

AN ABSTRACT OF THE DISSERTATION OF

Justin E. Eichelberger for the degree of Doctor of Philosophy in Applied Anthropology presented on March 11, 2019.

Title: Material Expressions of Class, Status and Authority amongst Commissioned Officers at Fort Yamhill and Fort Hoskins, Oregon, 1856-1866.

Abstract approved:

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During the 19th century the United States Army was a military institution characterized by a hierarchical system of authoritative, social and economic inequality between members of its different military grades. Although necessary for insuring military discipline within the Army this system of inequality also influenced the non-military social lives of commissioned officers and their families and colored much of military life with a non-military consumerist tint. This dissertation examines the material expression of military authority, social status and economic position amongst three grades of commissioned officers who served at two mid-19th century United States Army posts in western Oregon, Fort Yamhill and Fort Hoskins. Using historical and archaeological records associated with 47 company grade officers this dissertation demonstrates that the commissioned officers who served at these posts were highly competitive individuals who used their military rank and military salaries to express their social and economic status through the economic behaviors of conspicuous consumption and conspicuous leisure and to demonstrate their membership as socio-cultural elites within the upper classes of 19th century America.

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Material Expressions of Class, Status and Authority Amongst Commissioned Officers
at Fort Yamhill and Fort Hoskins, Oregon, 1856-1866.

by
Justin E. Eichelberger

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I understand that my dissertation will become part of the permanent collection of Oregon State University libraries. My signature below authorizes release of my dissertation to any reader upon request.

Justin E. Eichelberger, Author

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CHAPTER 1: INTRODUCTION

In this chapter I discuss my primary goals of this dissertation. I first begin my statement of purpose with a brief overview of other status studies conducted at United States military sites which is intended to highlight the various research gaps that currently exist in the field and what I hope to at least partially fill with this project. Next, I will discuss how I plan to accomplish such a goal using the examination of multiple lines of evidence (the convergence of evidence) from various sources (i.e., biographical data, purchasing records, the built environment and material culture). Lastly, I will present my plan of presentation as a guide to layout the logical structure of my argument and as a preview intended to provide the reader with the order and locations where the various data sets can be found and are discussed.

Statement of Purpose

The primary purpose of this dissertation is to examine how variations in status (social, economic and authority) between commissioned officers of different military grades (i.e., captain, first lieutenant and second lieutenant) are expressed through their purchasing of subsistence food articles, their military quarters and their material culture. This project is also intended to begin a discussion to fill two knowledge gaps within status studies of military sites: 1) to move past the gross examination of status between status groups of vastly different social, economic and military position (i.e., commissioned officers versus enlisted soldiers); and 2) to begin to expand the examination of status beyond the relatively few material culture classes that have dominated previous studies (i.e., ceramics, faunal remains, architecture, etc.) and attempt to examine social status holistically using multiple lines of converging evidence by not only using the material culture classes above but by also utilizing commissioned officer biographies, purchasing records and a much wide range of artifacts (i.e., decorative items, buttons, firearms, toys, etc.).

Archaeological Studies of Status at Military Sites

Military sites archaeology is commonly defined as the systematic study of archaeological sites associated with the military activities of the past. Archaeologists who study military sites in the United States and Canada divide the field of study based by time period, military conflict or region. For example, David Starbuck (1994; 2011) focuses on the archaeological study of 18th century military sites associated with the French and Indian War (1754-1763) and the American Revolutionary War (1775-1783). Others focus their research on particular conflicts such as the American Civil War (Geier and Potter 2000; Geier et al. 2006; Geier and Winter 1994) or on particular regions of the United States such as the Trans-Mississippi West (Scott 2009). Summaries of military sites archaeology tend to focus on discussion of the various “methods” (such as history, archaeology, geophysics and forensics) used to locate and study military sites as well and the various “topics” (such as battlefields, fortifications and shipwrecks) examined within these military sites (Geier et al. 2011). Few archaeological projects move beyond the identification and description of military sites and the artifacts recovered during these often limited excavations. As a result, it can be said that military sites archaeology is still in its infancy.

The number of military sites that have been excavated is relatively small and those that have been investigated have generally only been sampled and the results presented as either preliminary or purely descriptive. With such a small and incomplete sample it has been difficult if not impossible to develop higher level military site specific theory (Smith 1994:16) and in many ways military sites archaeology has remained a “handmaiden to history” particularly within military sites (Hume 1964:212-225). Although speaking of historical archaeology in general, and rather glibly, Hume was making the point that in the 1960s American archaeologists working on historic period sites were simply seeking the material remains of the past to compliment and provide physical manifestations to historical narratives. Since the 1960s the archaeology of military sites in the United States has suffered from much the same objectives as illustrated by Starbuck’s (2011:12-14) “research questions appropriate to military sites”. Although it was not intended to be exclusive the list

provided by Starbuck identifies several primarily historically- rather than anthropologically-generated research questions including: 1) the examination of differences between expected behavior and actual behavior; 2) the analysis of standardized versus vernacular military architecture; 3) the material expressions of ethnicity and race; 4) soldier foodways; 5) the reexamination of military history and tactics; and 6) the examination of the everyday life of the average soldier including his material culture. One major omission by Starbuck (and the topic of this proposal) is the study of military rank and its relationship to social status, economic status and military authority within military sites, a research topic that should be immediately apparent, and likely paramount at military sites, given the hierarchical social, economic and authoritative structure of the military. One objective of the current research project is to address this omission and begin to fill the gap in our understanding of the material expressions of status and authority at military sites.

Knowledge of our military past has been largely dominated by the discipline of history. These histories tended to focus on the larger national or regional historical events and the role the U. S. Army played in their development and conclusion (Ball 2001; Clark 1935; Douthit 2002; Frazer 1965; Glassley 1972; Hart 1963, 1967; Hunt 2004; Ledbetter 1935; Nelson 2007; Schwartz 1997; Tate 1999; Utley 1967 and 1984; Victor 1894). Although important for understanding historical trends within their larger context these histories tended to fail in providing either a detailed description or analysis that was anthropological in nature. Not all historical studies lacked analysis or an “anthropological perspective”. Grashof (1986) conducted a study on the standardization of family houses in the United States Army between 1866 and 1940, concluding that post architecture began to become standardized once the Army removed the duties of “architect” from the responsibilities of the army officer. In a similar study examining the architecture of the U. S. Army in the western United States, Hoagland (2004) concluded that although army architecture tended to conform to norms of layout and function, each post ultimately reflected the personal preference and Georgian ideals of army officers who built them. Going beyond the description and analysis of Army architecture Adams (2009) provides a detailed study on class and race in the frontier army. Comparing the commissioned officers and

enlisted men, Adams (2009:7) argues that the relationships between the different ranks of the army, their attitudes, material circumstances and consumption practices were largely determined by a Victorian class divide that was enhanced by the army's traditional caste system.

Although omitted in Starbuck's (2011) "research questions appropriate to military sites archaeology" the study of military rank and social class have been major topics within the field of military sites archaeology for many years. Archaeological investigations on the material manifestations of the rank, status and authority within military contexts tend to be purely descriptive in nature or to focus only on the differences between commissioned officers and enlisted men. For example, Brauner and Eichelberger (2009), Brauner et al. (2009) and Eichelberger (2011, 2014b) described the architectural remains and artifacts associated with the officers' quarters at Fort Yamhill, Oregon and Fort Hoskins, Oregon (Eichelberger 2014a). Other known archaeological descriptions of commissioned officers' quarters include those from Fort Atkinson, Iowa (Carr 1998); Fort Hoskins, Oregon (Bowyer 1992), Fort Smith, Arkansas (Dollar 1982); Fort Stevens, Oregon (Harrison 1988, 1990); Fort Sisseton, South Dakota (Kapler 1990); Fort Towson, Oklahoma (Martin 1987); Fort Chadbourne, Texas (Riemenschneider 2002, 2007, 2008), Fort Larned, Kansas (Scott 1989); Fort Townsend, Washington (Thomas and Larson 1977); and Fort Lane, Oregon (Tveskov and Cohen 2008).

When the archaeology of features associated with commissioned officers has been examined analytically and comparatively in terms of rank, class, status and/or authority they were usually done so in opposition to the archaeology associated with enlisted men. For example Bowyer (1992) compared the commissioned officer and enlisted men's artifact assemblages from Fort Hoskins, Oregon and found differences in the domestic, personal and military artifact groups between the two populations. Eichelberger (2018) examined the uses of spatial tactics by commissioned officers and enlisted men within the context of the consumption of sanctioned indulgences such as tobacco and forbidden indulgences such as alcohol. Similar analyses from Fort Vancouver (Horton 2014); Fort C. F. Smith, Washington D. C. (Balicki 2000); Fort Independence, Boston (Clements 1993); Fort Snelling, Minnesota (Clouse 1976,

1977, 1999); Cantonment Burgwin, New Mexico (Crass and Walsmith 1990); Fort Yamhill, Oregon (Eichelberger 2011a, 2011b); Fort Hoskins (Bryant 2014); Camp Floyd, Utah (Elsken 2002; Rust 1999); Crown Point Barracks, New York (Feister 1984); New Windsor Cantonment, New York (Fisher 1983); Fort Churchill, Nevada (Hardesty 1981); Fort Bowie, Arizona (Herskovitz 1978); Camp Nelson, Kentucky (McBride 1994; McBride, Andrews and Coughlin 2000; McBride and McBride 2006); and Fort Fillmore, New Mexico (Staski 1990; Staski and Johnson 1990; Staski and Reiter 1996) all yielded similar results. None of the above mentioned studies comparing the artifact assemblages of commissioned officers with that of other commissioned officers, instead these projects focused primarily on the description of material cultural assemblages associated with commissioned officers (usually as lumped assemblages and presented as a homogeneous group) with complex analysis and comparison being made almost exclusively between these commissioned officers and their much lower ranked enlisted counterparts.

These analyses also tended to place emphasis on or be restricted to the examination of just a few, and sometimes only one, type(s) of material culture such as ceramics (Barclay 1976; Bowyer 1992; Elsken 2002; Scott 1989), architecture (Clouse 1976, 1977; Dollar 1982; Feister 1984; Rust 1999; Staski and Reiter 1996) and faunal remains (Crass and Wallsmith 1990; Eichelberger 2011; Martin 1987) or a single type of behavior such as eating and drinking (McBride et al. 2000) rather than a holistic examination of status using multiple types of material culture and historical documentation to examine numerous manifestations of status simultaneously. Since social status is multidimensional (Weber 1946, 2010, 2015) in that one's status position is the intersection of at least three largely independent status positions (social, economic and political) as defined by one's relationship to the unequal distribution of and access to their corresponding resources (i.e., status, wealth, power) within a society (see Chapter 2: Theoretical Perspectives), then to fully understand social stratification, inequality and their material expressions the use of multiple lines of evidence, as independent as possible of each other, is essential (Ames 2009:508).

Research Gaps and Project Goals

The very brief history of status studies within the United States Army provided above has made two research gaps apparent: 1) the over abundance of status studies comparing commissioned officers with enlisted soldiers, and the comparatively lack of studies examining the expressions of status among commissioned officers (or for that matter among enlisted soldiers); and 2) the over reliance of status studies on the examination of a single or only a few types of material culture at the expense of holistic studies examining multiple lines of evidence from several sources of material culture and historical records. Two of the primary goals of this dissertation is to begin to address these research gaps.

One of the main objectives of this project is to begin the examination of status within the context of the 19th century United States Army in a more meaningful way. Although previously researchers examining status at military sites have contributed an enormous amount of data from these studies, as mentioned above, they almost exclusively interpreted these data within the context of the commissioned officer-enlisted soldier dichotomy. Although important, this research has focused on the most gross and obvious division in the social stratification present at military sites. The main problem with this focus is the failure to understand that although commissioned officers clearly thought of themselves as superior to their enlisted men they did not need to express their superiority over their men through their material culture, it was instead defined and expressed institutionally through their rank and authority and apparent in their social standing as “gentlemen” set apart socially and physically from their enlisted men. In fact, beyond the presence of a soldier employed as a servant/orderly the enlisted personnel of a post likely never saw the interior of their commissioned officers’ quarters and were certainly never invited to participate in the social gatherings which took place there (Adams 2009:89) and fraternization between commissioned officers and enlisted soldiers was highly discouraged by military custom and regulation. Instead commissioned officers strived to display their social inclusiveness and social stratification within their own commissioned officer social class (Adams 2009:86). Therefore, it is more anthropologically meaningful to compare the rank, status and material culture

between officers within the commissioned officer grades than it is to compare the material assemblages between commissioned officers and the enlisted soldiers under their command. This perspective has been lacking in *all* of the research reviewed for this study, an important gap in the anthropological research and literature of the 19th century U. S. Army that will begin to be addressed by research presented in this dissertation project.

The second main objective of this project is to attempt to examine the material expression of status as holistically as possible. As alluded to above, most archaeological studies of status within military sites has relied primarily on the examination of only a few classes of material culture (i.e., ceramics, faunal remains or architecture). This should not be surprising for two primary reasons: 1) the greater preservation of these material types in the archaeological record; and 2) the use of historical records to confirm the social and economic status of these materials (Miller 1980, 1992) and the apparent correlation between status and these classes of material culture from other archaeological sites (Ames 2009; Curet 2010; Reitz 1987). Despite these reasons, it has been hypothesized that correlations between artifacts and status can be adapted to any artifact found in sufficient quantity and with sufficient variation for comparison (Wason 1994:103). Therefore in addition to examining the expression of status in the ceramic, faunal remain and built environment I will also examine the variation in the quantity, quality and variety of numerous other artifact types such as interior decoration, glassware, personal adornment, office supplies and recreational items in order to provide a more holistic picture of the material expressions of status within the commissioned officers at Fort Yamhill and Fort Hoskins.

Scope of Study

In order to holistically examine the material expression of class, status and authority within the commissioned officers at Fort Yamhill and Fort Hoskins four sources of information will be utilized: 1) the biographical sketches of each of the 47

commissioned officers who served at Fort Yamhill and/or Fort Hoskins; 2) the subsistence account purchasing records for several commissioned officers who served at Fort Hoskins; 3) the form, spatial organization and spatial arrangement of each of the commissioned officers' quarters as presented in two historic period maps of each post and confirmed through archaeological investigations; and 4) the material culture assemblages recovered through archaeological excavations from three of the commissioned officers quarters at each post (six commissioned officers quarters total). Together these four sources of information provide a relatively accurate representation of the material expressions of social, economic and military status at Fort Yamhill and Fort Hoskins.

Plan of Presentation

In Chapter 2 I will present and discuss the various theoretical perspectives that are used to interpret the socio-cultural meaning of the material culture recovered from the commissioned officers' quarters at Fort Yamhill and Fort Hoskins. The discussion will begin with the definition of social inequality and the Weberian Three-Component Model of Social Stratification. Next, I will discuss the materiality of social inequality and social stratification through the theoretical perspective of symbolism and the more specific use of material cultural as status symbols through the cultural behaviors of conspicuous consumption, conspicuous leisure and spatial tactics. Then I will provide the social and cultural context for the examination of social stratification within the 19th century United States Military by discussing the social, economic and authority structure of the army. Lastly, I will end the chapter with a discussion on the worldview of commissioned officers within the 19th century United States Army in order to provide a social context for the material culture and behaviors used by commissioned officers to express social status, economic status and authority.

In Chapter 3 I will discuss the various research questions and methods used in this study. I will begin with the presentation of the research questions and hypotheses which were used to guide the research project. Next, I will briefly discuss the historical context of the study sites chosen for this project, Fort Yamhill and Fort Hoskins. Then, I will present and discuss the various sources of data I have used in

this study including: 1) commissioned officer biographical data (biographies); 2) subsistence purchasing records (*Fort Hoskins Subsistence Account Book*); 3) period fort maps (Davison Map of Fort Yamhill c. 1864, Chase Map of Fort Hoskins c. 1864); 4) archaeological data (results of several excavations at both Fort Yamhill and Fort Hoskins). Lastly, I will discuss the various analytical methods used to examine the artifacts recovered from these excavations including: 1) the artifact typology used; 2) how artifact counts were quantified; 3) a discussion of artifact density, sample size and representativeness; and 4) a discussion of the various analytical tools used to interpret the archaeological and historical record (i.e., Miller CC Index, Butchery Cut Preference Index, Fort Hoskins Subsistence Account Book Index and an Estimated Mean Monthly Salary Index).

In Chapter 4 I will present the biographical data of the commissioned officers who were stationed and “present” at either Fort Yamhill or Fort Hoskins between March 1856 and June 1866. These biographical data for the commissioned officers will be summarized and discussed by military grade (i.e., captain, first lieutenant and second lieutenant) and the detailed data for each specific commissioned officer will be presented in the appendices. This biographical data will be organized by commissioned officer grade and will include a summary of the grade’s: 1) military role(s); 2) length of military service, rank and tenure bonuses; 3) estimated mean monthly salary, 4) age; 5) previous profession(s); 6) attendance, class rank and percentile of the United States Military Academy; 7) worth of real and personal estates; 8) marital status; and 9) number of dependents.

In Chapter 5 I will present the subsistence article purchasing records for three commissioned officers at Fort Hoskins (Captain Seidenstricker, First Lieutenant Funk and Second Lieutenant Herzer) as they were recorded in the *Fort Hoskins Subsistence Account Book* (FHSAB 1862). The chapter will begin with a brief discussion of their clothing purchases and then continue to their subsistence article purchases. The discussion will begin with the total cost of subsistence articles and then proceed to a discussion of the specific food articles purchased within each food class. Lastly, the chapter will end with a brief discussion of the *Fort Hoskins Subsistence Account Book Index* and the values generated from this analysis.

In Chapter 6 I will discuss the built environment of “Officers’ Row” at both Fort Yamhill and Fort Hoskins. This discussion will begin with a description of the layout of both fort as presented in period maps (the Davison Map of Fort Yamhill and the Chase Map of Fort Hoskins) and then proceed to the description of the individual commissioned officers quarters (FYH1, FYH2, FYH3, FHH1, FHH2, FHH3) as they are reflected in archaeological data.

In Chapter 7 I present the description and analysis of the artifacts recovered from the various archaeological excavations conducted at Fort Yamhill and Fort Hoskins. The discussion is organized by functional group (i.e., domestic, military, personal) and then by functional class, type and/or category within each group. The archaeological data for Fort Yamhill will be presented first and then than of Fort Hoskins second within functional organizational structure noted above. The artifact descriptions presented in Chapter 7 are summaries with the detailed artifact descriptions provided in Appendix D.

In Chapter 8 I discuss the various expressions of social status, economic status and military authority as expressed within the data sets discussed above. I begin this discussion by presenting the expressions of status within the commissioned officers’ biographical data to provide the social, economic and military context for the material expression of status in the other data sources. Next, I discuss the expression of status within the purchases of subsistence articles, followed by the built environment and then lastly by those expressed in the material culture recovered from the individual commissioned officers quarters.

In Chapter 9 I summarize the results and interpretations drawn from the above data sets and analyses within the cultural, social and economic context of the 19th century United States Army. Here, I will link the various data sets back to the material expression of status (i.e., economic/class, social/status and power/authority) within the theoretical perspectives of social inequality and stratification within the social and military context of the 19th century United States Army. I will also discuss the limitations of the current research project and present several suggestions for further research.

Lastly, in the appendices I present the raw data and calculation tables used to derive the various analytical values used in this project. These appendices include appendix: A) commissioned officer biographical sketches; B) estimated mean monthly salary calculations; C) *Fort Hoskins Subsistence Account Book* Index calculations; D) detailed artifact descriptions; E) Miller CC Index Calculations; F) faunal analysis and butchery cut preference and index data and value calculations; and G) high quality artifact table and description of methods.

CHAPTER 2: THEORETICAL PERSPECTIVES

In this chapter I present the theoretical perspectives used to interpret the material expressions of social and economic status and military authority at Fort Yamhill and Fort Hoskins. First, I begin with a discussion of social inequality and stratification based on the work of sociologist Max Weber and his Three-Component Theory of Social Stratification. Next, I discuss how the non-material cultural phenomena of social-stratification and status are expressed through the symbolic nature of material culture and socio-cultural behaviors such as conspicuous consumption and leisure. Then, I discuss the social, economic and authority structure of the 19th century United States Army and the inequalities that are created and reinforced within the system. Lastly, I discuss the worldview of commissioned officers within the 19th century United States Army to provide context for the material culture and behaviors used by commissioned officers to express social status, economic status and authority.

Social Inequality and Social Stratification

Social Inequality

Social inequality is generally conceptualized as a differential access to assets (i.e., goods, services, rights, entitlements, power and prestige) with those members of society having more and greater access to assets being of higher status and those having less or lesser access to assets being of lower status. Social inequality is also generally a combination of inequality with dominance, where inequality is the social evaluation and disparity of differences that are regarded as relevant and dominance as the behavioral expression of the differences between individuals within a society (Berreman 1981:8; Wason 1994:36).

Social inequality is also an instituted process in that it is: 1) a moral phenomenon where people evaluate each other; 2) a structural phenomenon in that social differentiation exists in society; 3) a behavioral phenomenon in the sense that people act on their evaluations; 4) an interactional phenomenon in that these actions

occur largely in the context of interpersonal relations; 5) a material phenomenon in that their actions entail differential access to goods, services and opportunities; and 6) an existential phenomenon in that people experience their statuses and respond to them cognitively and affectively (Wason 1994:36).

At its root social inequality and status are mental concepts where individuals define their sense of self-worth and evaluate the worth of others and their relative importance within society in relation to a set of commonly shared social values and beliefs (i.e., norms). The particular characteristics of the value system within a society determines what is considered most valuable within that society and therefore what attributes should have higher statuses and correspondingly what attributes should have lower statuses.

A person's sense of self and their relative importance, viewed by themselves and by society as a whole, then is structural in that it is only relevant and meaningful within the context of the society in which it exists and is used to structure the social inequality within the social hierarchy. This social hierarchy is relational in that one's social position is defined as subordinate, equal or superior to someone else and is based on their level of subscription to the social values and beliefs (i.e., norms) of the group or their differential access to assets which are valued by the group.

Social inequality is also behavioral in that people act on their evaluations of themselves and others within the social hierarchy. Individuals behave within society in accordance to the socially defined beliefs and rules within the larger value systems and their prescribed societal roles in relation to their level within the social hierarchy. Different social groups within the society are expected to behave differently with members of their own social group then they are to behave with members of a different social group. These behaviors in part help to define the similarities of members within the same social group with which one identifies and the differences between individuals of different social groups with which one is contrasted and helps to create and reinforce the social hierarchy.

Social inequality is also interactional in that these behaviors occur largely in the context of interpersonal or small group interactions. Although these social behaviors are more or less scripted by the societal norms, values and belief systems

(i.e., normative) of the various social groups, and society as a whole, individuals interpret each other's actions rather than merely reacting to them (Blumer 1969:180). Their response is not made directly to the actions of one another but instead is based on the meaning with which they attach to such actions. Thus, human interaction is mediated by the use of symbols, either behavioral or physical, by inserting a process of interpretation of those symbols between the stimulus (sending the symbolic signal) and response (receiving the symbolic signal) within the social and cultural context of the interaction. Actions are not then individualistic in that they are motivated by rational choice or personal meaning which is simply expressed by the actor but rather a joint action with a mutual response to the actor and from the others with which the actor is interacting.

Social inequality is a material phenomenon in that actions entail differential control of and access to goods, services, opportunities, prestige and power. The differential access to these assets creates inequality within the society because different members of society have different amounts and varying levels of access to different asset types (i.e., wealth, prestige, power) and therefore must exchange some portion of what assets they do have or have access to for other assets they need or want.

Lastly, social inequality is also an existential phenomenon in that people experience their statuses and respond to them. An individual's social position or status (i.e., their relative control of or access to assets) directly influences and are actively used to influence their social interactions. Those individuals who control more assets (i.e., wealth, prestige or power) have a greater ability to influence others either through the use of these assets or by trading these assets or access to them for other assets. For example, a wealthier consumer has more financial means to exchange a portion of their wealth to a producer for more goods (i.e., food, shelter, luxury items) or to politicians as campaign contributions or bribes in order to gain more political power. The sum of an individual's control of or access to assets defines their social position and what influences they may have over other individuals with similar social positions as well as individuals of other social positions.

Social Stratification

When the differential access to resources within a society is structured, or forms discernible hierarchies of social strata that form a stable pattern of positions, then the society is deemed socially stratified (Pakulski 1999:311). Social stratification has four basic principles: 1) it is a trait of society, not simply a reflection of individual differences; 2) it carries over from generation to generation (although most stratification systems allow some mobility either up, down or horizontally); 3) it is universal, found in every complex society, but is variable and differs across time and place; and 4) it involves not just inequality to resources but also differences or inequalities in beliefs and values (Grusky 2011:622-624).

Within a stratified society the social hierarchy is made up of a series of ranked social units, called stratum, each stratum is comprised of a group of people that share a similar position in the social structure. According to Weber (1946, 2010, 2015) these positions are defined by the intersection of three key dimensions of inequality and their corresponding assets or resources: 1) the economic dimension (*class* or *economic situation*) of inequality comprised of the unequal distribution of the assets of income and wealth, 2) the cultural dimension (*status* or *status situation*) of inequality comprised of the unequal distribution of the asset of prestige, and 3) the political dimension (*power* or *parties*) of inequality comprised of the unequal distribution of the assets of power and authority (Pakulski 1999:312).

The economic dimension contains assets such as income and wealth. Income is generally defined as the resources, usually in the form of wages, salaries, profits or rents, which an individual receives in exchange for providing goods and/or services. Wealth, on the other hand, is generally defined as the monetary value of one's property such as land, buildings, businesses and personal possessions. One's income is primarily used to meet one's immediate needs (i.e., food, shelter, etc.) while one's wealth is generally used to secure one's position in the economic hierarchy of society which can be utilized in times of economic crisis to help secure one's economic position. If one's income exceeds one's needs then the excess can be used to consume luxury goods or build wealth through investment. The relative value of

one's economic assets defined what Weber called their *economic situation* and determined their level of *class power* within society.

The cultural dimension contains the non-economic asset of prestige. Prestige is generally defined as the opinion of a person held by others within society usually based on the social evaluation of the individual in accordance with a set of criteria such as values, ideals or social norms. Because prestige is based on the collective opinions of the members of society it can be either ascribed or achieved from a variety of sources such as one's identity (i.e., age, religion, race, ethnicity, etc.), behavior (i.e., honor, intellectualism, gentility, domesticity, etc.) or personality (i.e., charming, dependable, fair, etc.). For example in America during the 19th century being light skinned, of European decent and Christian was usually prestigious and therefore individuals who shared those characteristics tended to have higher status than those that did not. Similarly, a person may have high prestige for their subscription to ideal patterns of social behavior such as intellectualism, gentility, domesticity or displaying courage, honor or discipline. The relative value of one's cultural assets defined what Weber called their *status situation* and determined their level of *social power* within society (Weber 1946, 2010, 2015).

The political dimension contains the assets of power and authority which are closely related but differ on one important aspect, legitimacy. While power is generally perceived as a person's ability to get their way despite the resistance of others, authority is power that is perceived as legitimate by the social structure. Within most stratified societies the assets of power and authority are held and distributed within positions of leadership (i.e., rulers, politicians, officers, etc.) which use their power and authority to influence individual behavior or to make laws or rules which are in turn then used to govern and influence society. The relative value of one's political assets defined what Weber (1946, 2010, 2015) called their *political situation* or *party* and their level of political power within society.

Different social groups emerge within society which are differentiated based on their relationship to the different dimensions of inequality (economic, cultural and political), their corresponding assets (income/wealth, prestige and power) and on their possession and excising of power based on these inequalities. A *social class* is

defined as a group of people who could be differentiated based on their economic qualities (i.e., income and wealth), a *status group* is defined by their shared qualities of prestige (i.e., race, religion, honor, gentility, etc.) and a *political party* is defined by their shared level of power and authority. Social classes, status groups and political parties make up the constituent concepts of what Weber (1946, 2010, and 2015) called the three-component theory of stratification.

Within the three-component theory of stratification social hierarchies are viewed as a gradational complex of “social ladders” (i.e., upper, middle, lower, etc.) that reflect historically variable patterns of income, wealth, access to skills and education, social conventions, prestige and positions of power and authority (Pakulski 1999:315). Social hierarchies are also seen as multidimensional consisting of social classes, status groups and political parties either overlapping or cross-cutting each other with different combinations of economic power, social prestige and political command crystallizing into distinct social strata.

These social strata can be many and complex as each factor (class, status and power) can influence each other but can also be largely independent. For example, a businessman or landowner may have a high income and control of large amounts of wealth (class) giving them great economic power but have little prestige and no authority therefore have little social or political power; a religious leader or warrior, on the other hand, may possess great social power because of their high level of prestige (status) but have little income or wealth and no authority thus having little economic or political power; and lastly, a politician or member of government may have great authority (power) giving them political power but have little income or wealth and no prestige thus having no economic or social power.

Commissioned officers in the 19th century United States Army may best be defined as one of these unique social strata as they represent a specific point of convergence of different gradations of wealth, prestige and power. As officers they were placed within a specific position (grade and rank) in the military hierarchy with a specific level of authority defined by military law and compensated with a specific salary and amount of emoluments befitting their position within the hierarchy. A

commissioned officers' level of authority and his salary together provided him with the opportunities to achieve the necessary level of prestige as a gentleman.

Symbolic and Material Displays of Status

As discussed above social inequality and stratification have material components in that they entail differential access to assets or resources directly (i.e., control of goods and services) or indirectly through the control of rights, entitlements, power and prestige which can then be used to acquire material assets and resources through trade or influence. Social stratification systems, and the social hierarchies within them, depend primarily on the possession and use of status symbols that represent these inequalities. Status symbols can either be the physical assets or resources themselves (i.e., capital, food, lumber etc.) or some material object or behavior that symbolizes the unequal access to assets and resources (i.e., rare or expensive items, insignia, leisure activities, etc.). In any hierarchical society, there will be more need for behaviors and items to symbolically display status than in non-hierarchical societies (Wason 1994:112).

Status symbols can be either objects or actions that act as social cues people use to determine how much status a person holds and how they should be treated (Goffman 1951). Specifically status symbols, either implicitly or explicitly, represent social norms and value systems such as expensive items used to represent and display wealth, exclusive items and behaviors used to display prestige or distinctive items used to display authority. Social stratification therefore can be measured archaeologically by studying the unequal distribution of artifacts, and the behaviors they represent, which reflect the unequal distribution of income and wealth, prestige and authority.

Consumer Behavior and Conspicuous Consumption and Leisure

As with any military organization the United States Army during the 19th century was a subculture of the larger American society and as a result its members shared many

of the same socio-cultural values concerning social status, gentility, domesticity and consumerism. Not only were commissioned officers then soldiers in the Army guided by discipline and honor but also American consumers who received high salaries and used them to express their social class through conspicuous consumption and other displays of social status (Adams 2009:106).

Conspicuous consumption and conspicuous leisure are two social consumption behaviors that are used by socio-economic elites to display, reinforce and attain social status (Veblen 1899). Conspicuous consumption is the behavior of purchasing, acquiring and consuming luxury goods and services to publically display the discretionary economic power (i.e., income or wealth) of the buyer. Conspicuous leisure, on the other hand, is the behavior of engaging in non-productive activities (i.e., recreation, rules of etiquette, formal and ceremonial observances or idleness) to publically display not only the discretionary economic power of the participant but also the social prestige of the participant by demonstrating that they not only do not need to work but that work, especially manual labor, is beneath them.

Both behaviors are intended to glorify the lavish spending and the leisure culture of the upper classes, thus validating these behaviors and leading the admiration of the lower classes. This admiration can sometimes lead to the Veblen effect, an abnormal market behavior where consumers purchase higher-priced goods over similar lower-priced substitutes because of the belief that the higher price means higher quality (Trigg 2001). Such goods (also known as Veblen goods) are considered desirable for conspicuous consumption because of, rather than in spite of, their high prices and as a result their demand increases as the price increases. Status markers (and luxury goods generally) play an important role in maintaining and even generating status, and are thus important for the reproduction of the social order and are likely to be essential for the maintenance of stratification (Wason 1994:120).

Variation in the Quantity, Quality and Variety of Possessions

While much of the work in military sites archaeology using artifact distributions to infer status has been dominated by relatively few artifact types such as pottery, faunal remains or the built environment (Bowyer 1992; Bryant 2014; Horton 2014; McBride

et al. 2000; Riordan 1985; Rust 1999; Scott 1989; Staski and Reiter 1996), most correlations between artifacts and status can be adapted to any artifact found in sufficient quantity and with sufficient variation for comparison at least as gross differences in status reflected in three general ways: 1) variation in quantity; 2) variation in quality and; 3) variation in variety of possessions (Wason 1994:103, 112).

Variation in Quantity of Artifacts. Stratification and wealth can be inferred from the variation in the *quantity* of material possessions between individuals (Curet and Pestle 2010:418; Wason 1997:126). Assuming a greater number of material possessions will cost more to acquire than individuals with a greater number of possessions will have higher economic status. The inference of status from the variation in the quantity of possessions between individuals can also be applied at multiple scales such as the correlation between status and a single material possession (i.e., status symbol) or the correlation between status and the totality of material possessions or a subgroup of it (i.e. within classes, types or categories) (Wason 1994:116).

Variation in Quality of Artifacts. Stratification and status can also be inferred from the variation in the *quality* of the material possessions between individuals (Curet and Pestle 2010:417; Wason 1997:125). Assuming higher quality possessions (i.e., those made of rare or exotic materials, elaborate decoration or fine workmanship) will either cost more to acquire or are restricted because of their use as status markers than individuals with a greater number of high quality possessions will have higher economic or social status. For some artifact types, such as items of prestige or power, their presence in or absence from an archaeological context can be used to infer status, but for most artifact types it will be the relative variation in the quantity of high quality items that can be used to infer status differences.

Variation in Variety (Diversity) of Artifacts. Stratification and status can also be inferred from the overall *variety* and *diversity* of material possessions between individuals (Curet and Pestle 2010:418; Wason 1994:115). Assuming that some

types of possessions (i.e., luxury goods, elite or sumptuary items) will be restricted to particular or higher status groups, either because they are costly or because they are restricted as status markers, then individuals with a greater variety of possessions will have higher economic or social status.

19th Century U.S. Army Structure: Grade, Rank and Authority

The primary purpose of any army is to conduct war and to do so effectively, especially for large armies, a system of control is needed in order to coordinate between different military units and to ensure that all units followed the commands of the military leaders. In order to facilitate this control the United States Army utilized a hierarchical structure of military discipline based on a system of superiority and inferiority that rank ordered all officers (and soldiers) into grades that determined their relative level of authority. Discipline, defined as the behavior of personnel in conformity with previously prescribed rules usually in response to a command and normalized through instruction and drill, is the foundation of this military hierarchy (Burke 1999:447-449). Discipline in practice then was a set of customary beliefs and a repertoire of patterned behaviors that were used as a means of social control designed to submit the will of the individual to the will of the group. In this way the military can be viewed as a distinct sub-cultural group complete with its own set of cultural norms designed to define and control its members which were socially and economically stratified into military grades.

Each commissioned officer was assigned to one of these grades based on his training, education, experience and previous military service. During the 19th century nine commissioned officer grades were used in the United States Army: (1) lieutenant-general, (2) major-general, (3) brigadier general, (4) colonel, (5) lieutenant-colonel, (6) major, (7) captain, (8) first lieutenant and (9) second lieutenant (Table 2.1). Each grade held a particular level of authority and was assigned an “appropriate unit of command”, or size of command, on which he exercised his

Table 2.1 Commissioned Officer Grades and Rank (USWD 1857)

Rank	Grade	Unit of Command	Size of Command
General Officers			
1 st	Lieutenant-General	The U.S. Army	8 Regiments/80 Companies
2 nd	Major-General	Division	4 Regiments/40 Companies
3 rd	Brigadier-General	Brigade	2 Regiments/20 Companies
Field Officers			
4 th	Colonel	Regiment	1 Regiment/10 Companies
5 th	Lieutenant-Colonel	Battalion or Regiment	At Least 4 Companies
6 th	Major	Squadron or Column	At Least 2 Companies
Company Officers			
7 th	Captain	Company	1 Company (100 Men)
8 th	First Lieutenant	Platoon	½ Company (50 Men)
9 th	Second Lieutenant	Platoon	½ Company (50 Men)

authority as the unit commander. In general the higher the grade of an officer, the greater was his authority and the greater number of men he commanded.

A commissioned officer's authority was defined by his grade and rank and was given to him in Article 1, Paragraph 1 of the *Regulations for the Army* which stated that "All inferiors are required to obey, strictly, and to execute with alacrity and good faith, the lawful orders of the superiors appointed above them" (USWD 1857, 1861b and 1863). Article 1, Paragraph 1 essentially created a system of inequality between every officer and soldier who served in the United States Army giving "superiors" authority and power over "inferiors".

This hierarchical system of inequality not only created differences in power based on military authority but also created the mechanism for economic disparity based on grade and rank. Essentially the higher an officer's grade the more that officer was compensated both in pay (salary) and emoluments. For example, the Lieutenant General was the highest compensated officer in the United States Army at \$270.00 per month base salary or \$748.00 per month commutation salary including his emoluments which was 6 to 6.5 times the pay and emoluments of a second lieutenant of infantry, the lowest compensated officer in the Army, who made only \$45.00 per month base salary or \$113.50 per month commutation salary including his emoluments (USWD 1857, 1861b and 1863). Clearly higher graded officers had greater economic means than subordinate officers.

Table 2.2 Commissioned Officer Salaries

Rank	Grade	Base Salary	Salary + Emoluments
General Officers			
1 st	Lieutenant-General	\$270.00	\$748.00
2 nd	Major-General	\$220.00	\$457.00
3 rd	Brigadier-General	\$124.00	\$315.00
Field Officers (Infantry)			
4 th	Colonel	\$95.00	\$212.00
5 th	Lieutenant-Colonel	\$80.00	\$181.00
6 th	Major	\$70.00	\$169.00
Company Officers (Infantry)			
7 th	Captain	\$60.00	\$128.50
8 th	First Lieutenant	\$50.00	\$118.50
9 th	Second Lieutenant	\$45.00	\$113.50

Military Grade

An officer's grade was the primary factor in determining his level of authority and compensation and defined what positions, roles and level of command he was eligible to hold within the Army. Each commissioned officer was assigned to a grade based on his training, education, experience and previous military service and each grade level was considered subordinate to the grade above and supervisory to the grade below. Each grade was also compensated with base salary (Table 2.2) determined by Congress and a predetermined set of emoluments for quarters, wood, stationary, forage, camp equipage and baggage allowances by grade (Table 2.3). For the sake of brevity not all nine commissioned officer grades will be discussed below, instead only the company grade officers (captain, first lieutenant and second lieutenant) will be discussed because they were the only officer grades assigned to Fort Yamhill and Fort Hoskins.

Captain. A captain was usually the highest ranking officer and commander of a company of men. The company was the most basic military unit of command and was ideally comprised of 100 enlisted soldiers and three commissioned officers including the captain and two subaltern officers, a first lieutenant and second lieutenant. During the 19th century the responsibilities of the captain were broad and included ensuring the military discipline and proper military training of the soldiers under his command and the management of the company as a whole including for its

cleanliness, armament, shelter, subsistence and equipment. Although ultimately responsible for the entire company captains rarely took part in the day to day management of the company and usually divided and delegated these activities amongst his subaltern officers.

Captains were the highest compensated of the company grade officers (USWD 1857, 1861b and 1863). The captain of a mounted company (cavalry or dragoons) was compensated at \$70.00 in pay, four rations per day (\$36.00), two horses (\$16.00) and one servant (\$24.50) each month with a total commutation salary of \$146.50 per month. A captain of a non-mounted company (infantry or artillery) was compensated a little less at \$60.00 in pay, four rations per day (\$36.00), one horse (\$8.00) and one servant (\$24.50) each month with a computation salary of \$128.50 per month.

Mounted or not, all captains were also entitled to several emoluments including two rooms as quarters, one room as a kitchen, 80 pounds of personal baggage in the field and 700 pounds of personal baggage if changing stations, $\frac{3}{4}$ of a cord of wood per month from May through September and three cords of wood per month from October through April, 1 and $\frac{1}{2}$ quires of writing paper, $\frac{1}{8}$ quire of envelop paper, six quills or steel pens, $\frac{1}{8}$ quire of wafers, one ounce of sealing wax, $\frac{1}{2}$ papers of ink powder and $\frac{1}{2}$ pieces of tape per month as stationary, and one tent in the field, one axe and one hatchet as camp equipage. Captains also received an allowance of 28 pounds of hay, 24 pounds of oats, corn or barley and 100 pounds of bedding straw per horse per month if assigned to a mounted unit (cavalry or dragoon) or 14 pounds of hay, 12 pounds of oats, corn or barley and 100 pounds of bedding straw per horse per month if assigned to a non-mounted unit (infantry or artillery).

First Lieutenant. First lieutenants were the second highest ranking officer within the company. The primary responsibility of the first lieutenant was to assist his captain in the performance of all company duties. As a subaltern officer the first lieutenant was also charged with the supervision of a platoon of enlisted men and non-commissioned officers and was responsible for their order and cleanliness.

First lieutenants were the second highest compensated of the company grade officers (USWD 1857, 1861b and 1863). The first lieutenant of a mounted company (cavalry or dragoons) was compensated at \$53.33 in pay, four rations per day (\$36.00), two horses (\$16.00) and one servant (\$24.50) each month with a total commutation salary of \$129.83 per month. A first lieutenant of a non-mounted company (infantry or artillery) was compensated a little less at \$50.00 in pay, four rations per day (\$36.00), one horse (\$8.00) and one servant (\$24.50) each month with a computation salary of \$118.50 per month.

Mounted or not all first lieutenants were also entitled to several emoluments including one room as quarters, one room as a kitchen, 80 pounds of personal baggage in the field and 600 pounds of personal baggage if changing stations, 1/2 of a cord of wood per month from May through September and two cords of wood per month from October through April, 1 1/2 quires of writing paper, 1/8 quire of envelop paper, six quills or steel pens, 1/8 quire of wafers, one ounce of sealing wax, 1/2 papers of ink powder, 1/2 pieces of tape per month as stationary, one, tent, one axe and one hatchet that he must share with the second lieutenant as camp equipage. First lieutenants also received an allowance of 28 pounds of hay, 24 pounds of oats, corn or barley and 100 pounds of bedding straw per horse per month if assigned to a mounted unit (cavalry or dragoon) or 14 pounds of hay, 12 pounds of oats, corn or barley and 100 pounds of bedding straw per horse per month if assigned to a non-mounted unit (infantry or artillery).

Second Lieutenant. Second lieutenants were the third highest ranking officer within the company. The primary responsibility of the second lieutenant was (the same as for the first lieutenant) to assist his captain in the performance of all company duties. And, as a subaltern officer the second lieutenant was also charged with the supervision of a platoon of enlisted men and non-commissioned officers and was responsible for their order and cleanliness.

Second lieutenants were the least compensated of the company grade officers (USWD 1857, 1861b and 1863). The second lieutenant of a mounted company (cavalry or dragoons) was compensated at \$53.33 in pay, four rations per day

(\$36.00), two horses (\$16.00) and one servant (\$24.50) each month with a total commutation salary of \$129.83 per month. A second lieutenant of a non-mounted company (infantry or artillery) was compensated a little less at \$45.00 in pay, four rations per day (\$36.00), one horse (\$8.00) and one servant (\$24.50) each month with a computation salary of \$113.50 per month.

Mounted or not all second lieutenants were also entitled to several emoluments including one room as quarters, one room as a kitchen, 80 pounds of personal baggage in the field and 600 pounds of personal baggage if changing stations, 1/2 of a cord of wood per month from May through September and two cords of wood per month from October through April, 1.5 quires of writing paper, 1/8 quire of envelop paper, six quills or steel pens, 1/8 quire of wafers, one ounce of sealing wax, 1/2 papers of ink powder, 1/2 pieces of tape per month as stationary, and one tent in the field, one axe and one hatchet that he must share with the first lieutenant as camp equipage. Second lieutenants also received an allowance of 28 pounds of hay, 24 pounds of oats, corn or barley and 100 pounds of bedding straw per horse per month if assigned to a mounted unit (cavalry or dragoon) or 14 pounds of hay, 12 pounds of oats, corn or barley and 100 pounds of bedding straw per horse per month if assigned to a non-mounted unit (infantry or artillery).

Military Rank

A commissioned officer's rank defined his relative position of authority within the military hierarchy. As an officer's grade placed him within a defined category (i.e., as a captain, first lieutenant, or second lieutenant) an officer's rank was a relative term that described his position of authority relative to another officer. An officer's rank was either senior or junior in relation to another officer and could describe either the authoritative relationship of officers between grades (i.e., between a captain, first lieutenant and second lieutenant) or the authoritative relationship of officers within the same grade (i.e., between two captains, two first lieutenants or two second lieutenants, etc.). When determining who was the senior officer between grades the hierarchy of the grades themselves determined the ranked order as the higher ranked grades were senior or held authority over the lower ranked junior

Table 2.3 Commissioned Officer Emoluments

Emolument	Measure	Capt.	1st Lt.	2nd Lt.
<u>Compensation (Commutation Value)</u>				
Salary - Mounted/Non-Mounted	Dollars	\$70/\$60	\$53.33/\$50	\$53.33/\$45
Rations	Number	4 (\$36)	4 (\$36)	4 (\$36)
Horses - Mounted/ Non-Mounted	Number	2/1 (\$16/\$8)	2/1 (\$16/\$8)	2/1 (\$16/\$8)
Servants	Number	1 (\$26.50)	1 (\$26.50)	1 (\$26.50)
<i>Total \$ (Mounted/Non-Mounted)</i>		<i>\$146.50/\$128.50</i>	<i>\$129.83/\$118.50</i>	<i>\$129.83/\$113.50</i>
<u>Quarters</u>				
Personal	Rooms	2	1	1
Kitchen	Rooms	1	1	1
Wood (per month May-Sept.)	Cords	3/4	1/2	1/2
Wood (per month Oct.-Apr.)	Cords	3	2	2
<u>Office Supplies (per month)</u>				
Writing Paper	Quires	1 and 1/2	1 and 1/2	1 and 1/2
Envelop Paper	Quires	1/8	1/8	1/8
Quills or Steel Pens	Number	6	6	6
Wafers	Quires	1/8	1/8	1/8
Sealing Wax	Ounces	1	1	1
Ink Powder	Papers	1/2	1/2	1/2
Tape	Pieces	1/2	1/2	1/2
<u>Camp Equipage</u>				
Personal Baggage (in the field)	Pounds	80	80	80
Baggage (changing station)	Pounds	700	600	600
Tent	Number	1	1 for every 2	1 for every 2
Axe	Number	1	1 for every 2	1 for every 2
Hatchet	Number	1	1 for every 2	1 for every 2
<u>Forage (per month)</u>				
Hay - Mounted/Non-Mounted	Pounds	28/14	28/14	28/14
Oats, Corn or Barley	Pounds	24/12	24/12	24/12
Bedding Straw	Pounds	100	100	100

grades (i.e., a captain was senior to a first lieutenant who was junior and a first lieutenant was senior to a second lieutenant who was junior) (USWD 1857:1).

Determining rank within each grade was determined by seniority so that an officer with the earliest date of commission or appointment was senior or had higher rank than a junior officer with a later date of commission or appointment. When commissions were of the same date rank was decided: (1) between officers of the same regiment or corps by the order of appointment, or (2) between officers of different regiments or corps: first, by rank in actual service when appointed; second, by former rank and service in the army or marine corps; or third, by lottery among officers without prior service in the United States military (USWD 1857:1-2).

In addition to the compensation and emoluments of their grade officers were also entitled to several benefits as a result of their rank. First, an officer's military rank more often than not defined his level of military authority in that an officer who was senior in rank to another officer who was his junior then the senior officer held authority over the junior officer. This was particularly important when it came to assuming command and the issuing of orders. Second, the choice of quarters in garrison was determined by military rank in that senior officers were given the privilege of choosing their quarters before junior officers or when transferred to a new post a senior officer was permitted to select for his quarters any quarters already occupied by a junior officer (USWD 1857:125). That junior officer in turn was permitted to then select any quarters of an officer who was his junior or select any unoccupied quarters if available.

Second, as a reward for long military service commissioned officers were compensated an additional ration per day with a commutation value of \$9.00 per month for every five years of military service (USWD 1857, 1861b and 1863). This made a difference on an officer's pay overtime in that an officer with less than five years of military service earned no tenure bonus but an officer with 5-9 years of experience earned an additional \$9.00 per month, an officer with 10-14 years of experience earned an additional \$18.00 per month, an officer with 15-19 years of experience earned an additional \$27.00 per month and an officer with 20-24 years of experience earned an additional \$36.00 per month, etc.

Because promotion was based almost exclusively on seniority exceptional officers were often rewarded with a brevetted promotion (prestige). During the 19th century brevet promotions gave a commissioned officer a higher grade title as a reward for gallantry or meritorious conduct but without conferring the authority, precedence or pay of real grade or rank (Boatner 1991:84). In essence a brevetted promotion increased a commissioned officers prestige (status) but did not increase his class (wealth) or authority (power). It should be noted that commissioned officers were also given brevetted promotions out of necessity rather than because of merit or gallantry. Because the United States Congress permitted only a limited number of officers of each grade many lower graded officers received a brevet commission to a

grade more appropriate for his assignment. This was quite common along the frontier where more forts and missions existed than appropriately graded officers, and because military law required certain positions to be filled by officers of a specific grade, many commissioned officers received brevetted promotions for the duration of their assignment. Lastly, brevetted grades were given to newly commissioned officers until authorized positions became available. This was particularly true for many second lieutenants who just graduating from the United States Military Academy or entered the military from civilian society found that not enough Regular Army officer vacancies were available to give them commissions as regular second lieutenants.

Military Role

While serving at post or on campaign a commissioned officer could hold several military roles or positions with specific functions and levels of authority and compensation. Each role was an essential position for the proper functioning of the company and/or post. Again, for the sake of brevity only those military roles assumed at Fort Yamhill and Fort Hoskins will be discussed here. Five military roles were filled by the commissioned officers at Fort Yamhill and Fort Hoskins, including those of Post Commander, Company Commander, Post Adjutant, Assistant Commissary of Subsistence, Acting Assistant Commissary of Subsistence, Regimental Quartermaster and Acting Assistant Quartermaster. Each of these roles provided the officer with additional authorities and responsibilities not already assumed by his grade or rank and also emoluments including additional pay and allowances of rooms for offices, wood, stationary, horses and forage (Table 2.4).

Post Commander. The role of Post Commander (PC), as the name suggests, was primarily concerned with the command and management of a military post. The post commander had ultimate authority over the post, and was usually given wide latitude to run the post as he saw fit, within the bounds of military law. In this respect, post commanders had important responsibilities (for the determination of the use of force, finances, supply, equipment and ordnance), duties (to implement orders

from a higher authority and for the training and care of his troops) and powers (authority over all personnel assigned to the post including their discipline and punishments).

The position Post Commander was always assumed by the highest ranking officer present, regardless of regiment, company or grade, and the position was always a temporary position because if/when a new officer was assigned to the post, and he was senior to the existing post commander, then command of the post was transferred to the new officer. The position also held the highest level of authority and responsibility at the post including the complete control of post operations and the command over all soldiers and officers, including other lower ranking commanders and their commands. But beyond superior authority the position of post commander did not received any additional compensation in pay or emoluments.

Company Commander. The role of Company Commander (CC) was essentially the same as for the Post Commander and held the same responsibilities, duties and powers but instead of holding authority over the post, the authority of the Company Commander was limited to his company, unless he was also serving as a Post Commander. The role of Company Commander was almost always permanently held by an officer with the grade of captain but officers of a higher grade (major) sometimes also held the position. The *United States Army Regulations* (1857, 1861b) stipulated that the position of Company Commander could only be “permanently” filled by an officer with the grade of at least captain. Although subaltern officers did at times “command their company”, for example if the captain of the company was on leave, detached service or otherwise absent or incapacitated, but this was only a temporary promotion and it did not entitle the subaltern officer to the pay, emoluments and title of “Company Commander”.

The position of Company Commander was also one of the highest compensated positions at a military post earning the officer an additional \$10.00 per month in pay, an additional room as an office, an additional cord of wood per month from October to April, one ink stand, one stamp, one paper-folder, one sand-box, five quires of writing paper, half of a quire of envelope paper, twenty quills or steel pens,

as many lead pencils as may be required, not exceeding four per annum, one wafer-box, half of an ounce of wafers, three ounces of sealing wax, one paper of ink powder and one piece of office tape in stationary allowances (USWD 1857, 1861b and 1863).

Post Adjutant. The role of Post Adjutant (PA) was largely an administrative or clerical one with the primary responsibilities of the position being the official keeper of all non-financial records of the post and for managing all official correspondence. The Post Adjutant would have been responsible for the maintenance of several official post and company books including the *Order Book* (a list of all orders received from higher authorities and those given by the post commander), *Morning Reports* (a daily record of the status of all soldiers and officers assigned to the post), *Guard Report Book* (a daily record of all posted guards and events) and the *Letter Book* (which contained a copy of all official letters sent and received from the post). The Post Adjutant would have also served as a conduit for information between the post commander and the rest of the members of the post and between the post and the general public.

As the position of Post Adjutant was largely an administrative or clerical one the role did not confer any additional authority to the officer who held the position but it was nevertheless one of the highest compensated positions at a military post earning the officer an additional \$10.00 per month in pay and an allowance of an additional horse per month with a computation value of \$8.00 making the total compensation for the position \$18.00 per month.

Assistant Commissary of Subsistence/Acting Assistant Commissary of Subsistence.

The Assistant Commissary of Subsistence (ACS)/Acting Assistant Commissary of Subsistence (AACS) roles were also administrative as opposed to roles of command. The commissary of subsistence at each post was responsible for all subsistence supplies at a military post including for the acquisition, storage and issuance of all food to the soldiers, bakery and hospital and for the sales of subsistence stores to commissioned officers. The commissary of subsistence was also responsible for

keeping a record of the monthly returns of provisions received and issued, paid for and from whom they were acquired called the *Commissary's Book*. The commissary of subsistence was also responsible for keeping the *Subsistence Account Book* which recorded all sales of subsistence goods to the commissioned officers assigned to the post.

As an administrative position the commissary of subsistence did not confer any additional authority to the officer but he was compensated with additional pay and emoluments. The position of Assistant Commissary of Subsistence (ACS) was one of the highest compensated positions at a military post earning the officer an additional \$10.00 per month in pay, an additional room as an office and an additional cord of wood per month from October to April, one ink stand, one stamp, one paper-folder, one sand-box, 1 1/2 quires of writing paper, 1/8 of a quire of envelope paper, six quills or twelve steel pens and one holder, as many lead pencils as may be required, not exceeding four per annum, 1/8 of an ounce of wafers, one ounce of sealing wax, 1/2 paper of ink powder and 1/2 piece of office tape in stationary allowances (USWD 1857, 1861b and 1863).

The position of Acting Commissary of Subsistence (AACS) also did not confer any additional authority to the officer but he was compensated with the "pay and emoluments of mounted officers of respective grades" which amounted to an additional \$3.33 per month in pay a room as an office, an additional cord of wood per month from October to April, one ink stand, one stamp, one paper-folder, one sand-box, 1 1/2 quires of writing paper, 1/8 of a quire of envelope paper, six quills or twelve steel pens and one holder, as many lead pencils as may be required, not exceeding four per annum, 1/8 of an ounce of wafers, once ounce of sealing wax, 1/2 paper of ink powder and 1/2 piece of office tape in stationary allowances (USWD 1857, 1861b and 1863).

Regimental Quartermaster and Acting Assistant Quartermaster. The position of "Quartermaster" was also an administrative and clerical position responsible for the quarters and transportation of the army, storage and transportation for all army supplies including army clothing, camp and garrison equipage, cavalry

and artillery horses, fuel, forage, straw and stationary. A Regimental Quartermaster (RQM) was responsible for the acquisition, transportation, storage and quartering of the men and supplies at the regimental level and the officer filling the position was drawn from the subaltern officer's of the regiment. The Regimental Quartermaster was usually stationed away from his company at either the regimental headquarters or military department headquarters but was sometimes present with his company at post. An Acting Assistant Quartermaster (AAQM) was also responsible for the acquisition, transportation, storage and quartering of the men and supplies but at the company/post level and the officer filling the position was drawn from the subaltern officer's of the company/post instead of the regiment at large and was always stationed with his company.

The position of Regimental Quartermaster was one of the highest compensated positions earning the officer an additional \$10.00 per month in pay and an allowance of two additional horses per month with a computation value of \$16.00 making the total compensation for the position \$26.00 per month. The officer filling the position was also provided an additional room as an office and an additional cord of wood per month from October to April, one ink stand, one stamp, one paper-folder, one sand-box, 1 1/2 quires of writing paper, 1/8 of a quire of envelope paper, six quills or twelve steel pens and one holder, as many lead pencils as may be required, not exceeding four per annum, 1/8 of an ounce of wafers, once ounce of sealing wax, 1/2 paper of ink powder and 1/2 piece of office tape in stationary allowances (USWD 1857, 1861b and 1863).

The position of Acting Assistant Quartermaster was compensated with the "pay and emoluments of mounted officers of respective grades" which amounted to an additional \$3.33 per month in pay a room as an office, an additional cord of wood per month from October to April, one ink stand, one stamp, one paper-folder, one sand-box, 1 1/2 quires of writing paper, 1/8 of a quire of envelope paper, six quills or twelve steel pens and one holder, as many lead pencils as may be required, not exceeding four per annum, 1/8 of an ounce of wafers, once ounce of sealing wax, 1/2 paper of ink powder and 1/2 piece of office tape in stationary allowances (USWD 1857, 1861b and 1863).

Table 2.4 Commissioned Officer Roles, Compensation and Emoluments

	Measure	PC	CC	PA	ACS	AACS	RQM	AAQM
Compensation (per month)								
Additional Pay	Dollars	-	10.00	10.00	10.00	3.33	10.00	3.33
Quarters								
Rooms As Office	Number	1	-	1	1	-	1	-
Wood (per month)	Cords	1	-	1	1	-	1	-
Office Supplies (per month)								
Writing Paper	Quires	5	-	-	-	-	-	-
Envelop Paper	Quires	1/2	-	-	-	-	-	-
Quills or Steel Pens	Number	20	-	-	-	-	-	-
Wafers	Quires	1/2	-	-	-	-	-	-
Sealing Wax	Ounces	3	-	-	-	-	-	-
Ink Powder	Papers	1	-	-	-	-	-	-
Tape	Pieces	1	-	-	-	-	-	-
And to each desk or table								
Ink Stand	Number	1	-	1	1	-	1	-
Stamp	Number	1	-	1	1	-	1	-
Paper-Folder	Number	1	-	1	1	-	1	-
Sand-Box	Number	1	-	1	1	-	1	-
Wafer-Box	Number	1	-	1	1	-	1	-
Lead Pencil (per year)	Number	4	-	4	4	-	4	-
Furniture (to each office)								
Common Desk or Table	Number	2	-	2	2	-	2	-
Common Chairs	Number	6	-	6	6	-	6	-
Pair of Andirons	Number	1	-	1	1	-	1	-
Shovel	Number	1	-	1	1	-	1	-
Tongs	Number	1	-	1	1	-	1	-
Horses and Forage (per month)								
Horses (Commutation Value)	Number	-	-	1 (\$8)	1 (\$8)	1 (\$8)	2 (\$16)	1 (\$8)
Hay	Pounds	-	-	14	14	14	28	14
Oats, Corn or Barley	Pounds	-	-	12	12	12	24	12
Bedding Straw	Pounds	-	-	100	100	100	100	100

A commissioned officer's grade, rank and military roles together were often the largest determining factors of a commissioned officer's level of military, social and economic status, within the United States Army and American society at large. The highest graded officers held the highest levels of authority were paid the highest salaries and received the greatest emoluments. This created and reinforced social and economic inequality between officers who as the socio-cultural elite of the army were able to exercise their military, socio-cultural and socio-economic power over other commissioned officers and enlisted men ranked below them. This was particularly

true for commissioned officers stationed at remote United States Army posts in the West, such as Fort Yamhill and Fort Hoskins, where the fort was the only settlement for hundreds of miles. The remoteness of these posts further concentrated military authority, social control and economic power in the hands of a few commissioned officers.

Symbols of Military Status

The most obvious symbol of the military and military status in particular is the uniform although military weaponry and some accoutrements were also prescribed by military grade (Cole 2007; USWD 1857, 1861). The military uniform for all company officers (i.e., captain, first lieutenant, second lieutenant) consisted of a frock coat, trousers, cap, hat, cravat, boots, gloves, sash, sword belt and plate, sword and scabbard and overcoat of identical pattern with the only variations between corps and grades signified by slight variations in the uniform embellishments, the corps and grade (rank) insignia or the model of the saber/sword (edge weapon). Although never worn as official “military dress” commissioned officers were permitted to wear a plain dark blue body coat (sack coat) with large buttons designating their respective corps but never as a dress for any military purpose. In like manner officers were also permitted to wear a buff, white or blue vest with the small buttons of their corps, regiment or department (USWD 1857:456).

For company officers military corps was indicated by 1) variations in color of welt on the trousers, background cloth of the epaulettes and shoulder straps and on the cap pompon (i.e., Artillery – scarlet; Infantry – light or sky blue; Riflemen – medium or emerald green; Dragoons – orange; and Cavalry – yellow); 2) distinctive corps insignia (i.e., Artillery – cross cannons; Infantry – bugle; Riflemen – trumpet; Dragoons/Cavalry – crossed sabers) worn upon the cap and hat; 3) the device of the military button (spread eagle with the letter A, for Artillery – I, for Infantry – R, for Riflemen – C, for Cavalry – D, for Dragoons, on the shield); and 4) the sword/saber and scabbard patterns (mounted officers prescribed the *saber* and scabbard and non-

mounted officers prescribed the *sword* and scabbard “according to pattern”). While all of the colored corps insignia on the trousers, epaulettes, shoulder straps and pompons were made of cloth all of the other insignia (i.e., corps insignia, military buttons and sabers/swords and all or parts of their scabbards) were made of white (silver) or yellow (brass or gilded) metal.

For company officers specific military grade (or rank) was indicated solely by the epaulettes and shoulder straps through: 1) slight variations in the length and diameter of the epaulette bullion, 2) slight variations in the width of the borders of the epaulettes and shoulder straps and 3) by the device placed within them (i.e., one silver bar for captain, two silver bars for first lieutenants and blank for second lieutenants). All of the distinguishing elements of company officer grade (rank) insignia were made of cloth. Relative rank of commissioned officers within the army was also signified by the brass military button as the eagle device of the commissioned officer’s button contained a letter representing his military corps: A, for Artillery – I, for Infantry – R, for Riflemen – C, for Cavalry – D, for Dragoons on the shield while the shield of the enlisted soldier’s button did not contain a letter but were usual lined or left blank.

The only other uniform item that symbolized the military “rank” and identity of company grade officers and non-commissioned officers was the sword-belt plate. Made of gilded brass the plate was decorated with a silver wreath of laurel encircling the “Arms of the United States” [an eagle with a shield upon its breast clutching a laurel branch in one talon and arrows in the other and a scroll in its beak with “E PLURIBUS UNUM” in silver letters] upon a background of stars, clouds and sun rays. The belt plate signified their relative rank as an “officer” (either commissioned or non-commissioned) opposed to an enlisted soldier who were not issued swords or sabers. The belt plate also signified that the wearer was as member of the United States Army.

Relative military rank of a commissioned officers was also indicated by his weapons (Cole 2007). The sidearm (pistol) was the typical firearm used by the commissioned officer (although both commissioned officers and enlisted soldiers of cavalry and dragoons regiments used sidearms) while the longarm (rifle or rifle-

musket, etc.) was the military issue firearm used by the enlisted soldier. In addition the sword or saber was the edge weapon for “officers” (either commissioned or non-commissioned, although each had a different pattern) and bayonets were the edge weapons issued to enlisted soldiers.

All of the military accoutrements (i.e., cartridge boxes, knapsacks, haversacks and canteens) were generally considered to be military issue for the enlisted ranks and were not considered typical military items associated with the commissioned officers. Even though they were not considered regulation for commissioned officers some of these items, especially the canteen, were likely used by commissioned officers.

Non-Military Status in the 19th Century U.S. Army

During the 19th century commissioned officers in the United States Army understood themselves in terms of their social, economic and military positions and were certain of their station in life as elite members, not only within the Army, but also within American society as a whole. A commissioned officer’s socio-cultural position with the Army was defined by his financial means (his class), his status (prestige and social honor) and his power and authority (military grade and rank). The interplay of these three components defined what Weber (1946, 2010, 2015) called a person’s social position within the larger social stratification of society. The social position of commissioned officers in the United States Army defined their worldview as well as how they behaved and what they believed to be appropriate behaviors in relation to their perceived class (economic position), status (social position) and power (military position).

Commissioned Officers’ Worldview: Social Class and Status

Most 19th century commissioned officers view themselves as members of the socio-cultural, intellectual and economic elite of American society a viewpoint that was reinforced by the ridged hierarchical caste system of the United States Army. As a result of their family backgrounds, education and position within the Army

commissioned officers associated themselves with the most prominent members of their communities, were paid high salaries, were well educated and were often the de facto bearers of American ideals and culture in the western United States. As a result they believed in their social, cultural, economic and intellectual superiority both within the military but also within larger American society.

Officers as Intellectual, Economic and Socio-Cultural Elites.

During the latter half of the 19th century commissioned officers in the United States Army were some of the most educated men in America. By 1861 70% of all commissioned officers in the Regular Army were graduates of the United States Military Academy at West Point, New York (Ball 2001:72). While attending West Point not only did cadets learn the martial arts, such as military history and tactics, they were also educated in political science, math, geography, natural philosophy (science), engineering, drawing, rhetoric, English and even French (Morrison 1998). The curriculum was so broad and thorough that it was considered to be one of the most rigorous higher educations in America prior to the Civil War. Education of this type was so prestigious that heading into the last quarter of the 19th century Regular Army officers constituted the most highly educated profession in the United States given that by 1867 76% of all commissioned officers were graduates of West Point while only 1.28% of college-aged (20-24 years) white males outside the commissioned officers of the United States military were earning higher educations in 1870 (Adams 2009:23).

Many officers continued their intellectual growth after leaving West Point and many considered it important to remain well-read, even while serving on remote stretches of the frontier (Adams 2009:32). A sometimes important part of parlor life was the lounging in a rocking-chair enjoying a quite smoke and discussing the news of the day or having a philosophical debate (Adams 2009:32). Photographs from the period confirm this description showing officers relaxing in their quarters surrounded by books and newspapers filling bookshelves, stacked on desks and mantels and piled on tables (Brown 1992). Not only did commissioned officers continue to keep abreast of the latest intellectual thought of the country many of them also contributed

to it. Commissioned officers were, because they were stationed along the frontier, poised to become amateur naturalists, geographers, geologists and ethnographers (Tate 1999:3, 14). It was common, and often expected, for Army officers to record the natural and cultural history of the region where they were stationed. Climate and weather observations were made at nearly every Army post and geographical surveys of the topography surrounding these posts were military necessity. Most commissioned officers were keenly aware of the rapidly disappearing Native American cultures they encountered and many of them attempted to record ethnographic observations in their journals and letters back home and some of them even produced high quality ethnographies of Native cultures surrounding Fort Yamhill and a sister post Fort Umpqua (Glisan 1874; Sturtevant 1990).

Not only were commissioned officers intellectual elites they were also economic elites. Although few would have been considered “ostentatiously wealthy” all were paid well enough to place them in the upper economic tiers of society and paired with the fact that housing, rations, fuel and transportation were furnished by the Army most commissioned officers lived a comfortable life, even with the vicissitudes of the frontier. For example, the lowest paid commissioned officers, second lieutenants, were paid \$113.50 per month in salary and emoluments a small fortune compared to their enlisted counter-parts who earned just \$13.00 per month (USWD 1857, 1861 and 1863). Not only were commissioned officers well paid within the Army they would have been considered members of the economic elite within the larger American society as well. The same lowly second lieutenant brought home nearly \$1,400 annually a great sum when more than 90% of American families earned less than \$1,200 (Adams 2009:23). Regardless of an officer’s socio-economic background prior to his commission his appointment within the Army and the salary he received automatically elevated him to the economic elite within society.

Given their high level of education and their high military incomes commissioned officer’s thought of themselves as the social and economic elite of 19th century American society. As such recreating an upper middle-class Victorian lifestyle was a priority for commissioned officers and their spouses (Adams

2009:112; Ball 2001:73). This lifestyle was largely based on 19th century upper-middle class values of gentility (i.e., social superiority demonstrated by genteel manners, behavior and appearance) and domesticity (i.e., wife's emphasis on the home and creating a refuge for her wife and children) which were rooted in the caste structure of the gentlemanly aristocracy of the 18th century (Horton 2014:32). In this view every officer was a gentleman, and his wife a lady, and they was expected to behave as such.

In addition to being highly educated and well read commissioned officers were also expected to be cultured and if not a patron at least a consumer of the fine arts. Art, music, poetry and theater were all commonly found amongst the occupants of Officers' Row (Adams 2009:36). Photographs from the period show musical instruments such as pianos and guitars prominently displayed within parlors (Brown 1992:17-18) and historical sources report regimental and company bands playing not just patriotic music for the post but also works of Verdi and Strauss for officer parties and social events (Adams 2009:36). Nearly every commissioned officer kept a journal which later in life many used to write memoirs of their military experiences along the frontier including at least three commissioned officers who served at Fort Yamhill and Fort Hoskins: Second Lieutenant Philip H. Sheridan (Sheridan 1888), Second Lieutenant William B. Hazen (Hazen 1885) and Surgeon Rodney Glisan (Glisan 1887). Many commissioned officers used their experiences within the Army to draft poems and short stories set in and evoking the untamed wilds of the West (Adams 2009:34-35).

Parlors, dining rooms and bedrooms were often decorated with classical statuary, paintings and in some cases with the newest artistic medium of photography (Brown 1992). Tintype and daguerreotype pictures were common decorations on fireplace mantels, shelves and end tables often depicting family members, friends and loved ones. Drawings and paintings were also commonly found adorning parlor and dining room walls. Although the subject matter varied greatly two of the most common types were portraiture and landscapes. Prior to the advent of photography painted portraiture was the most common medium used for preserving the likeness of human form. Again, the subject matter was primarily personal with most paintings

depicting family members but many were also of prominent military, political and philosophical leaders of the past and present (Brown 1992). Landscapes were also a common subject matter. Either of natural or cultural in subject landscapes often evoked the feeling of a time and/or place. For example, in 1861 as a gift of appreciation from his men Captain Christopher C. Augur was given a painting of Fort Hoskins, Oregon (Figure 3.2), the post he commanded since 1856 (D. Brauner, Personal Communication, 2014). Although purely speculation one can imagine the painting adorning the walls of his subsequent military quarters as a reminder of his military service at the quite post before the Civil War.

Commissioned Officers' Views on Work and Leisure. As previously mentioned commissioned officers understood themselves in terms of class and status and in doing so they had a very specific understanding of their relationship to work and leisure. Simply put, commissioned officers regarded themselves as supervisors, not workers, and as a result they considered themselves unworthy of manual labor and instead relegated tasks requiring it to enlisted men (Adams 2009:48). In many ways the military culture and hierarchy emphasized an officer's supervisory control over his lower ranked officers and men and his social standing as a gentleman was much more overtly supported than within civil society. The tasks of military life were clearly divided along class lines between manual labor of the enlisted men and the managerial supervision of the officers. As most commissioned officers regarded manual labor as beneath their station they attempted to distance themselves from all tasks associated with it. For example, prior to 1870 U. S. Army Regulations permitted the "hiring" of enlisted men as orderlies who were to act as soldier-servants for a commissioned officer of their company. Most often these orderlies were drawn from the men of the company and for their troubles were compensated with "extra pay" (USWD 1857, 1861b, 1863). But these men were little more than domestic servants responsible for the daily requirements of cooking and cleaning and for the maintenance and upkeep of the officer's personal estate and quarters.

This division of labor and the commissioned officer's diversion to it was also extended to his family. As a commissioned officer was above the dregs of manual

labor so too was his wife and children (Adams 2009:51). Although a commissioned officer's wife was expected to conform to the cardinal virtues of the 19th century "Cult of True Womanhood" (i.e., piety, purity, submission and domesticity) the social status of her husband automatically excluded his wife, and the other the women of his household, from the drudgery of manual labor (Keister and Southgate 2011; Welter 1966). Instead an officers' wife, just as her husband, was to take on a managerial role of supervision, but instead of supervising soldiers and the running of an Army post, she were responsible for supervising orderlies and servants and the running of the home. As supervisors of the post and home commissioned officers and their wives delegated most of their tasks and therefore were largely inconsequential to the day-to-day activities and were free and expected to involve themselves in leisure pursuits.

Commissioned officers and their wives filled their free time, which consequently was most of their time, with a wide range of leisure activities such as riding, reading, participating in philosophical or political debates, playing and listening to music, going to the theater, playing games, general socializing and other activities associated with gentility or parlor life. In fact the daily routine was so full of such activities that leisure was not merely a part of life, it oftentimes was their life (Adams 2009:75). No leisure activities were more emblematic of this life of leisure and the material manifestations of status than calling, dining and hunting. These three activities were used to construct a formalized leisure culture that made real the genteel aspirations of commissioned officers and their families and in many ways became class rituals (Adams 2009:78).

Calling. Calling was an institutional ritual of introduction and an implicit pronouncement of class standing. Upon arriving at a new duty station, an officer was expected to pay a formal social call to the commanding officer of the post. After this initial call, other commissioned officers of the garrison were required to call upon the newcomers, who would then return the calls. After this initial exchange, the newcomers would quickly integrate into the social world of the post through subsequent social calls, the higher status officer calling upon the lower status officer, and other facets of leisure culture (Adams 2009:78). The sociability imposed by this

cycle of visits, in a very real way, had the force of law for if a commissioned officer spurned its dictates he and his family could expect to be shunned. As the men participated in the formal “duty calls” that occurred between the commissioned officers of a post the officers’ wives participated in their own ritual of reciprocal and complementary social visits that paralleled the professional calls of their husbands and fathers.

The ritual behavior of calling was an implicit pronouncement of class standing and the ritual had its own set of paraphernalia that often reflected the status of the caller and the called upon (Figure 2.1). For example, if the recipient of social call was not at home the visitor was to leave with a servant a calling card that listed the officer’s name, rank and “U.S.A.” (presumably to distinguish officers in the regular army from those in the volunteer army or militia groups) (Adams 2009:78). These cards could range from modest cards printed with just the name and rank of the officer in black ink on white card stock to more expensive and higher status cards filled out with elaborate gilded calligraphy and containing a picture of the caller. Until presented these cards were usually stored in card cases made of fabric, leather, brass, silver or sometimes gold that tended to be highly decorated and was carried in an officer’s pocket. Once given the calling card was usually deposited by the servant on a calling card tray placed on a table or stand close to the front door of the house and usually made of silver plate, porcelain or glass and often highly ornate with painted, stamped or incised decoration and sometimes mounted on a pedestal or within a holder. The variation in quality, and likely cost, found within paraphernalia associated with the ritual of calling suggests that calling card, case and tray were meant to reflect of social and economic status of the owner.



Figure 2.1 Material Culture of Calling: Calling Card of Lieutenant General Philip H. Sheridan post-1863 , Silver Calling Card Case c. 1850, and Glass Calling Card Tray with Gilded Stand c. 1860 (Jackson 2018).

In addition to the specific rituals of calling, and its unique material culture, the social ideals of gentility and domesticity required the caller to be good host and provide his or her guest with comfort and refreshment when they received the newcomer. For the men the introductions of the social call might involve the offering of rare and expensive liquors served from cut glass decanters and consumed from fine glass tumblers, while sitting and smoking tobacco by the fire in a well decorated parlor or on the front porch (Adams 2009:115). For the wives, and likely the men at times as well, these social introductions involved the offering of rare or expensive tea and/or coffee served from porcelain tea/coffee pots and consumed from gilded tea cups and saucers within a parlor or dining room (Adams 2009:122-123). Not only was the ritual of calling an implicit statement of class standing illustrating the military and social hierarchy of the post it was also an opportunity for commissioned officer's to express their economic status in the form of conspicuous consumption within a ritual that was entirely about the expression of their military and social position.

Dining. Dining was another important social ritual used to facilitate social interaction between commissioned officers that reflected the class imperative of leisure (Adams 2009:81). A dinner party could be hosted by any commissioned

officer who could afford it although it was likely difficult for some as the guests were supposed to be impressed by the amount and variety of food casually proffered by the host. As meals were a daily occurrence the opportunity for commissioned officers to use the dining experience as a proclamation of class standing was ever-present. At posts where most of the commissioned officers were married and had families it was customary for the responsibility of hosting the daily meals to be rotated amongst the commissioned officers who could afford to do so. In contrast, at posts where the majority of commissioned officers were unmarried it was not uncommon for the wealthiest officer, which was usually the highest ranked officer, to host and provide his fellow officers with their daily meals. In cases where no officer was wealthy enough to regularly host his peers' then all of the officers present pooled their funds and shared meals in a communal "officer's mess" (USWD 1861). During holidays or combined with post balls dinner parties became ostentatious events which began with a formal dinner and continued into the night with series of "dinners" interspersed with games, music, dancing and other social activities (Adams 2009:82-83).

Meals, especially in the company of guests, were performative events at which the rituals of class presentation and standing were staged (Adams 2009:113). For most commissioned officers food, and its consumption, symbolized a spectrum of bourgeois values including wealth, fashion and cultural refinement. In order to demonstrate, reassure and secure their social position commissioned officers served their guests ostentatious meals of luxury replete with fine dining rituals such as serving exotic and expensive foods within multiple-course meals, on fancy dining services and with fine dining implements. The amount, variety and quality of food a host could provide were believed to reflect their social and economic status and through the prevalence of dinner parties officers could stake a claim to membership in the leisure class (Adams 2009:82). The ability of a commissioned officer to regularly host dinners and meet the expectations of his guests was a clear indication that he held a secure position within the upper-middle class society that was the commissioned officer corps.

Hunting and Fishing. To live a lifestyle of leisure required commissioned officers to fill their time with recreational activities such as hunting and fishing in addition to making the customary social calls and participating in elaborate dinner parties. Hunting, specifically, was used to express and reinforce a commissioned officer's status as a member of the socio-cultural elite and provided him with vehicle for expressing the competitive individualism that colored the upper-class life in the Army (Adams 2009:86). While both commissioned officers and enlisted men hunted and fished they do so very differently with regard to their access, reasons and approaches. Because of their station enlisted soldiers were required to obtain the permission of a superior in order to hunt and fish off-post and for the use of Army owned firearms and ammunition. Although enlisted men did hunt for recreation purposes it was an imperative that they hunt as a subsistence activity to supplement their usually meager and sometimes spoiled Army rations. Enlisted men also tended to hunt and fish communally sharing the bounty amongst the participants and sometimes the company at large (Adams 2009:90-91).

Commissioned officers hunted and fished for very different reasons. Officers were permitted to hunt and fish whenever they pleased so long as their absence did not impact the Army's mission or disrupt the operations of the post to any significant degree. The fact that most commissioned officers were marginal to the day-to-day operations of the post erased all concerns of their absence and further exemplified their preoccupation with a leisure culture. In addition to its popularity as an activity to pass the time hunting and fishing appealed to the commissioned officer elite as an expression of upper-class masculinity and gentility (Adams 2009:85). The ability for commissioned officers to leave their post for extended periods of time to hunt and kill prey was a direct reflection of their ability to live a life of leisure and his sense of masculinity.

While both enlisted men commissioned officers hunted, officers hunted in style and prided themselves on owning expensive hunting dogs, thoroughbred horses and the most up-to-date personally owned firearms and ammunition. When hunting commissioned officers were not resigned to use the "standard" military issued firearms and ammunition, instead many of them purchased expensive and the most

up-to-date in firearm and ammunition technology (Adams 2009:86). The 1850s and 1860s were time when firearm technology was rapidly shifting from muzzle-loading arms using round-ball projectiles to breech-loading arms using conical projectile technology (Thomas 1997) therefore it would have been class and military imperative for commissioned officers to keep abreast of the latest technological innovations. For many commissioned officers firearms were not just an implement of death but were also symbols of their military status (i.e., side arms) and expressions of their upper-class masculinity and gentility (i.e., hunting rifles and fowling pieces).

Although commissioned officers may have went on hunts together, their experience was of individualism and competition. Hunting trips were often turned into grand sporting events where points were earned by killing animals and officers were quick to call attention to their successful hunts often recording a dozen or more kills of wolves, bear, buffalo, elk, deer, antelope, turkey, geese, ducks, grouse, quail and gripe in a single day (Adams 2009:86). While commissioned officers most certainly supplied their dinner tables with their kills they were also very interested using hunting trips to acquire trophies. Photographs from the period depict the walls of commissioned officers quarters dressed with pelts, antlers and fully taxidermied animals (Brown 1992:13-23). The meat acquired during these hunts was considered the private property of the individual commissioned officer who killed the animal and although officers most certainly shared their bounties with their peers it was done so within the context of competition and the display of status marked by the successful hunt. While killing, animals or men, was part of a soldier's life few commissioned officers enjoyed killing their fellow man but most took great pride in the hunting, killing and display of beasts and it was a mark of prestige to be good at it.

Commissioned Officer Consumption and their Material Worlds.

Commissioned officers and their families were consumers and used consumption to physically display their social and economic statuses. Adams (2009) in his historical study of "class and race in the frontier army" recites an almost unending list of historical examples where commissioned officers and their families participated in a variety of consumer behaviors (i.e., conspicuous consumption, etc.) that were

unquestionably designed to express social and economic status. Commissioned officers spend exorbitant and sometimes ruinous amounts of money on food, alcohol, decorative items, china, glass and silver dining services, clothing (both military and civilian) and other fine items to stake a claim to elite status (Adams 2009:104-128). Some of these items are worth discussing in more detail as they are likely to be recovered at both Fort Yamhill and Fort Hoskins. As discussed above calling, dining and hunting were important leisure activities for commissioned officers and will not be repeated here. But two important aspects of the commissioned officers material world have yet to be discussed his dress and personal adornment and his quarters and the decoration of them.

Dress and Adornment. The dress and adornment of commissioned officers was of two types: that of their military dress or uniform and that of civilian attire. As briefly discussed above the uniform was specific to corps and grade as prescribed by military regulation (USWD 1857, 1861) and dictated what types of clothing a commissioned officer was required to wear and when and where he was permitted to wear civilian attire. As the name implies the uniform was intended to be unchanging in form or character between commissioned officers of different military status and thus representing group unity and identity but because they were required to purchase their own uniforms they were provided with a very limited opportunity of latitude to make additions within the confines of the regulations. For example, although all company officers within the same corps were required to wear frock coats and trousers of an identical pattern they could and did have them tailored to better fit their individual bodies (Adams 2009:125). In addition, all of the metal insignia (buttons, corps and regimental badges) were prescribed as either “gilt” or “silver” but cheaper versions were also used and made instead of “bright” white (tin-based alloy) or yellow metal (copper-based alloy, brass) (Brinckerhoff 1972; USWD1857, 1861). And when not “on duty” commissioned officers were permitted to dispense with the epaulette or could wear swords of honor rather than the prescribed sword or saber (USWD 1857:446-447).

Contemporary dress uniforms were elaborate with frock coats, trousers and caps/hats trimmed with all manner of insignia and badges symbolizing the Army, corps, grade (rank) of the officer, and as they were required but not furnished by the Army they were a considerable expense for commissioned officers. In addition, once purchased maintaining their official uniform also came at a hefty price as the army had a habit of periodically overhauling dress uniforms. For example, between 1851 and 1861 the army made major modifications to the dress uniform at least three times (USWD 1851, 1857, 1861) which would have required the commissioned officer to purchase new items in order to keep up to date and the military strived to keep abreast of changing fashion trends.

Although military dress uniforms were required to be worn by regulation and were regarded as a symbol of their military status many commissioned officers preferred civilian attire especially when not on duty (Adams 2009:125). When not wearing their uniform most commissioned officers wore business or formal wear consisting of suits, frock coats, vests, trousers, blouses/shirts, coats and hats. Although the fitted frock coat remained the dominate garment for men during the period the looser more comfortable sack coat grew in popularity during the 1860s. Interestingly the sack coat (referred to as a body coat by the Army) was also introduced in the 1850s as an official garment lacking all ornament except buttons designating their respective corps (USWD 1857:455) but was not to be worn as dress for any military purpose. Men carried few accessories such as canes, umbrellas with decorative handles and wore gloves. For men, jewelry was largely confined to watches and watch chains, tie pins, and a variety of ornamental buttons and studs (Tortora and Eubank 2005:316-320). In contrast to the elaborate display of the military uniform civilian menswear was intended to be a “rational use of resources” through the elimination of wasteful motions and the rejection of sensuality and individuality (Matthews 2016). Instead, menswear should demonstrate restraint and reflect quality, craftsmanship, impeccable fit and elegance. In essence menswear was meant to be somber, austere and non-distracting (Vanderbilt University 2018).

Women’s dress was more elaborate and was intended to reflect the social status of their husbands. Women wore a variety of daytime dresses with mostly high

necklines, long sleeves and wide skirts which continued to widen throughout the 1850s and into the 1860s. Evening dresses were similar although they tended to have lower “off the shoulder necklines” and shorter sleeves and wider skirts. Corsets and hoopskirts were considered fashionable and common. Women carried several accessories including gloves, handkerchiefs, folding fans, small muffs and parasols. For women, the most common jewelry were bracelets, earrings, brooches, necklaces and buttons made of fashionable materials such as coral, cameos, cabochon stones, colored glass and jet (Tortora and Eubank 2005:309-315). More elaborate display was permitted in women’s dress. Garments, especially eveningwear, were often made of rare, imported and/or expensive materials such as silk and adorned with ribbon or lace. One young commissioned officer’s wife complained that the women’s fashions were so extravagant that she was forced to wear her wedding dress “just to keep up” (Adams 2009:125).

Quarters and Interiors. The built environment of the 19th century army post was specifically designed to express and reinforce differences in rank. The buildings in the post were arranged hierarchically around a hollow quadrangle with each build type grouped by function social status and military rank. For most posts the officer’s quarters were positioned on one side of the quadrangle with the enlisted men’s quarters opposite or sometimes adjacent, but usually a considerable physical and social distance away from the officers. The third side of the quadrangle contained the administrative buildings such as guardhouses and adjutants’ offices while the fourth side was either left open or sometimes contained the primary storehouses or defensive structures such as a blockhouse. The ancillary structures such as kitchens, bakeries, carpenter and blacksmith shops, stables and occasionally hospitals were located outside the quadrangle and away from the parade ground. In a study of 214 nineteenth century military posts located in the Western United States, Scott (2009: 304) found that 90.7 percent of these posts were constructed using this plan.

The specific layout of these posts reflected the military and social distance between ranks that were not only physical (i.e., fences, orchards) but also ideological using location, views, perspective, height and empty space to establish and reinforce

social and military status hierarchies within the post. For example commissioned officers often complained of their quarters being “unpleasantly situated” as either too close together or an insufficient distance (scarcely 100 yards) from the barracks of the men (Adams 2009:152). Although surveillance of the post, especially the enlisted barracks, was important for discipline commissioned officers were also selfishly interested in obstructing from their perception the sights, sounds and smells of the less desirable side of military life such as the stables, blacksmith, hospital and other support structures of the post through the use of orchards and other obstructions such as other fort buildings (Adams 2009:152).

As discussed above military regulation allotted space by grade and permitted commissioned officers to choose their quarters by rank (USWD 1857, 1861a, 1861b). So although officers had little control over the scale and layout of their quarters (as they were generally already constructed and their forms described by regulation) higher ranked officers did have the authority to choose the “best” quarters available (i.e., most space, best situated, most desirable view, etc.) and appear to have done so. Because commissioned officers had little control over the overall form (i.e., size and layout) and exterior decoration of their quarters, which tended to be classical, orderly and minimalist (Hoagland 2009), they used their interior spaces to reflect their post and rank (Adams 2009:121). Commissioned officers (and their wives) used copious amounts of inanimate objects to decorate their homes to reinforce their sense of self-worth, so much so that the interior of their homes often appeared crowded. A brief survey of the images of commissioned officers interior spaces collected by Brown (1992) depicts nearly every square foot of floor space filled with chairs, sofas, bookshelves, desks, tables and rugs with a plethora of books, musical instruments, firearms, trophies, art and other decorative items cluttering the walls, tables, desks, shelves and fireplace mantels.

The culture of the commissioned officers looked backward not forward striving to achieve the values of 18th century European aristocrats. Faced with the rapidly changing social world of the 19th century officers were conservative in their views of social status, work and proper behavior. These views were enhanced and

institutionalized within the ridged military and social hierarchy of the 19th century United States Army. As a result most officers valued discipline, gentility, polite manners, intellectualism and leisure culture and the ideal army officer was, in addition to be a soldier, a “gentleman-artist-scholar-statesman” (Adams 2009:46) who was sophisticated and certain of his place, and that of his family, in society. The commissioned officer and his family were also consumerist and used their economic position to purchase fine and expensive items to stake a claim to elite status.

CHAPTER 3: METHODS

Introduction

The purpose of this thesis is to examine the material expressions of status within the commissioned officer corps of the United States Army during the middle of the 19th century. As the full examination of every commissioned officer grade within the Army and at every fort or post would be difficult, if not impossible, this thesis will focus on examining the expression of status associated with just three commissioned officer grades (captain, first lieutenant and second lieutenant) who occupied six commissioned officers quarters at two mid-19th century United States Army posts in Western Oregon, Fort Yamhill and Fort Hoskins (Figure 3.1). Guided by the research questions below this research project will examine the economic, social and military status of these commissioned officers as these statuses are expressed in their demographics, subsistence purchase records, built environment and material culture.

Research Questions

As discussed in Chapter 2 the commissioned officers in the United States Army viewed themselves as members of the socio-cultural elite of 19th century America. As such, these commissioned officers actively expressed their economic, social and political position within the Army subculture through status displays such as conspicuous consumption and conspicuous leisure (Adams 2009). In order to test these assertions I pose several research questions and hypotheses:

1. Do higher graded commissioned officers have higher economic status than lower graded commissioned officers?
 - a. If higher graded commissioned officers have higher economic status than lower graded commissioned officers then higher graded commissioned officers should have higher military salaries and a higher level of accumulated wealth than lower graded commissioned officers, and
 - b. If higher graded commissioned officers have higher economic status than lower graded commissioned officers then higher graded commissioned officers should have: 1) a higher quantity of material possessions; 2) a higher quantity and proportion of high quality and more expensive material possessions; and 3) a greater variety of material possessions than lower graded commissioned officers.
2. Do higher graded commissioned officers have higher social status than lower graded commissioned officers?
 - a. If higher graded commissioned officers have higher social status than lower graded commissioned officers then higher graded commissioned officers should have more material possessions associated with highly valued social behaviors such as domesticity, gentility, intellectualism and leisure than lower graded commissioned officers.
3. Do higher graded commissioned officers have higher military status (authority) than lower graded commissioned officers?
 - a. If higher graded commissioned officers have higher military status than lower graded commissioned officers then higher graded commissioned officers should hold military commands, positions and roles which have higher military authority than lower graded commissioned officers.

Study Sites

Six commissioned officer quarters from two mid-19th century United States Army posts are the subject of this study including three quarters from Fort Yamhill: Fort Yamhill House 1 (FYH1), Fort Yamhill House 2 (FYH2) and Fort Yamhill House 3 (FYH3); and three quarters from Fort Hoskins: Fort Hoskins House 1 (FHH1), Fort Hoskins House 2 (FHH2) and Fort Hoskins House 3 (FHH3). Both forts were established early in 1856 and were continuously occupied until their permanent closure in 1865 (Fort Hoskins) and 1866 (Fort Yamhill). During their occupation both forts garrisoned both U.S. Army Regulars and Volunteers charged with protecting the Oregon Coast Reservation (1856-1861) and for maintaining a Federal Union presence in the region during the American Civil War (1861-1865).

Historical Context

In June 1853, Joel Palmer, Superintendent of Indian Affairs for the Oregon Territory, recommended that large tracts of land west of the Oregon Coast Range be set aside as reservation lands for Native American habitation and use as a method to solve the rising tension between Euro-American settlers and local native populations (Brauner and Stricker 2006:25). By executive order on November 8, 1855 the Coast Reservation was created to include these lands west of the crest of the Oregon Coast Range from the Nestucca River in the north to the Siltcoos River in the south (Figure 3.1) (Beckham 1998, Harger 1972 and Tveskov 2000).

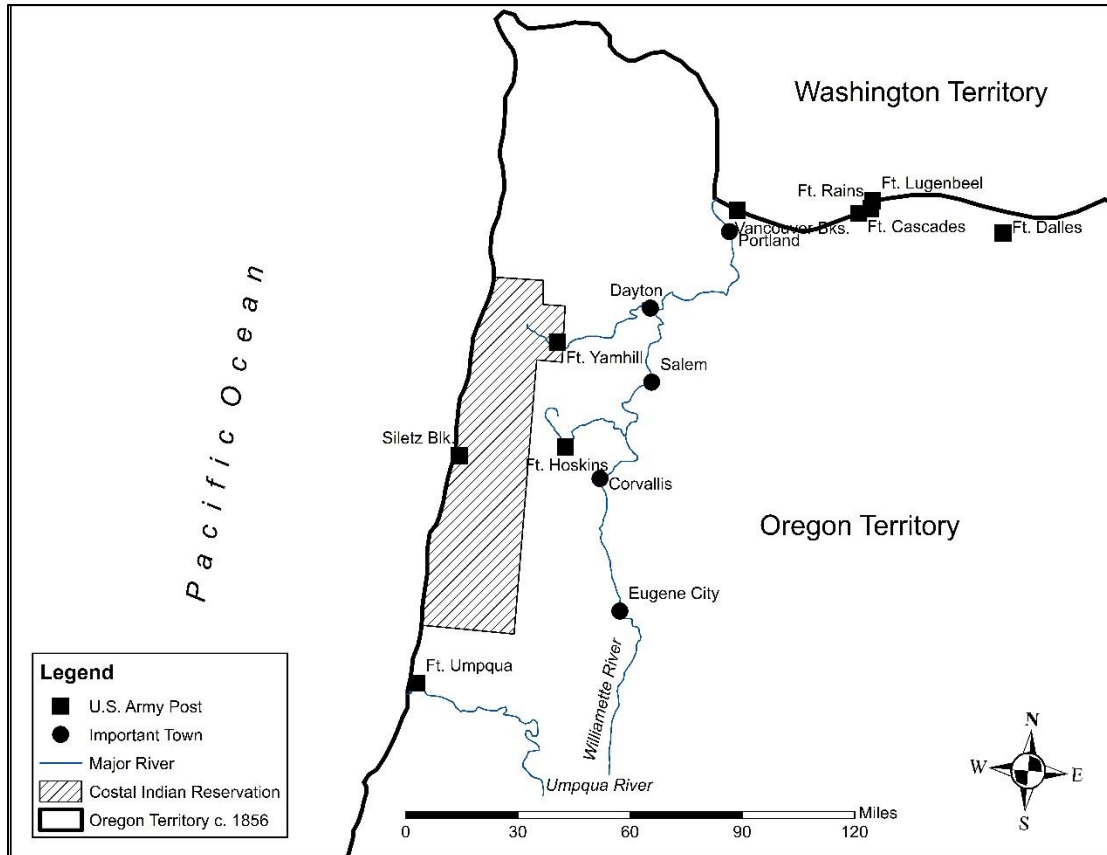


Figure 3.1 Map of Military Forts and the Oregon Coast Reservation, c. 1856

The larger Coast Reservation was divided into two smaller reservations, the Grand Ronde Reservation in the north encompassing 61,440 acres with an Indian Agency located at the western edge of the Grand Ronde Valley and the Siletz Reservation in the south encompassing 225,000 acres with an Indian Agency at Siletz near the confluence of the south fork of Rock Creek and Depoe Slough (Adams 1991:11, Douthit 2002, Harger 1972, Schwartz 1995). One other Indian Agency, the Alsea Agency, was established along the coast just north of Winchester Bay. During the early months of 1856 U.S. Army Regulars began escorting various Native American bands to the reservation and by late-July 1856 at least 2,455 Native Americans were on the Reservation (Adams 1991:11-12). Those Native American tribes that were relocated to the Grand Ronde Reservation included members of the Rogue River, Umpqua, Kalapuya, Tillamook, Klamath, Molalla and Tualatin while members of the Alsea, Coos, Coquille, Chetco, Nestucca, Rogue River, Port Orford,

Shasta, Siuslaw, Tillamook, Tututni, Umpqua, and Yaquina were relocated to the Siletz Reservation (Adams 1991:11, Brauner and Stricker 2006:31).

To guard the newly established Coast Reservation Superintendent Joel Palmer requested that a series of forts be established near each of the Indian Agencies. The primary purpose of these posts was to police the Native American population, provide military support for each of the Indian agencies, guard the reservation from Euro-American incursion and protect the peaceful Indians from white hostility, and to monitor and control all traffic in and out of the Reservation. A total of three forts, Fort Umpqua, Fort Hoskins and Fort Yamhill, and one blockhouse, at Yaquina Bay/Siletz, were constructed in the spring and summer of 1856 (Figure 3.1). The original purpose of these forts was to control traffic in and out of the Coast Reservation and from the period of 1856 to 1861 this was the primary purpose of all three forts. During the Army's tenure as cultural intermediaries between the Government of the United States and the various Indian tribes, these posts served as home to companies of the 9th Oregon Mounted Volunteers, 4th U.S. Infantry, 1st U.S. Dragoons, 9th U.S. Infantry and the 3rd U.S. Artillery (Brauner and Stricker 2006:62, Eichelberger 2011:40).

With the outbreak of the American Civil war in the April of 1861, the purpose of the forts changed dramatically. Originally all three forts were destined for closure in 1862, but after becoming aware of a strong secessionist movement by the Knights of the Golden Circle based in Monroe, Oregon, the U.S. Government decided to keep Fort Yamhill and Fort Hoskins in operation to garrison volunteer companies from the 2nd and 4th California Volunteer Infantry, the 1st Washington Territorial Volunteer Infantry and the 1st Oregon Volunteer Infantry (Brauner and Stricker 2006:62, Eichelberger 2011:40). During the period of the American Civil war, Fort Yamhill and Fort Hoskins remained opened in order to maintain a Union presence in the state to counter balance the secessionist movement and to deter a feared British invasion of the Pacific Northwest (Brauner et al. 2009:7 and Brauner and Stricker 2006:41, 62-63). After the conclusion of the American Civil War the threat of secession and the fear of a British invasion had been alleviated Fort Yamhill and Fort Hoskins had lost their military usefulness. As a result they were closed by General Order No. 19 of

August 3, 1866, and the post buildings, livestock and surplus supplies were sold at auction shortly thereafter (Barth 1959:197).

Fort Yamhill. Fort Yamhill was the largest of the three military forts established to guard Oregon Coast Reservation and comprised of at least 24 buildings including six commissioned officers' quarters, a blockhouse, an adjutant's office, a guard house, a commissary and quartermaster storehouse, a barracks, a mess hall, a company kitchen, a hospital, five laundress quarters, a bake house, a stables, a blacksmith shop, a carpenter shop, a sutler store and a sentry box (Figure 3.2).

The fort was laid out as a rectangular quadrangle around an open parade ground with each of the sides containing structures grouped by function and socio-cultural rank. The eastern side of the quadrangle was the socio-economic apex of the post and contained the six commissioned officers' quarters collectively known as Officers' Row. The north side of the quadrangle was the administrative hub of the post and contained the adjutant's office, guardhouse and commissary and quartermaster storehouse. The west side of the quadrangle contained the only defensive structure at the post, the blockhouse, which looked out over the Grand Ronde Indian Agency and the Oregon Coast Reservation. The south side of the quadrangle contained the quarters for the enlisted men including a barracks, company kitchen and messhall. The other 11 buildings were all quasi-civilian in nature (hospital, laundresses, bakery, stables, blacksmith and sutler store) and were located outside the post fence to the south and west.

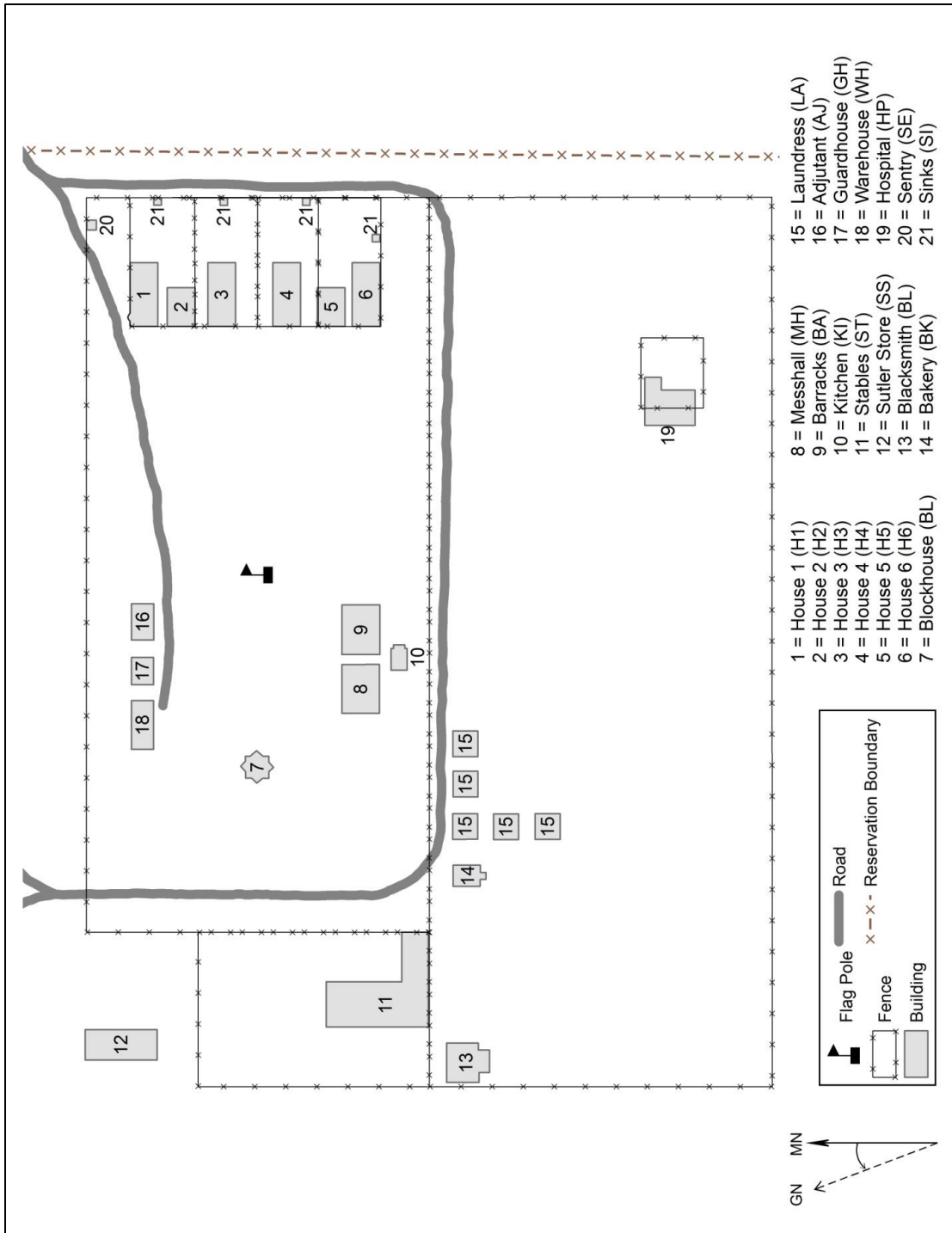


Figure 3.2 Map of Fort Yamhill, c. 1864. Redrawn from Davison Map (Adams 1991)

Fort Yamhill was intended to garrison two companies of men and was therefore designed to do so including the construction of six commissioned officers houses (two sets of three houses one house for each of the three officers for each

company) and two barracks buildings (again, one for each company). Although the post was garrisoned briefly by two companies between August 1856 and June 1857 (Co. F, 4th United States Infantry and Co. C, 1st United States Dragoons) for the vast majority of its history the post was never garrisoned with more than one company. In all six United States Regular and Volunteer Army companies were stationed at Fort Yamhill including Company C of the 2nd Oregon Mounted Volunteers, Company F and Company K of the 4th United States Infantry, Company C of the 1st United States Dragoons, Company D of the 4th California Volunteer Infantry and Company A of the 1st Oregon Volunteer Infantry (Table 3.1).

Fort Hoskins. Fort Hoskins was a smaller post and was comprised of at least 20 buildings including three commissioned officers' quarters, a blockhouse, an adjutant's office, barracks, powder magazine, root cellar, commissary and quartermaster warehouse, hospital, stables, blacksmith shop, carpenter shop, four laundresses, two bakeries and sutler store (Figures 3.3 and 3.4).

The fort was also laid out as a rectangular quadrangle around an open parade ground with each of the sides containing structures grouped by function and socio-cultural rank. The southwestern side of the quadrangle was the socio-economic apex of the post and contained the three commissioned officers' quarters collectively known as Officers' Row. The southeast side of the quadrangle was the administrative hub of the post and contained the adjutant's office and guardhouse. The northeast side of the quadrangle contained the quarters for the enlisted men including a barracks, root cellar and powder magazine. The northwest side of the quadrangle contained the commissary and quartermaster storehouse. The other 11 buildings were

Table 3.1 U.S. Army Companies Assigned to Fort Yamhill 1856-1866

Company	Regiment	Dates Assigned to Post
C	2nd Oregon Mounted Volunteers	March 1856 - April 1856
F	4th United States Infantry	July 1856 - August 1857
C	1st United States Dragoons	August 1856 - June 1857
K	4th United States Infantry	August 1857 - June 1861
D	4th California Volunteer Infantry	November 1861 - July 1865
A	1st Oregon Volunteer Infantry	August 1865 - June 1866

all quasi-civilian in nature (hospital, laundresses, bakery, stables, blacksmith, carpenter ship and sutler store) and were located outside the post fence to the north, west and east.

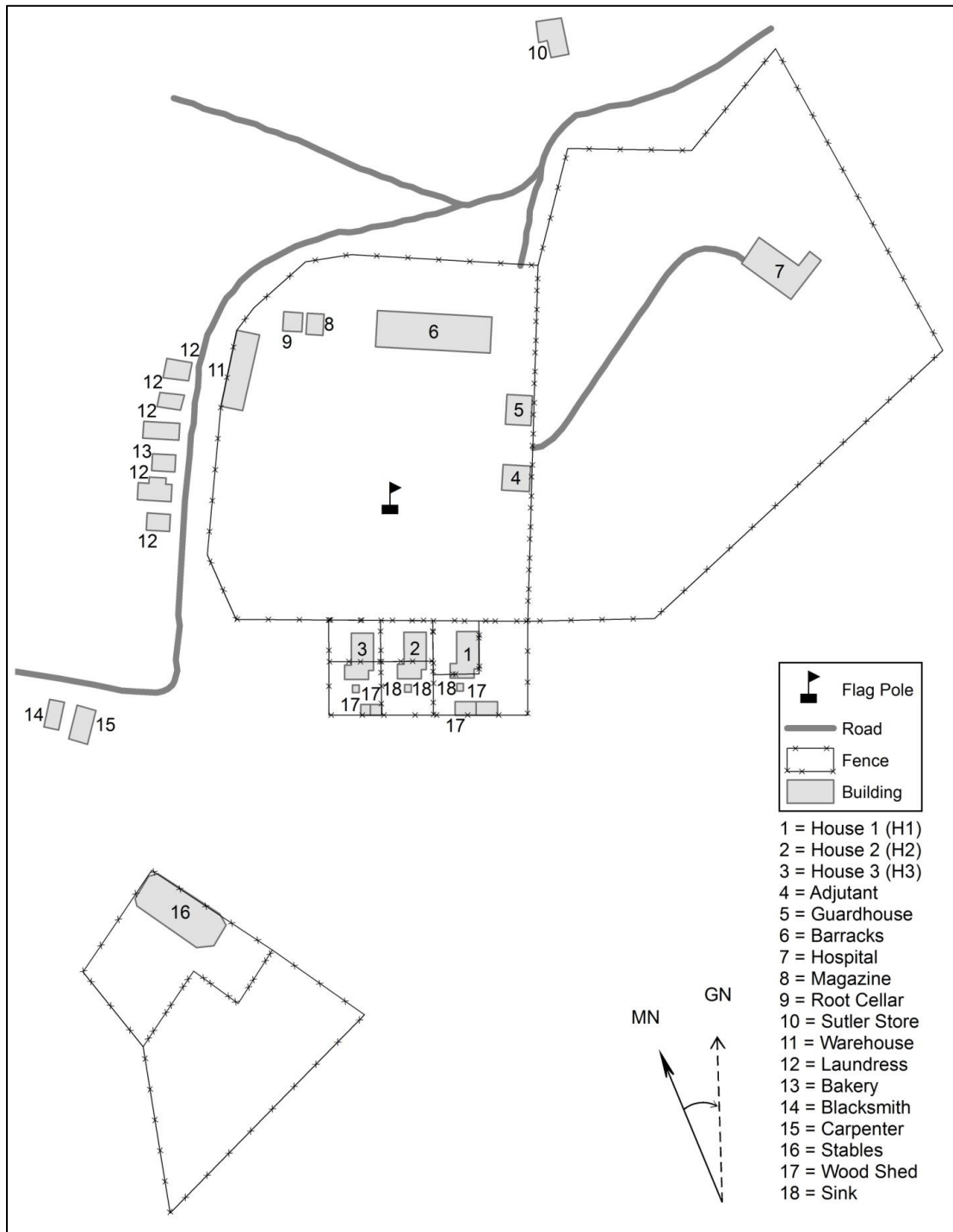


Figure 3.3 Map of Fort Hoskins, c. 1864. Redrawn from Chase Map (Bowyer 1992)



Figure 3.4 Oil Painting of Fort Hoskins, c. 1862 (Benton County Historical Society)

Fort Hoskins was intended to garrison only one company of men and was therefore designed to do so including the construction of just three commissioned officers houses (one set of three houses or one house for each of the three officers) and one barracks buildings (for one company). In all eight United States Regular and Volunteer Army companies were stationed at Fort Hoskins including Company G of the 4th United States Infantry, Company B of the 9th United States Infantry, Company F of the 4th United States Infantry, Company B of the 2nd California Volunteer Infantry, Company D of the 1st Washington Territorial Volunteer Infantry, Company D of the 4th California Volunteer Infantry, Company B of the 1st Oregon Volunteer Infantry and Company F of the 1st Oregon Volunteer Infantry (Table 3.2).

Table 3.2 U.S. Army Companies Assigned to Fort Hoskins 1856-1865

Company	Regiment	Dates Assigned to Post
G	4 th United States Infantry	July 1856 - July 1861
B	9 th United States Infantry	June 1861 - October 1861
F	4 th United States Infantry	June 1857 - June 1861
B	2 nd California Volunteer Infantry	October 1861 - June 1862
D	1 st Washington Territorial Volunteer Infantry	July 1862 - March 1863
D	4 th California Volunteer Infantry	September 1863 - October 1864
B	1 st Oregon Volunteer Infantry	December 1864 - March 1865
F	1 st Oregon Volunteer Infantry	January 1865 – February 1865

Historical Data and Methods

The primary objective of this study is to examine the material expressions of socio-economic status and authority amongst the commissioned officers who served at Fort Yamhill and Fort Hoskins. In order to accomplish this goal several sources of historical data were utilized in order to provide socio-economic and spatial contexts for the recovered archaeological material including a demographic profile for each of the commissioned officers who served at either post (Commissioned Officer Biographies), the examination commissioned officer purchasing records (Fort Hoskins Subsistence Account Book) and spatial analysis of several period maps of Fort Yamhill (the Davison Map of 1864) and Fort Hoskins (the Chase Map of 1864).

Commissioned Officer Biographies

A biographical sketch was created for each of the commissioned officers who served at either Fort Yamhill or Fort Hoskins (Appendix A). Each biography was comprised of both demographic data (officer age, marital status, number of dependents), socio-economic data (previous profession, if any, and worth of personal and real estate) and military data (officer grade, corps, dates assigned to the post, military roles served, number of years in military service, an estimated mean monthly salary and attendance of the West Point Military Academy).

The data contained within each of these sets was compiled from several sources. Demographic data was primarily compiled from published biographies, both

electronic websites and hardcopy books, and from online genealogy databases such as Ancestry.com. Socio-economic data was primarily compiled from the *United States Federal Census* Records of 1850 and 1860 and previous profession data was compiled from published commissioned officer biographies and enlistment/muster records. Military data was primarily compiled from post records such as the *Post Returns* for both Fort Yamhill and Fort Hoskins and published commissioned officer historical biographies including *Cullum's Biographical Register of the Officers and Graduates of the U.S. Military Academy* (Holden 1901), *Records of California Men in the War of the Rebellion* (Orton 1890) and *The California Volunteers and the Civil War* (WPA 1940) and others. The estimated mean monthly salary figures were calculated using grade, corps, number of months at post and military role data compiled from the Fort Yamhill and Fort Hoskins *Post Returns* and years of military service as presented in *Cullum's Biographical Register of the Officers and Graduates of the U.S. Military Academy* (Holden 1901).

Fort Hoskins Subsistence Account Book (FHSAB)

Commissioned officer purchasing records were compiled from “sales of subsistence stores to officers” in the *Fort Hoskins Subsistence Account Book* (FHSAB 1862). The *Fort Hoskins Subsistence Account Book* (FHSAB) was an official supply and financial book keeping document maintained by the Assistant Commissary of Subsistence/Acting Assistant Commissary of Subsistence for the post that contained a detailed monthly account of the sales of subsistence stores (food) from the post commissary to commissioned officers. In the account book is recorded the specific subsistence item, quantity purchased, the unit cost for each item, the total cost for each item purchased, the date of the purchase and the name and rank of the officer who purchased the subsistence stores. In all 487 entries listing sales of subsistence articles to commissioned officers are included in the book and the sales date between June 1862 and February 1864.

Period Maps

Two fort-era maps of Fort Yamhill and Fort Hoskins are also used in this study to provide both a spatial context for the commissioned officers' quarters at each post but also as a source of analytical data for understanding the expressions of status within the physical space of each fort. Both maps were drawn by educated personnel, a second lieutenant at Fort Yamhill and a post surgeon at Fort Hoskins, and appear to be fairly accurate concerning building location and layout. For analysis, both maps were georectified and scaled to extant foundations and archaeological features uncovered during the archaeological investigations discussed below.

Davison Map of 1864. The Davison Map was drawn by Second Lieutenant James Davison of Company D, 4th California Volunteer Infantry on June of 1864 (Figure 3.5). The map is fairly accurate displaying the relative location and orientation of each of the 24 buildings at Fort Yamhill. The layout or interior plan of each building is also presented with the size and orientation of each room depicted and the placement of doors and/or windows illustrated as gaps. The commissioned officers' quarters, the subject of this study, are clearly depicted with several important details including the specific layout of each house including the placement of doors, windows, fireplaces, porches and outbuildings (privy) enclosed within a fenced yard.

Chase Map of 1864. The Chase Map was drawn by Post Surgeon E. Y. Chase who was attached to Company D, 4th California Volunteer Infantry sometime in 1864 (Figure 3.6). Just as the Davison Map of Fort Yamhill the Chase Map of Fort Hoskins is fairly accurate displaying the location of each of the 20 buildings at Fort Hoskins in their correct location and orientation. The layout or interior plan of each building is also presented with the size and orientation of each room depicted and the placement of doors and/or windows illustrated as gaps. The commissioned officers' quarters, the subject of this study, are clearly depicted with several important details including the specific layout of each house including the placement of doors, windows, fireplaces, porches and outbuildings (privy and shed) enclosed within a

fenced yard. The map also depicts the location of underground water pipes and where each pipe enters each of the officer's quarters.

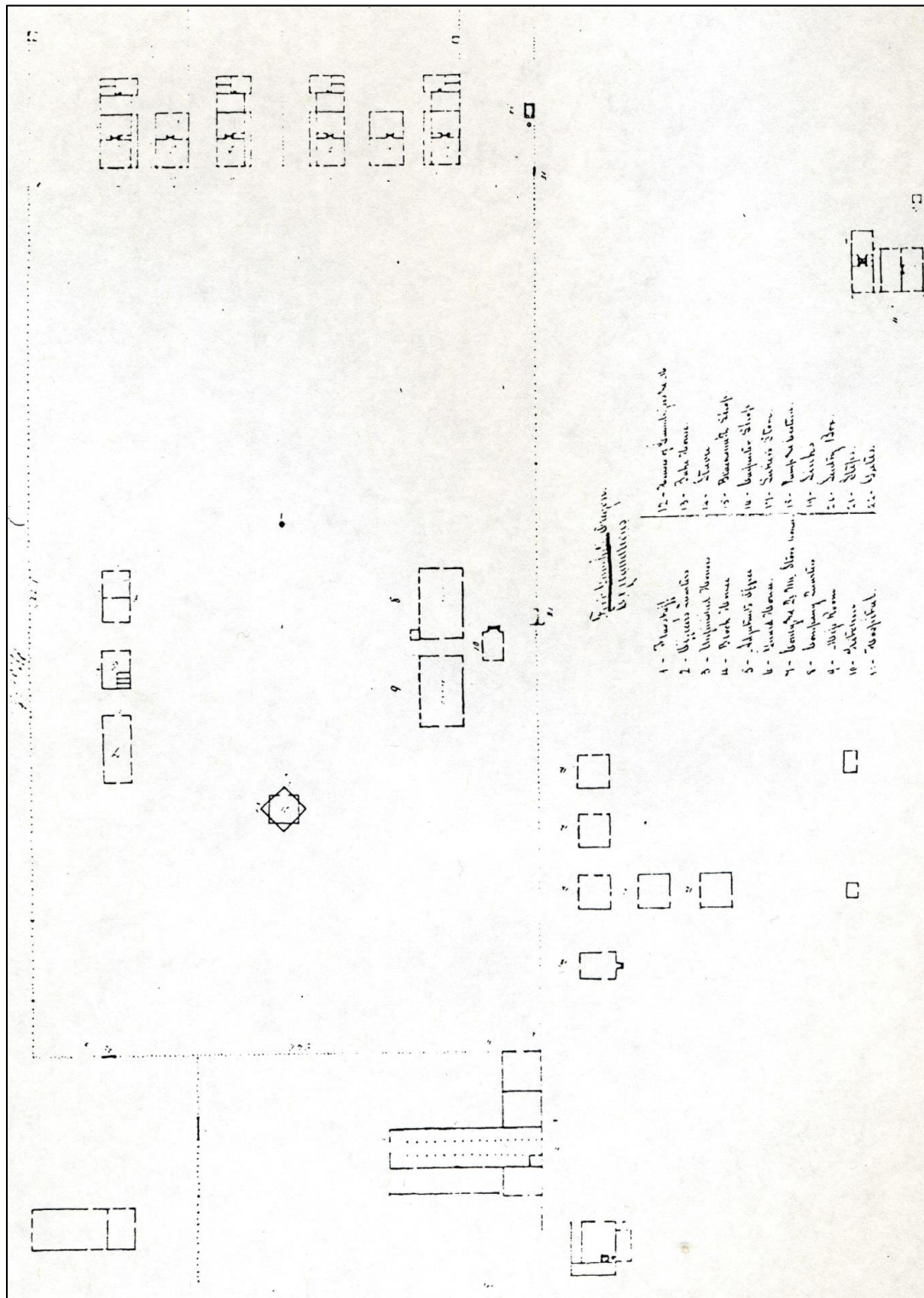


Figure 3.5 Davison Map of Fort Yamhill, c. 1864 (Adams 1991)

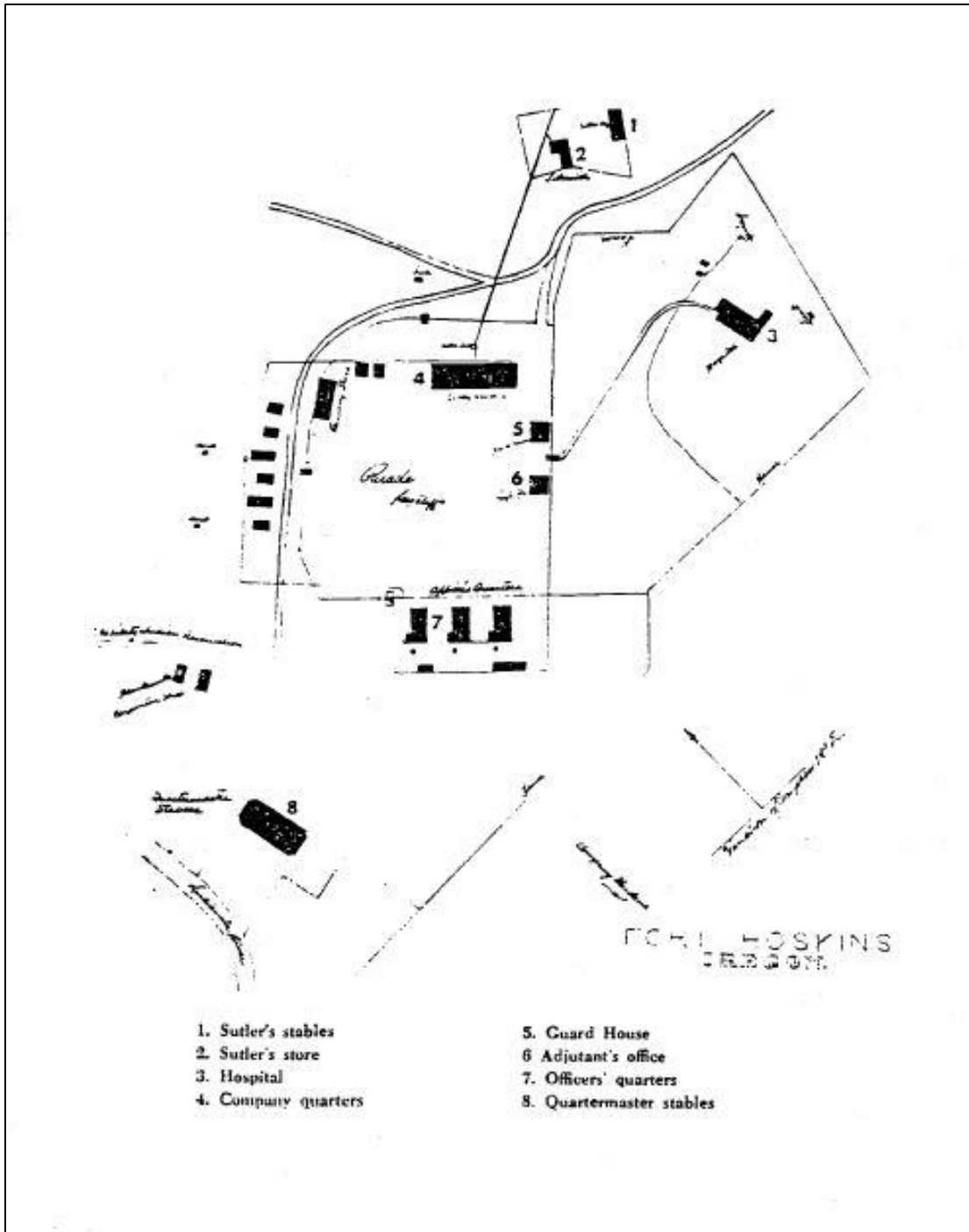


Figure 3.6 Chase Map of Fort Hoskins, c. 1864 (Bowyer 1992)

Archaeological Data and Methods

Inspired by the early historical work on the U.S. Military in western Oregon (Barth 1959, Beckham 1969, Harger 1972, Nelson and Onstad 1965 and Onstad 1964), the first serious archaeological work on these western forts began with two field seasons of work at Fort Hoskins in 1976 and 1977 (Brauner 1976, 1977; Bowyer 1992a). The results of this work warranted further excavation at the site and archaeologists from Oregon State University returned in 1993-1994 (Trussel 1997), 2005 and 2010 (unpublished) and 2013 (Eichelberger and Wesseler 2015).

Fort Yamhill, the largest and longest inhabited of these western posts, was first revitalized by historians in the late 1950s (Barth 1959) but remained obscure until the early 1990s when the Oregon State Parks and Recreation Department (OPRD) expressed interest in developing the property into an Oregon State Heritage Area (Adams 1991). Based on Adams' preliminary work the OPRD decided to develop the property as a heritage park and to continue archaeological investigations, for interpretive purposes, in 2004-2009, 2011 and 2013 (Brauner and Eichelberger 2009; Brauner et al. 2009; Eichelberger 2011, 2014b; Eichelberger and Brauner 2011). The archaeological data used in this study was recovered from six commissioned officer's houses including features and artifact assemblages from two officers' quarters which housed captains (FYH1 and FHH1), two quarters which housed first lieutenants (FYH2 and FHH2) and two quarters which housed second lieutenants (FYH3 and FHH3) at each post.

In all 690 square meters of archaeological excavation was conducted within these six officers' quarters at Fort Yamhill and Fort Hoskins including 374 square meters at Fort Yamhill (FYH1=185, FYH2=61 and FYH3=128) and 316 square meters at Fort Hoskins (FHH1=148, FHH2=116 and FHH3=52). Although over 70,000 total artifacts were recovered during these excavations of which only 1,721 objects (MNO, MNV or MNBC) will be used in this study including 752 recovered from Fort Yamhill (FYH1=365, FYH2=209 and FYH3=178) and 969 recovered from Fort Hoskins (FHH1=474, FHH2=323 and FHH3=172).

Each excavation unit was attributed to a particular commissioned officers' quarters (FYH1, FYH2, FYH3, FHH1, FHH2 or FHH3) based on its spatial location in relation to the officers' houses and the associated fenced yards as depicted in the 1864 Davison Map of Fort Yamhill (Figures 3.2 and 3.5) and the 1864 Chase Map of Fort Hoskins (Figures 3.3 and 3.6). Each commissioned officers' quarters was defined by the placement of the fences used to divide each commissioned officer's yard and all excavation units were attributed to the commissioned officers' quarters within which the excavation unit was located. The excavation units located outside the boundaries of the fenced yards at Fort Hoskins were attributed to the closest commissioned officer's house.

Excavations at Fort Yamhill

Three commissioned officer's quarters at Fort Yamhill will be used in this study: Fort Yamhill House 1 (FYH1), Fort Yamhill House 2 (FYH2) and Fort Yamhill House 3 (FYH3) (Figure 3.7). The first subsurface archaeological testing at the site was conducted by Oregon State University in conjunction with several archaeological field schools beginning in 2004. Under the direction of Dr. David R. Brauner the primary goal of the 2004 field season was to determine the extent and integrity of subsurface deposits for several historic features including areas associated with the sutler's store, Officers' Row and the post dump.

Based on these investigations it was determined that archaeological deposits in the areas associated with officer's row were intact and substantial. As a result OPRD funded further archaeological work on Officers' Row in 2005 and 2006. During these seasons excavations were focused primarily on the excavation of Fort Yamhill House 1 (FYH1), Fort Yamhill House 2 (FYH2), Fort Yamhill House 3 (FYH3), the company barracks, company kitchen, messhall and post bakery (Brauner et al. 2009; Eichelberger 2011). Further work was conducted in 2007 on Fort Yamhill House 1 (FYH1), company kitchen, post bakery, commissary and quartermaster warehouse, guardhouse and adjutant's office (Brauner et al. 2009; Eichelberger 2011). In 2008 Oregon State University returned to Fort Yamhill and continued the excavation of Fort Yamhill House 1 (FYH1), the post bakery and the

north porch of the barracks (Brauner and Eichelberger 2009; Eichelberger 2011). In 2011 excavations were conducted exclusively at Fort Yamhill House 1 (FYH1) (Eichelberger and Brauner 2011). The most recent archaeological investigations of officers' quarters were conducted in 2013 and focused exclusively on the excavation of Fort Yamhill House 1 (FYH1), Fort Yamhill House 2 (FYH2) and Fort Yamhill House 3 (FYH3) in order to collect data for this study (Eichelberger 2014). All of these reports on file at the Oregon State Historic Preservation Office in Salem, Oregon and in the Department of Anthropology at Oregon State University in Corvallis.

In all 369 one by one meter excavation units (369 square meters) were excavated within the boundaries of the first three commissioned officers quarters at Fort Yamhill (FYH1=185, FYH2=61 and FYH3=123) (Figure 3.8). The greatest number of units were excavated within FYH1 (n=185) and were focused on exposure of the building's foundations including the foundation for the bay window and the porch supports. Excavations were expanded behind to the east of the officer's quarters in order to recover archaeological remains from a midden feature. Sixty-one 1 by 1 meter units were excavated within FYH2 and were also focused on the exposure of the buildings foundations but also included a few units to the east of the officer's quarters in order to investigate for any midden features behind the house. Fort Yamhill House 3 (FYH3) was investigated using 123 one by one meter excavation units. Again, the units were primarily positioned to uncover the building's foundations but were expanded to the northeast in order to explore foundation and midden features.



Figure 3.7 Archaeological Excavations of FYH1, FYH2 and FYH3 at Fort Yamhill

Excavations at Fort Hoskins

Three commissioned officer's quarters at Fort Hoskins will also be used in this study: Fort Hoskins House 1 (FHH1), Fort Hoskins House 2 (FHH2) and Fort Hoskins House 3 (FHH3) (Figure 3.8). The first subsurface archaeological testing at the site was conducted by Oregon State University in conjunction with several archaeological field schools beginning in 1976. Under the direction of Dr. David R. Brauner the primary goal of the 1976 field season was to provide an educational opportunity for OSU archaeology students, an interpretation opportunity for the general public and to determine the extent and integrity of subsurface deposits for several historic areas associated with Officers' Row (Brauner 1976:2-3).

The positive results from the 1976 field season initiated a multi-year archaeology program at Fort Hoskins which continued intermittently until 2014. Dr. Brauner returned to Fort Hoskins in 1977 in order to conduct further excavations along Officers' Row but also expanded his investigations to the barracks (Bowyer 1992a). Archaeological investigations returned to Officers' Row at Fort Hoskins in 2014 when excavations were conducted behind the newly relocated Commanding Officers House (FHH1) as part of a National Public Archaeology Month event, to investigate the area where a reconstructed kitchen was being proposed and to collect additional data for this study (Eichelberger and Wesseler 2015).

In all 316 square meters were excavated within the boundaries of the commissioned officers quarters at Fort Hoskins (FHH1=148, FHH2=116 and FHH3=52) (Figure 3.8). The basic excavation unit measured 2 meters by 2 meters, but some variation did exist with both 1 meter by 2 meter and 1 meter by 1 meter excavation units also used (Bowyer 1992:33). The greatest number of units were excavated within FHH1 (148 square meters) and were focused on the excavation of the foot print of the house, its privy and dump feature behind (southeast) of the house proper. One hundred and sixteen square meters were excavated within FHH2 and were primarily focused on the foot print of the house and its privy. And, 52 square meters were excavated within FHH3 and were primarily focuses on the foot print of the house and a dump feature behind (southeast) of the house proper.

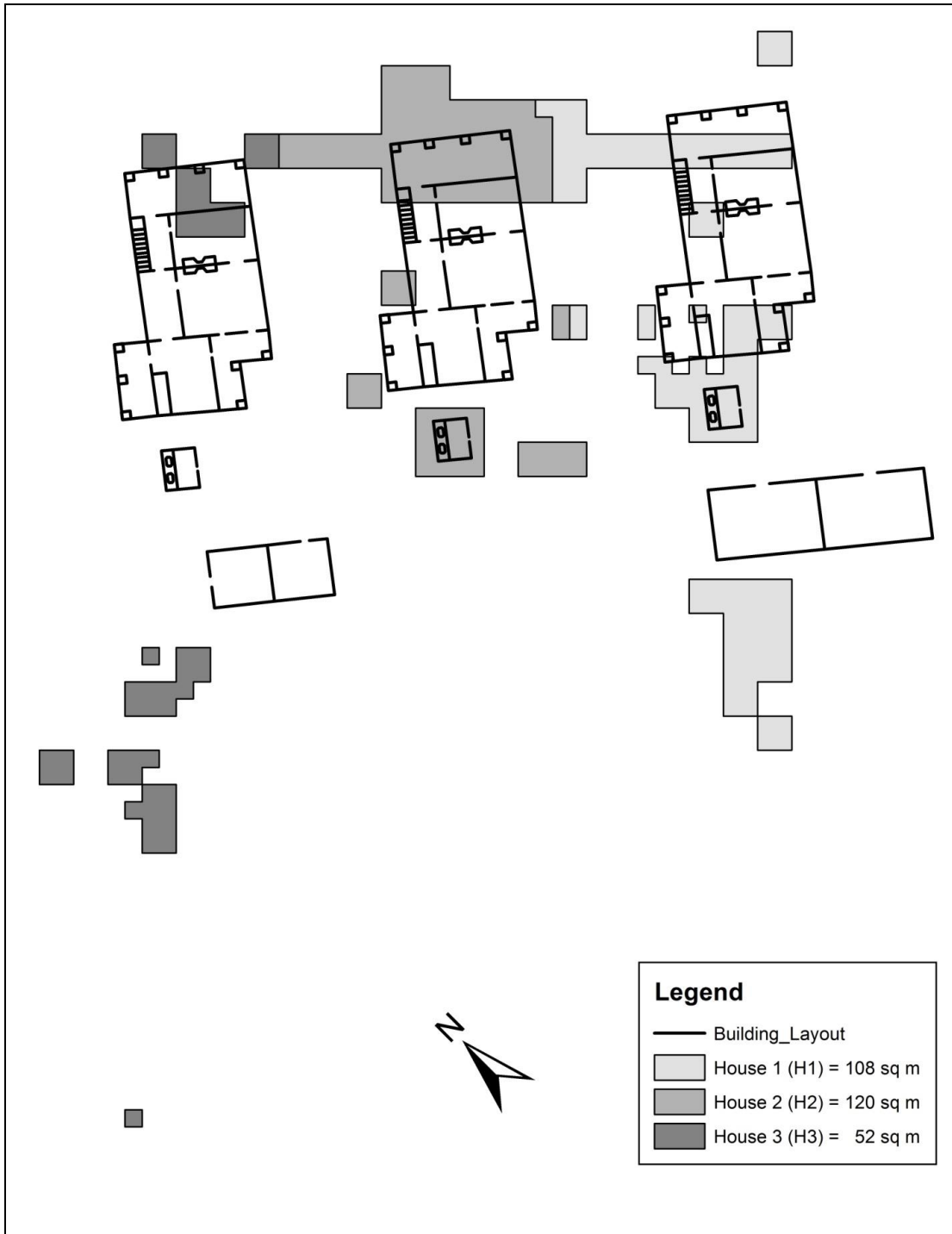


Figure 3.8 Archaeological Excavations of FHH1, FHH2 and FHH3 at Fort Hoskins

Artifact Typology

The artifacts included in this study were chosen because they have either been previously demonstrated to be sensitive indicators of social status or because they were used within the context of specific behaviors such as calling, dining, hunting, recreation, health and personal adornment where socio-economic status was historically known to be expressed (Adams 2009; Ames 2008; Andrews and Mullins 1989; Fitts 1999; Hooker 1981; Horton 2014; McBride et al 2000; Miller 1980, 1991; Miller et al. 1994; Otto 1977; Scott 1989; Wall 1994, 1999; Wason 1994; White 2005; Williams 1987).

The relative economic costs of many of these artifacts are also known since the price for these artifacts is known to have varied dramatically by type, quality, decoration or contents. This is especially true for gustatory ceramics but will also be demonstrated for domestic houseware items, culinary ceramics, glassware, cutlery, food remains, food containers and sewing items; military uniforms, arms and ammunition and accoutrements; and personal items such as indulgences, health items, adornment, office supplies, recreational items, pocket items and transportation related artifacts. The specific artifacts chosen for inclusion in this study have been sorted into three broad artifact groups (Domestic, Military and Personal) based on their functional context and then further sorted into 15 artifact classes by function, and 43 artifact types by function and/or form (Table 3.3).

Artifact Quantification

The 1,721 artifacts used in this study were quantified using a “minimum number” approach either as minimum number of objects (MNO), minimum number of vessels (MNV) or minimum number of butchery cuts (MNBC). For some objects the raw artifact count was used as these artifacts were whole and represented one complete object (i.e., buttons, projectiles, percussion caps, pendants, rings, beads, pens, pencils, marbles, domino, whole bottles, glass vessels, ceramic vessels, etc.). For all incomplete objects represented by sherds, shards and fragments all artifacts were assumed to represent one object unless determined to represent separate objects by displaying variation in form (material type, color, size, shape or decoration).

Table 3.3 Artifact Typology

Group	Class	Type	Example Artifacts
Domestic	Housewares	Furniture Lighting Heating Decoration	Caster, Chamberstick, Oil Lamp, Stove Part, Figurine, Flower Pot, Tintype Frame
	Culinary	Storage Vessels Preparation Vessels Cooking Vessels Cooking Appliances	Stoneware Jar, Dish, Baking Dish, Kettle, Cook Stove
	Gustatory	Glassware Ceramicware Tinware Cutlery	Tumbler, Stemware, Decanter, Plate, Bowl, Butter Dish, Compote/Celery Vase, Cup/Mug, Saucer, Pot, Creamer/Sugar, Platter, Tureen, Pitcher, Butter Tub, Dish, Mess Pan, Fork, Spoon, Knife
	Foodstuffs	Food Remains Food Containers	Bone, Shell, Seed, Canister, Food Bottle, Condiment Bottle
	Maintenance	Sewing General Repair	Needlework Clamp, Scissors, Thimble, Safety Pin, Straight Pin, Cement
Military	Uniform	Military Button Military Headwear Military Insignia	Frock Coat/Jacket/Vest Buttons, Chinstrap Buckle, Branch, Regiment and Company Insignia
	Arms and Ammunition	Arms Projectiles Ignition Systems	Revolver, Bayonet, <.44 caliber projectiles, pistol percussion cap, percussion cap box
	Accouterments	Canteen Cartridge Box Knap Sack	Stopper/Spout, Buckle, Triangle Loop
Personal	Indulgences	Alcoholic Beverage Non-Alcoholic Beverage Tobacco	Bottle, Smoking Pipe, Spittoon
	Health	Medical Items Grooming Items	Medicine Bottle, Syringe, Cologne/Perfume, Hair Tonic, Cosmetic Jar, Comb, Mirror, Toothbrush, Toothpick, Soap Box, Wash Basin, Chamber Pot
	Adornment	Hair Accessory Civilian Button Civilian Buckle/Fastener Jewelry and Accessories Footwear	Headband, Hair Pin, Button, Belt Buckle, Suspender, Corset, Pocket Watch, Pendant, Bracelet, Finger Ring, Bead, Boot/Shoe
	Administration	Office Supplies	Pen Nib, Ink Pot, Ink Bottle, Slate Pencil, Slate Tablet, Graphite Pencil, Sealing Wax
	Recreation	Toys and Games Musical Instruments Hunting Implements Fishing Implements	Tea Set, Doll, Marble, Domino, Harmonica, Mouth Harp, Chordophone, Aerophone, Firearm, Percussion Cap, Projectile, Fish Hook
	Pocket Items	Tools Currency	Spectacles, Pocket/Pen Knife, Coin
	Transportation	Luggage Horse Furniture	Carpet Bag, Stirrup, Saddle, Crotal Bell, Horseshoe

For all vessels (glass and ceramic) all counts represented minimum number of vessels (MNV) determined by the analysis of vessel form, size, element, ceramic paste or glass type, ceramic paste or glass color, sherd/shard thickness and by ceramic decoration/glaze, pressed or cut glass pattern or embossed glass labels. For all faunal material (animal bone, shell, fish and shellfish) all counts represent minimum number of butchery cuts (MNBC) in reference to historic period butcher cuts compiled and identified by Horton (2014:383-384) and modified using Adams (2009:101-102). Faunal analysis proceeded first with the identification of the taxa (species) then to bone/shell element (i.e., femur, humerus, whole, hinge, etc.), then portion (proximal, medial, distal) which were compared with depictions and descriptions of historic period butchery cuts.

Artifact Density and Sample Size Representativeness

As discussed above the volume of archaeological deposits excavated within each of the commissioned officers quarters at both Fort Yamhill and Fort Hoskins were not equal (Table 3.4). At Fort Yamhill more units were excavated at FYH1 than were excavated at FYH2 or FYH3 and more units were excavated at FHH2 than were excavated at FHH1 or FHH3. In order to adjust for the lack of equity between the different excavations artifact densities were calculated for each of the six commissioned officers by: 1) number of excavation units; 2) number of commissioned officers; and 3) number of total occupants (Table 3.4).

Artifact Density by Number of Excavation Units. At Fort Yamhill 365 artifacts were recovered from 185 one-by-one meter excavation units at FYH1 resulting in an artifact density of 1.97 artifacts per square meter; 209 artifacts were recovered from 61 one-by-one meter excavation units at FYH2 resulting in an artifact density of 3.43 artifacts per square meter; and, 178 artifacts were recovered from the 123 one-by-one meter excavation units at FYH3 resulting in an artifact density of 1.45 artifact per square meter. At Fort Hoskins 474 artifacts were recovered from 108 one-by-one excavation units at FHH1 resulting in an artifact density of 3.20 artifacts per square meter; 323 artifacts were recovered from 120 one-by-one meter excavation

Table 3.4 Artifact Densities at Fort Yamhill and Fort Hoskins Officers' Quarters

Artifact Density By:	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
# of Excavation Units	1.97	3.43	1.45	3.20	2.78	3.31
# of Commissioned Officers	60.83	34.83	25.43	52.67	40.38	15.64
# of Total Occupants	20.28	13.93	13.69	11.85	24.85	8.19

units at FHH2 resulting in an artifact density of 2.78 artifact per square meter; and, 172 artifacts were recovered from 52 one-by-one meter excavation units at FHH3 resulting in an artifact density of 3.31 artifacts per square meter.

At first glance the higher artifact densities calculated at FYH2 and FHH3 (followed by FYH1 then FYH3 and FHH1 then FHH2) suggests that those quarters may contain richer archaeological deposits than the other commissioned officers quarters. Although this may be true, the number of excavation units may not be the best measure for artifact density for three reasons: 1) the excavation units were not similarly placed within each of the commissioned officers quarters excavated (Figures 3.7 and 3.8); 2) each set of commissioned officers quarters housed unequal numbers of total commissioned officers through time; and 3) each set of commissioned officers quarters housed unequal numbers of total occupants through time.

Artifact Density by Number of Commissioned Officers. At Fort Yamhill six captains occupied FYH1 resulting in an artifact density of 60.83 artifacts per commissioned officer; six first lieutenants occupied FYH2 resulting in an artifact density of 34.83 artifacts per commissioned officer; and seven second lieutenants occupied FYH3 resulting in an artifact density of 25.43 artifacts per commissioned officer. A similar adjustment to the artifact densities are observed at Fort Hoskins where nine captains occupied FHH1 resulting in an artifact density of 52.67 per commissioned officer; eight first lieutenants occupied FHH2 resulting in an artifact density of 40.38 artifacts per commissioned officer; and 11 second lieutenants occupied FHH3 resulting in an artifact density of 15.64 artifacts per commissioned officer. Because the number of commissioned officers stationed at both posts is known artifact density by number of commissioned officers may be the most representative of the three methods used.

Artifact Density by Number of Total Occupants. At Fort Yamhill 18 occupants (six captains and 12 dependents) likely occupied FYH1 resulting in an artifact density of 20.28 artifacts per occupant; fifteen occupants (six second lieutenants and nine dependents) likely occupied FYH2 resulting in an artifact density of 13.93 artifacts per occupant; and thirteen occupants (seven second lieutenants and six dependents) likely occupied FYH3 resulting in an artifact density of 13.69 artifacts per occupant. A similar adjustment to the artifact densities are observed at Fort Hoskins where 40 occupants (nine captains and 31 dependents) likely occupied FHH1 resulting in an artifact density of 11.85 per occupant; 13 (eight first lieutenants and five dependents) likely occupied FHH2 resulting in an artifact density of 24.85 artifacts per commissioned officer; and 21 occupants (11 second lieutenants and 10 dependents) occupied FHH3 resulting in an artifact density of 8.19 artifacts per occupant. Artifact density by number of total occupants is unlikely to be the most representative for two reasons: 1) although the number of dependents each officer supported is known it is unknown (and unlikely) if all of their dependents actual lived on post; and 2) by including all of potential occupants (most of which were children) then the density data is skewed and likely be over represents the artifact contribution of the children.

Artifact and Historical Document Analysis

Primarily artifact analysis was limited to raw object counts and descriptive statistics as either percentage of assemblage (within an artifact group, class, type or specific category such as material type or decoration) or by artifact category ratios (i.e., plates to bowls, teas to plates, etc.). In a few instances more refined analytical methods are utilized including the Miller CC Index (Miller 1980, 1991), a Butchery Cut Preference Index (Horton 2014) and two indices developed for this study: a Fort Hoskins Subsistence Account Book (FHSAB) Index and an Estimated Mean Monthly Salary (EMMS) Index.

Miller CC Index. In order to analyze the relative economic values of the gustatory ceramic assemblages recovered from each of the commissioned officers quarters the Miller CC Index was used to calculate an index value for teas (cups and saucers), flatware (plates and platters), bowls and a mean for all vessel forms. The detailed methods used to calculate each of the index values are presented in the calculation tables in Appendix E which include the specific vessel forms, decoration, the index year and value and number of vessels used in these calculations.

Butchery Cut Preference Index. In order to analyze the relative preference of the butchery cuts within the faunal assemblage recovered from each of the commissioned officers quarters a butcher cut preference index developed by Horton (2014:383-384) was utilized. The method developed by Horton ranked each butchery cut for beef and pork by preference as either High, Medium or Low and with corresponding preference value ranging from 9 to 1, with values of 9, 8 or 7 for the high preferred butchery cuts, 6, 5 or 4 for medium preferred butchery cuts and 3, 2 or 1 for low preferred butcher cuts. Horton's (2014) identification of historic butchery cuts and their ranked order and values were developed from Abell (1852), Beecher (1871), Bliss (1850), Hall (1856), Philip (1859), Lyman and Lyman (1869), Storke (1859), Webster and Parks (1845), Huelsbeck (1991), LeeDecker et al. (1987), Lyman (1979); Manning (1905) and Schultz and Gust (1983). A detailed description of the butchery cuts, their rankings and the use of the preference index in the analysis of the faunal remains in this study can be found in Appendix F.

Fort Hoskins Subsistence Account Book (FHSAB) Index. The Fort Hoskins Subsistence Account Book (FHSAB) Index was developed to analyze and compare the subsistence article purchasing patterns of commissioned officers at Fort Hoskins. Using the monthly sales of subsistence stores to the commissioned officers found in the *Fort Hoskins Subsistence Account Book* (FHSAB) it was possible to create a subsistence article index to compare the relative amount of money spent by each officer on the different classes of food articles. The method used here is similar to the method developed by Miller (1980, 1991) to compare the socioeconomic

differences of ceramic assemblages but modified here to measure the socioeconomic differences in the different classes of food purchased by the commissioned officers at Fort Hoskins.

Following Miller (1980, 1991) the cheapest food article within each food class was given a value of 1.00 and the values for all other food articles within that food class were then generated by dividing the cost of the cheapest food article into the cost of the other food articles of the same class. An index value for an each food class was then calculated by multiplying the amount of each food article in its food class by its index value to produce a total value for that food article. All of the total values for food articles within a food class were then added together and divided by the total amount of the food articles purchased in that food class. The resulting index value, called the *Fort Hoskins Subsistence Account Book Index* (FHSAB Index), represents the average cost of the food articles in each food class and can be compared between individual food article and class purchases regardless of the volume purchased. The figures and tables used to calculate the index values for each food class can be found in Appendix C.

Estimated Mean Monthly Salary (EMMS) Index. The Estimated Mean Monthly Salary (EMMS) Index was developed to provide an estimated mean monthly salary for each of the commissioned officers who served at Fort Yamhill and Fort Hoskins that could be used to compare the relative economic status between the three commissioned officers grades presented at each post. The EMMS value was determined as a function of the pay associated with an officer's grade (captain, first lieutenant, second lieutenant), corps or type of military unit (mounted or non-mounted), the number of months present at the post, his military role(s) and number of months he served that role(s) (company commander, post adjutant, commissary of subsistence, quartermaster) and length of military service (represented by a tenure bonus). The specific pay values used can be found associated with each commissioned officer grade, corps/unit and military role described in Chapter 2 and the tables used to calculate the specific EMMS values for each officer and grade can be found in Appendix B. The values used in these calculations were based on

contemporary on contemporary *United States Army Regulations* (USWD 1857, 1861b).

Estimated Mean Monthly Salary (EMMS) Formula: The EMMS for each commissioned officer is a function of the officer's grade (captain, first lieutenant or second lieutenant), type of military unit (mounted or non-mounted), extra duties (i.e., company commander, post adjutant, commissary of subsistence, quartermaster etc.) and the bonus they received based on their length of military service:

$$EMMS = \text{Grade and Unit Pay} + \text{Extra Duty Pay} + \text{Tenure Pay}$$

Each of the variables (grade, military unit, extra duty and tenure pay) was multiplied by the number of months the officer held the specific grades, served with the specific type of unit, completed the extra duties and earned his tenure bonus. These values were then summed and the sum divided by the total number of months the officer served at the post thus providing the estimated average (or mean) monthly salary the officer earned while serving at the post. The formula used was:

$$E = ((R \times M_1) + (X_1 \times M_2) + (X_2 \times M_3) + (X_3 \times M_4) + (X_4 \times M_5) + (Y \times M_1)) / M_1$$

Where:

E = Estimated Monthly Pay (\$)
 R = Grade/Unit Pay Rate (\$)
 M₁ = Number of Months Stationed at Post
 M₂ = Number of Months Served Extra Duty 1
 M₃ = Number of Months Served Extra Duty 2
 M₄ = Number of Months Served Extra Duty 3
 M₅ = Number of Months Served Extra Duty 4
 X₁ = Extra Duty 1 Pay Rate (\$)
 X₂ = Extra Duty 2 Pay Rate (\$)
 X₃ = Extra Duty 3 Pay Rate (\$)
 X₄ = Extra Duty 4 Pay Rate (\$)
 Y = \$9.00 for Every 5 Years of Military Service

It should be noted that the EMMS calculations used in this study are only *estimates* of what the commissioned officers likely earned based on their individual grades, corps/units, roles and length of military service. No pay records for the commissioned officers who served at Fort Yamhill or Fort Hoskins have been recovered and therefore these figures have not been verified.

CHAPTER 4: COMMISSIONED OFFICER DEMOGRAPHICS AND THE ROOTS OF SOCIO-ECONOMIC DIFFERENCE AMONGST THE OFFICERS AT FORT YAMHILL AND FORT HOSKINS

In this chapter I present a summary of several demographic characteristics pertaining to the military, personal and socioeconomic status of each commissioned officer for the period they served at either Fort Yamhill or Fort Hoskins. For the purposes of this study the commissioned officers are grouped into three populations by military grade (captain, first lieutenant and second lieutenant). Within each grade population are presented the demographic data for each of the individual officers, and summarized by grade, including their assigned military unit (corps, regiment and company) and the dates assigned to the post, his military duties while assigned to the post, number of years military service in the United States Army before being assigned to the post, his age while stationed at the post, his prior profession(s) before being commissioned in the United States Army, whether or not he attended the West Point Military Academy and his graduating class rank, the value of his real estate and personal estate as reported in the *United States Federal Census* Records of 1850 and/or 1860, his marital status and the total number of dependents he supported including any wives, children or other wards. The demographic data also includes an estimated mean monthly Army salary (EMMS) for each officer calculated using the officer's military grade, assigned corps, length of military service and extra duties served while stationed at Fort Yamhill and/or Fort Hoskins. This information is summarized in Tables 4.1 and 4.2 and discussed below. A detailed biographical sketch of each of the commissioned officers who served at both posts can be found in Appendix A.

Table 4.1 Summary of Demographic Data for Commissioned Officers at Fort Yamhill

Commissioned Officer		Months at Post	Military Role (# of Months) ¹							Years in Service	Est. Mean Monthly Salary (\$)	Age	USMA Cadet	Worth of Estate in:		# of Dep.
Last Name	Grade		PC	CC	PA	ACS	AACS	RQM	AAQM					1850	1860	
Rinearson	Capt	2	2	2	-	-	-	-	-	0.50	148.50	42	No	Unk	N/A	0
Floyd-Jones	Capt	14	2	11	-	-	-	-	-	9.75	154.35	30	Yes	Unk	N/A	0
Smith	Capt	11	5	11	-	-	-	-	-	18.08	175.50	41	Yes	Unk	N/A	3
Russell	Capt	47	41	47	26	-	-	-	-	11.75	162.03	31	Yes	Unk	4,000	0
Scott	Capt	45	31	45	23	6	-	-	6	0.25	146.72	31	No	Unk	0	4
Lafollette	Capt	11	2	11	11	-	-	-	-	0.75	148.50	36	No	Unk	1,600	5
Capt Total		130	83	127	60	6	0	0	6	41.08	-	211	3 of 6	Unk	5,600	12
Capt Mean		21.6	13.8	21.1	20	6	0	0	6	6.8	155.69	35.1	0.50	Unk	1,867	2
Taylor	1st Lt	11	4	-	-	-	-	-	-	9.58	139.83	32	Yes	0	N/A	2
Forsythe	1st Lt	45	1	-	23	-	-	-	-	8.83	141.61	30	Yes	Unk	Unk	0
Owen	1st Lt	1	1	-	-	-	1	-	1	6.58	134.16	28	No	0	0	2
Garden	1st Lt	22	-	-	22	-	2	-	2	0.25	129.10	32	No	Unk	300	0
Catley	1st Lt	3	-	-	-	3	-	3	3	0.41	141.83	31	No	N/A	Unk	3
Shipley	1st Lt	11	8	-	-	10	-	-	10	0.75	130.62	26	No	N/A	100	2
1st Lt Total		93	14	0	45	13	3	3	16	26.4	-	179	2 of 6	0	400	9
1st Lt Mean		15.5	3.5	0	22.5	6.5	1.5	3	4	4.4	137.06	29.8	0.33	0	133.3	1.5
Hazen	2nd Lt	14	2	-	-	-	13	-	13	0.58	119.68	26	Yes	0	N/A	0
Sheridan	2nd Lt	63	9	-	-	7	41	-	48	1.75	119.31	25	Yes	0	Unk	1
Garber	2nd Lt	2	-	-	-	-	-	-	-	2.80	113.50	27	Yes	0	N/A	0
Wheeler Jr.	2nd Lt	17	-	-	17	-	4	-	4	0.58	130.06	27	Yes	Unk	N/A	Unk
Davison	2nd Lt	38	13	-	-	20	14	-	34	0.33	122.96	34	No	0	Unk	1
Rathbun	2nd Lt	10	1	-	-	-	-	-	-	0.08	113.50	33	No	Unk	0	2
Dunbar	2nd Lt	11	-	-	-	-	-	-	-	0.75	113.50	26	No	N/A	0	2
2nd Lt Total		155	25	0	17	27	72	0	99	6.87	-	198	4 of 7	0	0	6
2nd Lt Mean		22.1	6.2	0	17	13.5	18	0	24.7	0.9	120.58	28.2	0.57	0	0	1

¹Military Roles: PC=Post Commander, CC=Company Commander, PA=Post Adjutant, ACS=Assistant Commissary of Subsistence, AACS=Acting Assistant Commissary of Subsistence, RQM=Regimental Quartermaster, AAQM=Acting Assistant Quartermaster.

Table 4.2 Summary of Demographic Data for Commissioned Officers at Fort Hoskins, 1 of 2

Commissioned Officer		Months at Post	Military Role (# of Months) ¹							Years in Service	Est. Mean Monthly Salary	Age	USMA	Worth of Estate in:		# of Dep.
Last Name	Grade		PC	CC	PA	ACS	AACS	RQM	AAQM					1850	1860	
Augur	Capt	61	58	60	51	-	-	-	-	10.9	173.69	35	Yes	0	0	8
Dent	Capt	7	4	6	3	3	-	-	3	10.2	162.92	41	Yes	Unk	0	4
Floyd-Jones	Capt	41	-	25	-	-	-	-	-	9.7	152.59	31	Yes	Unk	Unk	0
Schmidt	Capt	9	8	9	9	-	-	-	-	0.2	148.50	42	No	Unk	0	5
Seidenstricker	Capt	9	9	9	8	-	-	-	-	0.3	147.39	46	No	Unk	Unk	4
Scott	Capt	14	13	14	9	8	-	-	8	1.7	148.26	34	No	Unk	0	4
Palmer	Capt	4	1	4	-	-	-	-	-	0.1	138.50	37	No	Unk	Unk	2
Currey	Capt	2	2	2	-	-	-	-	-	0.1	138.50	32	No	N/A	Unk	1
Waters	Capt	2	-	3	-	-	-	-	-	0.1	138.50	32	No	N/A	5,500	3
Capt Total		149	95	132	80	11	0	0	11	33.3	-	330	3 of 9	0	5,500	31
Capt Mean		16.5	13.5	14.6	16	5.5	0	0	5.5	3.7	159.99	36.6	0.33	0	1,100	3.4
Bonnycastle	1st Lt	10	-	10	10	-	-	-	-	10.0	146.50	34	Yes	Unk	0	3
Campbell	1st Lt	9	-	-	-	-	9	-	9	0.2	125.16	29	No	Unk	0	0
Funk	1st Lt	9	-	-	-	-	9	-	9	0.4	125.16	28	No	Unk	Unk	0
Garden	1st Lt	11	6	-	9	-	5	-	9	0.7	130.92	32	No	Unk	300	0
Davison	1st Lt	14	-	-	1	4	-	-	1	2.1	118.50	36	No	0	Unk	1
Walker	1st Lt	4	4	-	-	-	-	-	-	0.1	118.50	26	No	N/A	550	0
Catley	1st Lt	3	-	-	-	3	-	2	3	0.1	138.49	30	No	N/A	Unk	Unk
Randall	1st Lt	3	-	-	-	-	-	-	-	0.2	118.50	27	No	N/A	300	1
1st Lt Total		63	10	10	20	7	23	2	31	13.8	-	242	1 of 8	0	1,150	5
1st Lt Mean		7.8	5	10	6.6	3.5	7.6	2	6.2	1.7	130.08	30.2	0.12	0	230	0.7

¹Military Roles: PC=Post Commander, CC=Company Commander, PA=Post Adjutant, ACS=Assistant Commissary of Subsistence, AACS=Acting Assistant Commissary of Subsistence, RQM=Regimental Quartermaster, AAQM=Acting Assistant Quartermaster.

Table 4.2 Summary of Demographic Data for Commissioned Officers at Fort Hoskins, 2 of 2

Commissioned Officer		Months at Post	Months Assigned Extra Duties							Years in Service	Est. Mean Monthly Salary	Age	USMA	Worth of Estate in:		# of Dep.
Last Name	Grade		PC	CC	PA	ACS	AACS	RQM	AAQM					1850	1860	
Sheridan	2nd Lt	11	-	-	-	-	8	-	8	1.8	118.34	25	Yes	0	Unk	0
Gentry	2nd Lt	51	2	-	-	51	-	-	51	0.8	117.83	24	Yes	N/A	0	0
Garber	2nd Lt	21	-	-	-	-	-	-	-	3.0	113.50	27	Yes	0	N/A	0
McCall	2nd Lt	5	-	-	-	-	-	-	-	2.8	113.50	Unk	No	Unk	Unk	Unk
Carlton	2nd Lt	11	-	5	-	-	-	-	-	0.9	118.04	23	Yes	N/A	Unk	0
Andrews	2nd Lt	7	-	-	-	-	-	-	-	0.5	113.50	22	Yes	N/A	0	0
Watson	2nd Lt	9	-	-	-	-	-	-	-	0.2	113.50	33	No	Unk	Unk	Unk
Herzer	2nd Lt	28	1	-	1	-	-	-	-	0.5	113.85	41	No	Unk	Unk	Unk
Rathbun	2nd Lt	4	-	-	-	1	-	-	1	0.1	116.83	33	No	Unk	0	2
Cullen	2nd Lt	4	-	-	4	-	-	-	-	0.1	123.50	26	No	N/A	1800	4
Balch	2nd Lt	3	-	-	-	-	-	-	-	0.2	113.50	39	No	0	1231	4
2nd Lt Total		154	3	5	5	52	8	0	60	10.8	-	293	5 of 11	0	3031	10
2nd Lt Mean		14	1.5	5	2.5	26	8	0	20	0.9	116.01	29.3	0.45	0	606	1.2

¹Military Roles: PC=Post Commander, CC=Company Commander, PA=Post Adjutant, ACS=Assistant Commissary of Subsistence, AACS=Acting Assistant Commissary of Subsistence, RQM=Regimental Quartermaster, AAQM=Acting Assistant Quartermaster.

Commissioned Officers at Fort Yamhill and Fort Hoskins

Sixty-two commissioned officers were assigned to Fort Yamhill and Fort Hoskins between March of 1856 and June 1866. Of these 62 officers only 47 actually served at either post including 19 commissioned officers who served at Fort Yamhill and 28 who served at Fort Hoskins. The other 15 commissioned officers “assigned” to these posts “never joined [their] company at post” because they were transferred to another company/regiment or post before arriving at Fort Yamhill or Fort Hoskins or they served as regimental officers (Regimental Quartermaster, Regimental Adjutant, etc.) and were stationed elsewhere. The officers who did serve at Fort Yamhill or Fort Hoskins were attached to one of 14 different companies from eight different regiments with two Army corps from both the United States Regular Army and Volunteer Army services.

Commissioned Officers at Fort Yamhill

Twenty-five commissioned officers were assigned to Fort Yamhill between March 1856 and June of 1866 (Table 4.3). Only nineteen of these officers were ever present at the post including seven captains, six first lieutenants and six second lieutenants. The other six commissioned officers served on detached service elsewhere or were on leave during their assignments and never joined their company at the post (FYPR 1856). The officers who were present at Fort Yamhill served in four regular army regiments and four volunteer regiments including the 4th and 9th United States Infantry, 1st United States Dragoons, 2nd Oregon Mounted Volunteers, 4th California Volunteer Infantry, 1st Oregon Volunteer Infantry and the 1st Washington Territorial Volunteer Infantry.

Six of the officers who served at Fort Yamhill held the grade of captain including Jacob Swain Rinearson, DeLancey Floyd-Jones, Andrew Jackson Smith, David Allen Russell, Lyman Samuel Scott and Charles Lafollette. Two of these officers were attached to mounted units including Captain Jacob S. Rinearson who commanded Company C of the 2nd Oregon Mounted Volunteers and was stationed at Fort Yamhill between March and April 1856 and Captain Andrew J. (A.J.) Smith who

Table 4.3 Commissioned Officers Assigned to Fort Yamhill from March 1856 to June 1866

Grade	Last Name	First Name	Company, Regiment	Dates Assigned to Post
Capt	Rinearson	Jacob S.	C, 2nd Ore. Mnt. Vol.	March 1856 - April 1856
	Floyd-Jones	DeLancey	F, 4th U.S. Inf.	July 1856 - August 1857
	Smith	Andrew J.	C, 1st U.S. Drag.	August 1856 - June 1857
	Russell	David A.	K, 4th U.S. Inf.	August 1857 - June 1861
	Archer	James J.	I, 9th U.S. Inf.	July 1861 - September 1861*
	Scott	Lyman S.	D, 4th Cal. Vol. Inf.	November 1861 - July 1865
	Lafollette	Charles E.	A, 1st Ore. Vol. Inf.	August 1865 - June 1866
1st Lt	Taylor	Oliver H. P.	C, 1st U.S. Drag.	August 1856 - June 1857
	Hodges	Henry C.	F, 4 th U.S. Inf.	July 1856 – August 1857*
	Forsythe	Benjamin D.	K, 4th U.S. Inf.	August 1857 – April 1861
	Reynolds	Charles A.	I, 9 th U.S. Inf.	July 1861 – September 1861*
	Owen	Philip A.	I, 9th U.S. Inf.	September 1861
	Garden	James	D, 4th Cal. Vol. Inf.	November 1861 - August 1863
	Lee	Orlando H.	D, 4 th Cal. Vol. Inf.	December 1864 – March 1865*
	Forry	William R.	D, 4 th Cal. Vol. Inf.	April 1865 – July 1865*
	Catley	Henry	A, 1st Ore. Vol. Inf.	June 1865 - August 1865
	Shipley	William J.	A, 1st Ore. Vol. Inf.	August 1865 - July 1866
2nd Lt	Hazen	William B.	K, 4th U.S. Inf.	March 1856 - April 1857
	Wheeler Jr.	James	C, 1st U.S. Drag.	August 1856 - June 1857
	Sheridan	Philip H.	K, 4th U.S. Inf.	July 1856 - September 1861
	Garber	Hezekiah	F, 4 th U.S. Inf.	July 1857 – August 1857
	Camp	Elisha E.	I, 9 th U.S. Inf.	July 1961 – September 1861*
	Davison	James	D, 4th Cal. Vol. Inf.	November 1861 - December 1864
	Rathbun	James S.	D, 4th Cal. Vol. Inf.	November 1864 - July 1865
	Dunbar	William R.	A, 1st Ore. Vol. Inf.	August 1865 - June 1866

* Never Joined Company at Post

commanded Company C of the 1st United States Dragoons and was stationed at Fort Yamhill between August 1856 and June 1857. The remaining five captains were all attached to non-mounted (infantry) units including Captain DeLancey Floyd-Jones who commanded Company F of the 4th United States Infantry and was stationed at the Fort Yamhill between July 1856 and August 1857; Captain David A. Russell who commanded Company K of the 4th United States Infantry and was stationed at Fort Yamhill between August 1857 and June 1861; Captain Lyman S. Scott who commanded Company D of the 4th California Volunteer Infantry and was stationed at Fort Yamhill between November 1861 and July 1865; and Captain Charles E.

Lafollette who commanded Company A of the 1st Oregon Volunteer Infantry and was stationed at Fort Yamhill between August 1865 and June 1866.

Six of the officers who served at Fort Yamhill held the grade of first lieutenant. Only one of these officers was attached to a mounted unit, First Lieutenant Oliver Hazard Perry (O.H.P.) Taylor who served with Company C of the 1st United States Dragoons as was stationed at Fort Yamhill between August 1856 and June 1857. The remaining five first lieutenants were all attached to non-mounted (infantry) units including First Lieutenant Benjamin D. Forsythe who served with Company K of the 4th United States Infantry and was stationed at Fort Yamhill between August 1857 and April 1861; First Lieutenant Philip A. Owen who served with Company I of the 9th United States Infantry and was stationed at Fort Yamhill for only one month, September 1861; First Lieutenant James Garden who served with Company D of the 4th California Volunteer Infantry and was stationed at Fort Yamhill between November 1861 and August 1863; First Lieutenant Henry Catley who served with Company A of the 1st Oregon Volunteer Infantry and was stationed at Fort Yamhill between June and August 1865; and First Lieutenant William J. Shipley who also served with Company A of the 1st Oregon Volunteer Infantry but was stationed at Fort Yamhill between August 1865 and July 1866.

Seven of the officers who served at Fort Yamhill held the grade of second lieutenant. Only one of these officers was attached to a mounted unit, Second Lieutenant James Wheeler Jr. who served with Company C of the 1st United States Dragoons and was stationed at Fort Yamhill between August 1856 and June 1857. The remaining six second lieutenants were all attached to non-mounted (infantry) units including Second Lieutenant William Babcock Hazen who served with Company K of the 4th United States Infantry and was stationed at Fort Yamhill between March 1856 and April 1857; Second Lieutenant Philip Henry Sheridan who also served with Company K of the 4th United States Infantry but was stationed for much longer at Fort Yamhill from July 1856 until September 1861; Second Lieutenant Hezekiah Garber who served with Company F of the 4th United States Infantry and was stationed at Fort Yamhill between July 1857 and August 1857; Second Lieutenant James Davison who served with Company D of the 4th California

Volunteer Infantry and was stationed at Fort Yamhill between November 1861 and December 1864; Second Lieutenant James S. Rathbun who also served with Company D of the 4th California Volunteer Infantry between November 1864 and July 1865; and Second Lieutenant William R. Dunbar who served with Company A of the 1st Oregon Volunteer Infantry and was stationed at Fort Yamhill between August 1865 and June 1866.

Commissioned Officers at Fort Hoskins

Thirty-seven commissioned officers were assigned to Fort Hoskins between July 1856 and July 1865 (Table 4.4). Only twenty-eight of these officers were ever present at the post including nine captains, eight first lieutenants and eleven second lieutenants. The other nine commissioned officers served on detached service elsewhere or were on leave during their assignments and never joined their company at the post (FHPR 1856). The officers who were present at Fort Hoskins served in two regular army regiments and four volunteer regiments including the 4th and 9th United States Infantry, 2nd and 4th California Volunteer Infantry, 1st Oregon Volunteer Infantry and the 1st Washington Territorial Volunteer Infantry.

Nine of the officers who served at Fort Hoskins held the grade of captain including Christopher Colon Augur, Frederick Tracy Dent, DeLancey Floyd-Jones, John Conrad Schmidt, Johann Friedrich Seidenstricker, Lyman Samuel Scott, Ephraim Knowlton Palmer, Abner Walter Waters and George Byron Currey. One officer was attached to a mounted unit, Captain Currey who was stationed at Fort Hoskins between January and February 1865. The remaining eight captains were all attached to non-mounted (infantry) units including Captain Augur who commanded Company G of the 4th United States Infantry and was stationed at Fort Hoskins between July 1856 and July 1861; Captain Dent who commanded Company B of the 9th United States Infantry and was stationed at Fort Hoskins between June 1861 and October 1861; Captain Floyd-Jones who commanded Company F of the 4th United States Infantry and was stationed at Fort Hoskins between June 1857 and June 1861; Captain Schmidt who commanded Company B of the 2nd California Volunteer Infantry and was stationed at Fort Hoskins between October 1861 and June 1862;

Table 4.4 Commissioned Officers Assigned to Fort Hoskins from July 1856 to March 1865

Grade	Last Name	First Name	Company, Regiment	Dates Assigned to Post
Capt	Augur	Christopher C.	G, 4 th U.S. Inf.	July 1856 - July 1861
	Dent	Frederick T.	B, 9 th U.S. Inf.	June 1861 - October 1861
	Floyd-Jones	DeLancey	F, 4 th U.S. Inf.	June 1857 - June 1861
	Schmidt	John C.	B, 2 nd Cal. Vol. Inf.	October 1861 - June 1862
	Seidenstricker	Frederick	D, 1 st Wash. Terr. Vol. Inf.	July 1862 - March 1863
	Scott	Lyman S.	D, 4 th Cal. Vol. Inf.	September 1863 - October 1864
	Palmer	Ephraim K.	B, 1 st Ore. Vol. Inf.	December 1864 - March 1865
	Waters	Abner W.	F, 1 st Ore. Vol. Inf.	January 1865 - February 1865
	Currey	George B.	E, 1 st Ore. Vol. Cav.	January 1865 - February 1865
1st Lt	Macfeely	Robert	G, 4 th U.S. Inf.	July 1856 - July 1861*
	Hodges	Henry C.	F, 4 th U.S. Inf.	June 1857 - June 1861*
	Bonnycastle	John C.	F, 4 th U.S. Inf.	November 1859 - August 1860
	Woods	Charles R.	B, 9 th U.S. Inf.	June 1861 - July 1861*
	Hughes	William B.	B, 9 th U.S. Inf.	July 1861 - August 1861*
	Campbell	Thomas B.	B, 2 nd Cal. Vol. Inf.	October 1861 - June 1862
	Funk	Herman C.	D, 1 st Wash. Terr. Vol. Inf.	July 1862 - March 1863
	Garden	James	D, 4 th Cal. Vol. Inf.	April 1863 - February 1864
	Davison	James	D, 4 th Cal. Vol. Inf.	September 1863 - October 1864
	Walker	Cyrus H.	B, 1 st Ore. Vol. Inf.	December 1864 - March 1865
	Catley	Henry	B, 1 st Ore. Vol. Inf.	January 1865 - March 1865
	Randall	Darius B.	F, 1 st Ore. Vol. Inf.	January 1865 - March 1865
2nd Lt	Sheridan	Philip H.	K, 4 th U.S. Inf.	July 1856 - May 1857
	Kautz	Augustus V.	G, 4 th U.S. Inf.	July 1856 - November 1856*
	Cully	Mervin E.	G, 4 th U.S. Inf.	November 1856 - May 1857*
	Gentry	William T.	G, 4 th U.S. Inf.	May 1857 - July 1861*
	Garber	Hezekiah	F, 4 th U.S. Inf.	June 1857 - October 1859
	McCall	James K.	F, 4 th U.S. Inf.	August 1860 - June 1861
	Carlton	Caleb H.	F, 4 th U.S. Inf.	August 1860 - May 1861
	Andrews	John N.	F, 4 th U.S. Inf.	December 1860 - June 1861
	Quattlebaum	Paul J.	B, 9 th U.S. Inf.	June 1861 - August 1861*
	Forney	Philip R.	B, 9 th U.S. Inf.	October 1861
	Watson	Grove	B, 2 nd Cal. Vol. Inf.	November 1861 - June 1862
	Herzer	Louis	D, 1 st Wash. Terr. Vol. Inf.	July 1862 - October 1864
	Blake	John. G.	D, 4 th Cal. Vol. Inf.	March 1864 - July 1864*
	Rathbun	James S.	D, 4 th Cal. Vol. Inf.	July 1864 - October 1864
	Cullen	John W.	B, 1 st Ore. Vol. Inf.	December 1864 - March 1865
	Balch	James A.	F, 1 st Ore. Vol. Inf.	January 1865 - March 1865

* Never Joined Company at Post

Captain Seidenstricker who commanded Company D of the 1st Washington Territorial Volunteer Infantry and was stationed at Fort Hoskins between July 1862 and March 1863; Captain Scott who commanded Company D of the 4th California Volunteer Infantry and was stationed at Fort Hoskins between September 1863 and October 1864; Captain Palmer who commanded Company B of the 1st Oregon Volunteer Infantry and was stationed at Fort Hoskins between December 1864 and March 1865; and Captain Waters who commanded Company F of the 1st Oregon Volunteer Infantry and was stationed at Fort Hoskins between January and February 1865.

Eight of the officers who served at Fort Hoskins held the grade of first lieutenant including John Charles Bonnycastle, Thomas B. Campbell, Herman E. Funk, James Garden, James Davison, Cyrus Hamlin Walker, Henry Catley and Darius Bullock Randall. All of the first lieutenants were all attached to non-mounted (infantry) units including First Lieutenant Bonnycastle who served with Company F of the 4th United States Infantry and was stationed at Fort Hoskins between November 1859 and August 1860; First Lieutenant Campbell who served with Company B of the 2nd California Volunteer Infantry and was stationed at Fort Hoskins between October 1861 and June 1862; First Lieutenant Funk who served with Company D of the 1st Washington Territorial Volunteer Infantry and was stationed at Fort Hoskins between July 1862 and March 1863; First Lieutenant Garden who served with Company D of the 4th California Volunteer Infantry and was stationed at Fort Hoskins between April 1863 and February 1864; First Lieutenant Davison who also served with Company D of the 4th California Volunteer Infantry and was stationed at Fort Hoskins between September 1863 and October 1864; First Lieutenant Walker who served with Company B of the 1st Oregon Volunteer Infantry and was stationed at Fort Hoskins between December 1864 and March 1865; First Lieutenant Catley who also served with Company B of the 1st Oregon Volunteer Infantry and was stationed at Fort Hoskins between January 1865 and March 1865; First Lieutenant Randall who served with Company F of the 1st Oregon Volunteer Infantry and was stationed at Fort Hoskins between January 1865 and March 1865.

Eleven officers stationed at Fort Hoskins held the grade of second lieutenant including Philip Henry Sheridan, William Thomas Gentry, Hezekiah Garber, James

K. McCall, Caleb Henry Carlton, John Newman Andrews, Grove Watson, Louis Herzer, James Simon Rathbun, John Winchell Cullen and James A. Balch. All of the second lieutenants were all attached to non-mounted (infantry) units including Second Lieutenant Sheridan who served with Company K of the 4th United States Infantry and was stationed at Fort Hoskins between July 1856 and May 1857; Second Lieutenant Garber who served with Company F of the 4th United States Infantry and was stationed at Fort Hoskins between June 1857 and October 1859; Second Lieutenant McCall who served with Company F of the 4th United States Infantry and was stationed at Fort Hoskins between August 1860 and June 1861; Second Lieutenant Carlton who served with Company F of the 4th United States Infantry and was stationed at Fort Hoskins between August 1860 and May 1861; Second Lieutenant Andrews who served with Company F of the 4th United States Infantry and was stationed at Fort Hoskins between December 1860 and June 1861; Second Lieutenant Forney who served with Company B of the 9th United States Infantry and was stationed at Fort Hoskins in October 1861; Second Lieutenant Watson who served with Company B of the 2nd California Volunteer Infantry and was stationed at Fort Hoskins between November 1861 and June 1862; Second Lieutenant Herzer who served with Company D of the 1st Washington Territorial Volunteer Infantry and was stationed at Fort Hoskins between July 1862 and October 1864; Second Lieutenant Rathbun who served with Company D of the 4th California Volunteer Infantry and was stationed at Fort Hoskins between July 1864 and October 1864; Second Lieutenant Cullen who served with Company B of the 1st Oregon Volunteer Infantry and was stationed at Fort Hoskins between December 1864 and March 1865; and Second Lieutenant Balch who served with Company F of the 1st Oregon Volunteer Infantry and was stationed at Fort Hoskins between January and March 1865.

Military Roles

Commissioned officers at Fort Yamhill and Fort Hoskins filled at least seven military roles associated with the general running of a military post and for which they sometimes earned extra pay and emoluments. These positions included acting as the Post Commander (PC), Company Commander (CC), Post Adjutant (PA), Assistant Commissary of Subsistence (ACS), Acting Assistant Commissary of Subsistence (AACS), Regimental Quartermaster (RQM) and as the Acting Assistant Quartermaster (AAQM) (Table 4.5).

At both Fort Yamhill and Fort Hoskins the extra roles served by the commission officers appear to correlate with military grade where those extra duty positions with the highest level of responsibility, authority and compensation such as Post Commander, Company Commander and Post Adjutant were held by the higher graded officers while those extra duty positions with lower levels of responsibility, authority and compensation such as Assistant Commissary of Subsistence, Acting Assistant Commissary of Subsistence, Regimental Quartermaster and Acting Assistant Quartermaster were held by lower graded officers.

Table 4.5 Military Roles Served By Commissioned Officers at Fort Yamhill and Fort Hoskins

Military Role	Fort Yamhill			Fort Hoskins		
	Capt.	1 st Lt.	2 nd Lt.	Capt.	1 st Lt.	2 nd Lt.
Present at Post ^{1,2}	83	93	155	95	63	154
Post Commander	83	14	25	95	10	3
Company Commander	127	0	0	132	10	5
Post Adjutant	60	45	17	80	20	5
Assistant Commissary of Subsistence	6	13	27	11	7	52
Acting Assistant Commissary of Subsistence	0	3	72	0	23	8
Regimental Quartermaster	0	3	0	0	2	0
Acting Assistant Quartermaster	6	16	99	11	31	60

¹A commissioned officer with the grade of captain, first lieutenant or second lieutenant was presented at Fort Yamhill for 122 of the 123 months the post was occupied. ²A commissioned officer with the grade of captain, first lieutenant or second lieutenant was presented at Fort Hoskins for all 108 months the post was occupied.

The Role of Post Commander. The position of the Post Commander (PC) held the highest level of authority and responsibility at the post including the complete control of post operations and the command over all soldiers and officers, including other lower ranking commanders and their regiments and/or companies. The role of post commander was always assumed by the highest ranking officer present, regardless of regiment or company, and was always a temporary position as the only qualification to hold the position was being the highest ranking officer present. The position was considered temporary because if an officer was assigned to the post, and he was higher ranking than those already present, he assumed command of the post until he left the post and relinquished command to the highest ranking officer who remained or if a higher ranking officer was assigned to the post and assumed command.

The Role of Post Commander at Fort Yamhill. Role of the Post Commander (PC) was more commonly held by officers with the grade of captain than by those with the grade of either first or second lieutenant (Table 4.5). At Fort Yamhill role of Post Commander was held by all six captains who served at the post including Captain Rinearson who held the position for two months, Captain Floyd-Jones who held the position for two months, Captain Smith who held the position for five months, Captain Russell who held the position for longer than any other officer (forty-one months), Captain Scott who held the position for thirty-one months and Captain Lafollette who held the position for only two months. In all, officers with the grade of captain held the position of Post Commander during 83 of the 122 months (68.2%) where a Post Commander was recorded.

Eight subaltern officers at Fort Yamhill also held the position of Post Commander but with less frequency than those with the grade of captain. Four first lieutenants served as the Post Commander including First Lieutenant Taylor who held the position for four months, First Lieutenants Forsythe and Owen who held the position for only one month each and First Lieutenant Shipley who held the position for eight months, the longest of any of the first lieutenants. In all, officers with the grade of first lieutenant held the position for 14 of the 122 months (11.4% of the

time) where a Post Commander was recorded. Four second lieutenants also served as the Post Commander including Second Lieutenant Hazen who held the position for only two months, Second Lieutenant Sheridan who held the position for nine months, Second Lieutenant Davison who held the position for longer than any other subaltern officer (thirteen months), and Second Lieutenant Rathbun who held the position for only one month. In all, officers with the grade of second lieutenant held the position for 25 of the 122 months (20.4% of the time) where a Post Commander was recorded.

The Role of Post Commander at Fort Hoskins. Role of the Post Commander (PC) was more commonly held by officers with the grade of captain than by those with the grade of either first or second lieutenant (Table 4.5). At Fort Hoskins role of Post Commander was held by seven of the nine captains who served at the post including Captain Augur who held the position longer than any other commissioned officer (58 months), Captain Dent who held the position for four months, Captain Schmidt who held the position for eight months, Captain Seidenstricker who held the position for nine months, Captain Scott who held the position for 13 months, Captain Palmer who held the position for only one month, and Captain Currey who held the position for two months. In all, officers with the grade of captain held the position of Post Commander during 95 of the 108 months (87.9%) where a Post Commander was recorded.

Four subaltern officers at Fort Hoskins also held the position of Post Commander but with less frequency than those with the grade of captain. Only two first lieutenants served as the Post Commander including First Lieutenant Garden who held the position for six months and First Lieutenant Walker who held the position for four months. In all, officers with the grade of first lieutenant held the position for only 10 of the 108 months (9.2% of the time) where a Post Commander was recorded. Two second lieutenants also served as the Post Commander including Second Lieutenant Gentry who held the position for two months and Second Lieutenant Herzer who held the position for only one month. In all, officers with the grade of second lieutenant held the position for 4 of the 108 months (3.7% of the time) where a Post Commander was recorded.

The Role of Company Commander. The position of Company Commander (CC) held the second highest level of authority, second only to the position of Post Commander. In the case where only one company was present at the post, the Company Commander also served as the Post Commander. The Company Commander was the highest ranking officer in the company and his responsibilities were broad and included command his company in battle, ensuring the military discipline and proper military training of the soldiers under within his company and the overall management of the company including its armament, shelter, subsistence and equipment while on campaign, traveling and in garrison (at post). Although ultimately responsible for the all of the men Company Commanders rarely took part in the day to day management of the company (in the field or in garrison) and usually divided and delegated these activities amongst his subaltern officers.

The Role of Company Commander at Fort Yamhill. Role of the Company Commander (CC) was held exclusively by officers with the grade of captain at Fort Yamhill (Table 4.5). For all 127 months were a Company Commander was recorded the position was held by an officer with the grade of captain. Captain Rinearson held the position for two months, Captain Floyd-Jones held the position for eleven months, Captain Smith also held the position for eleven months, Captain Russell held the position longer than any other officer (forty-seven months), Captain Scott held the position nearly just as long (forty-five months) and Captain Lafollette held the position for eleven months. No subaltern officers ever officially held the position of Company Commander at Fort Yamhill.

The Role of Company Commander at Fort Hoskins. At Fort Hoskins role of the Company Commander (PC) was more commonly held by officers with the grade of captain than by those with the grade of either first or second lieutenant (Table 4.5). At Fort Hoskins role of Company Commander was held by all nine captains who served at the post including Captain Augur who held the position longer than any other commissioned officer (sixty months), Captain Dent who held the position for

six months, Captain Floyd-Jones who held the position for twenty-five months, Captain Schmidt who held the position for nine months, Captain Seidenstricker who held the position for nine months, Captain Scott who held the position for fourteen months, Captain Palmer who held the position for four months, Captain Currey who held the position for only four months, and Captain Waters who held the position for three months. In all, officers with the grade of captain held the position of Company Commander during 132 of the 147 months (89.8%) where a Company Commander was recorded.

Only two subaltern officers at Fort Hoskins held the position of Company Commander. Only one first lieutenant served as a Company Commander, First Lieutenant Bonnycastle who held the position for ten months. In all, officers with the grade of first lieutenant held the position for only 10 of the 147 months (6.8% of the time) where a Company Commander was recorded. One second lieutenant also served as a Company Commander, Second Lieutenant Carlton who held the position for only five months. In all, officers with the grade of second lieutenant held the position for just 5 of the 147 months (3.4% of the time) where a Company Commander was recorded.

The Role of Post Adjutant. The position of Post Adjutant (PA) was largely an administrative or clerical one with the primary responsibilities of the position being the official keeper of all non-financial records of the post and for managing all official correspondence. The officer would have also served as a conduit for information between the Post Commander and the rest of the members of the post and between the post and the general public.

The Role of Post Adjutant at Fort Yamhill. Role of the Post Adjutant (PA) was also more commonly held by officers with the grade of captain than by those with the grade of either first or second lieutenant (Table 4.5). At Fort Yamhill role of Post Adjutant was held by three captains who served at the post including Captain Russell who held the position for longer than any other officer (twenty-six months), Captain Scott who held the position for twenty-three months and Captain Lafollette

who held the position for eleven months. In all, officers with the grade of captain held the position of Post Adjutant during 60 of the 122 months (49.1%) where a Post Adjutant was recorded.

Three subaltern officers at Fort Yamhill also held the position of Post Adjutant but with less frequency than those with the grade of captain. Two first lieutenants served as the Post Adjutant including First Lieutenant Forsythe who held the position for longer than any other subaltern officer (23 months) and First Lieutenant Garden who held the position for nearly the same amount of time (22 months). In all, officers with the grade of first lieutenant held the position for 45 of the 122 months (36.8% of the time) where a Post Adjutant was recorded.

Only one second lieutenant served as the Post Adjutant, Second Lieutenant Wheeler Jr., who held the position for seventeen of the 122 months (13.9% of the time) where a Post Adjutant was recorded. It should also be noted that two other subaltern officers, both first lieutenants, served as Regimental Adjutants (RA) but “never joined [their] company at post” including First Lieutenant Hodges who served as the Regimental Adjutant for the 4th United States Infantry and First Lieutenant Lee who served the same position for the 4th California Volunteer Infantry.

The Role of Post Adjutant at Fort Hoskins. Role of the Post Adjutant (PA) was also more commonly held by officers with the grade of captain than by those with the grade of either first or second lieutenant (Table 4.5). At Fort Hoskins role of Post Adjutant was held by five captains who served at the post including Captain Augur who held the position for longer than any other officer (fifty-one months), Captain Dent who held the position for three months, Captain Schmidt who held the position for nine months, Captain Seidenstricker who held the position for eight months and Captain Scott who held the position for nine months. In all, officers with the grade of captain held the position of Post Adjutant during 80 of the 105 months (76.2%) where a Post Adjutant was recorded.

Five subaltern officers at Fort Hoskins also held the position of Post Adjutant but with less frequency than those with the grade of captain. Three first lieutenants served as the Post Adjutant including First Lieutenant Bonnycastle who held the

position for longer than any other subaltern officer (10 months), First Lieutenant Garden who held the position for nine months and First Lieutenant Davison who held the position for only one month. In all, officers with the grade of first lieutenant held the position for 20 of the 105 months (19.0% of the time) where a Post Adjutant was recorded.

Two second lieutenants also served as Post Adjutants including Second Lieutenant Herzer, who held the position for only one month and Second Lieutenant Cullen who held the position for four months. In all, officers with the grade of second lieutenant held the position for only 5 of the 105 months (4.7% of the time) where a Post Adjutant was recorded.

The Role of Assistant Commissary of Subsistence/Acting Assistant Commissary of Subsistence. The positions of Assistant Commissary of Subsistence (ACS) and Acting Assistant Commissary of Subsistence (AACS) were also largely administrative and clerical with the primary responsibilities of the positions being the procurement, inspection, storage and issue of subsistence stores and the official recording keeping of these activities.

The Role of Assistant Commissary of Subsistence/Acting Assistant Commissary of Subsistence at Fort Yamhill. At Fort Yamhill roles of the Assistant Commissary of Subsistence (ACS) and Acting Assistant Commissary of Subsistence (AACS) was more commonly held by officers with the grade of second lieutenant than by those with the grade of either captain or first lieutenant (Table 4.5). Role of Assistant Commissary of Subsistence was held by only one captain, Captain Scott, who held the position for only six of the forty-six months (13% of the time) where an Assistant Commissary of Subsistence was recorded. The position of Acting Assistant Commissary of Subsistence was never held by a captain at Fort Yamhill.

Four subaltern officers at Fort Yamhill held the position of Assistant Commissary of Subsistence including two first lieutenant and two second lieutenants, and six subaltern officers held the position of Acting Assistant Commissary of Subsistence including two first lieutenants and four second lieutenants. First

Lieutenant Catley held the position of Assistant Commissary of Subsistence for only three months and First Lieutenant Shipley held the position for ten months. In all, officers with the grade of first lieutenant held the position of Assistant Commissary of Subsistence for thirteen of the forty-six months (28.3% of the time) where an Assistant Commissary of Subsistence was recorded. Two First Lieutenants also held the position of Acting Assistant Commissary of Subsistence including First Lieutenant Owen who held the position for only one month and First Lieutenant Garden who held the position for only two months. In all, officers with the grade of first lieutenant held the position of Acting Assistant Commissary of Subsistence for three of the seventy-five months (only 4% of the time) where an Acting Assistant Commissary of Subsistence was recorded.

Two second lieutenants also served as the Assistant Commissary of Subsistence including Second Lieutenant Sheridan, who held the position for seven months, and Second Lieutenant Davison who held the position for twenty months. In all, officers with the grade of second lieutenant held the position of Assistant Commissary of Subsistence more than officers of any other grade, twenty-seven of the forty-six months (58.7% of the time) where the position was recorded. Four second lieutenants also held the position of Acting Assistant Commissary of Subsistence including Second Lieutenant Hazen who held the position for thirteen months, Second Lieutenant Sheridan who held the position the longest of any officer (forty-one months), Second Lieutenant Wheeler Jr. who held the position for only four months and Second Lieutenant Davison who held the position for fourteen months. In all, officers with the grade of second lieutenant held the position of Acting Assistant Commissary of Subsistence more than officers of any other grade, seventy-two of the seventy-five months (96% of the time) where the position was recorded.

The Role of Assistant Commissary of Subsistence/Acting Assistant Commissary of Subsistence at Fort Yamhill. At Fort Hoskins role of the Assistant Commissary of Subsistence (ACS) was more commonly held by officers with the grade of second lieutenant while the position of Acting Assistant Commissary of

Subsistence (AACS) was more commonly held by officers with the grade of first lieutenant (Table 4.5). Role of Assistant Commissary of Subsistence was held by two captains, Captain Dent who held the position for only three months and Captain Scott who held the position for eight months. In all officers with the rank of captain held the position of Assistant Commissary of Subsistence for eleven of the seventy months (15.7% of the time) where an Assistant Commissary of Subsistence was recorded. The position of Acting Assistant Commissary of Subsistence was never held by a captain at Fort Hoskins.

Four subaltern officers at Fort Hoskins held the position of Assistant Commissary of Subsistence including two first lieutenants and two second lieutenants, and four subaltern officers held the position of Acting Assistant Commissary of Subsistence including three first lieutenants and only one second lieutenant. First Lieutenant Davison held the position of Assistant Commissary of Subsistence for four months and First Lieutenant Catley held the position for three months. In all, officers with the grade of first lieutenant held the position of Assistant Commissary of Subsistence for seven of the seventy months (10% of the time) where an Assistant Commissary of Subsistence was recorded. Three first lieutenants also held the position of Acting Assistant Commissary of Subsistence including First Lieutenant Campbell who held the position for nine months, First Lieutenant Funk who also held the position for nine months and First Lieutenant Garden who held the position for only five months. In all, officers with the grade of first lieutenant held the position of Acting Assistant Commissary of Subsistence for twenty-three of the thirty-one months (74.2% of the time) where an Acting Assistant Commissary of Subsistence was recorded.

Two second lieutenants also served as the Assistant Commissary of Subsistence including Second Lieutenant Gentry, who held the position for fifty-one months, and Second Lieutenant Rathbun who held the position for only one month. In all, officers with the grade of second lieutenant held the position of Assistant Commissary of Subsistence more than officers of any other grade, fifty-two of the seventy months (74.3% of the time) where the position was recorded. One second lieutenant held the position of Acting Assistant Commissary of Subsistence, Second

Lieutenant Sheridan, who held the position for eight months (25.8% of the time) where the position was recorded.

The Role of Regimental Quartermaster. The position of Regimental Quartermaster was also largely an administrative and clerical one with the primary responsibilities of the position being the construction and maintenance of non-defensive military buildings, the procurement and inspection of all military supplies excluding subsistence stores, arms and ammunition of the regiment as a whole.

The Role of Regimental Quartermaster at Fort Yamhill. Role of Regimental Quartermaster (RQM) was exclusively held by officers with the grade of first lieutenant at Fort Yamhill (Table 4.5). Only one first lieutenant, First Lieutenant Catley, held the position for the 1st Oregon Volunteer Infantry for two months while stationed at the post.

The Role of Regimental Quartermaster at Fort Hoskins. Role of Regimental Quartermaster (RQM) was exclusively held by officers with the grade of first lieutenant at Fort Hoskins (Table 4.5). Only one first lieutenant, First Lieutenant Catley, held the position for the 1st Oregon Volunteer Infantry for two months while stationed at the post.

The Role of Acting Assistant Quartermaster. The position of Acting Assistant Quartermaster (AAQM) was also largely an administrative or clerical one but instead of being responsible for the construction and maintenance of non-defensive military buildings, the procurement and inspection of all military supplies for the regiment as a whole, the position was only responsible for fulfilling the supply needs of the company and/or post to which he was assigned.

The Role of Acting Assistant Quartermaster at Fort Yamhill. Role of the Acting Assistant Quartermaster (AAQM) was also more commonly held by officers with the grade of second lieutenant than by those with the grade of either captain or first lieutenant (Table 4.5). At Fort Yamhill role of Acting Assistant Quartermaster was held by only one captain, Captain Scott, who held the position for only six of the 121 months (4.9% of the time) where an Acting Assistant Quartermaster was recorded.

Eight subaltern officers at Fort Yamhill also held the position of Acting Assistant Quartermaster including four first lieutenants and four second lieutenants. The four first lieutenants who served as the Acting Assistant Quartermaster including First Lieutenant Owen who held the position for only one month, First Lieutenant Garden who held the position for two months, First Lieutenant Catley who held the position for three months and First Lieutenant who held the position longer than any other first lieutenant (10 months). In all, officers with the grade of first lieutenant held the position for sixteen of the 121 months (13.2% of the time) where an Acting Assistant Quartermaster was recorded.

Four second lieutenants who served as the Acting Assistant Quartermaster included Second Lieutenant Hazen who held the position for thirteen months, Second Lieutenant Sheridan who held the position longer than any other officer (48 months), Second Lieutenant Wheeler Jr. who held the position for four months and Second Lieutenant Davison who held the position for thirty-four months. In all, officers with the grade of second lieutenant held the position of Acting Assistant Quartermaster more than officers of any other grade, ninety-nine of the 121 months (81.8% of the time) where the position was recorded.

The Role of Acting Assistant Quartermaster at Fort Hoskins. At Fort Hoskins role of the Acting Assistant Quartermaster (AAQM) was also more commonly held by officers with the grade of second lieutenant than by those with the grade of either captain or first lieutenant (Table 4.5). Role of Acting Assistant Quartermaster was held by two captains, Captain Dent, who held the position for three months and Captain Scott who held the position for eight months. In all officers

with the rank of captain held the position of Acting Assistant Quartermaster for eleven of the 102 months (10.7% of the time) where an Acting Assistant Quartermaster was recorded.

Eight subaltern officers at Fort Hoskins also held the position of Acting Assistant Quartermaster including five first lieutenants and three second lieutenants. The five first lieutenants who served as the Acting Assistant Quartermaster including First Lieutenant Campbell who held the position for nine months, First Lieutenant Funk who also held the position for nine months, First Lieutenant Garden who also held the position for nine months, First Lieutenant Davison who held the position for only one month and First Lieutenant Catley who held the position for three months. In all, officers with the grade of first lieutenant held the position for thirty-one of the 102 months (30.3% of the time) where an Acting Assistant Quartermaster was recorded.

Three second lieutenants who served as the Acting Assistant Quartermaster included Second Lieutenant Sheridan who held the position for eight months, Second Lieutenant Gentry who held the position longer than any other officer (fifty-one months) and Second Lieutenant Rathbun who held the position for only one month. In all, officers with the grade of second lieutenant held the position of Acting Assistant Quartermaster more than officers of any other grade, sixty of the 102 months (58.8% of the time) where the position was recorded.

Length of Service, Rank and Tenure Bonus

An officer's length of military service had two major impacts to their status, the first affected their military authority and the second affected their socioeconomic position. During the 19th century an officer's level of military authority primarily based on their grade but when interacting with an officer of the same grade authority was determined by their rank within their grade. Authority between members of different military grades was determined by the explicit difference in the order of their grades, for example a higher graded officer always had military authority over a lower graded

officer. But authority between members of the same military grade was determined by their length of military service in that grade (also known as rank). Authority based on rank was determined by the date the officer was commissioned or promotion to their current grade, where the officers with the earliest date of commission or promotion had authority over those officers with later dates.

Length of Service, Rank and Tenure Bonus of Commissioned Officers at Fort Yamhill. Commissioned officers at Fort Yamhill had varying lengths of military service that tended to correlate with their military grade. In general the officers with the highest military grade at the post also tended to have the longest length of military service (Table 4.6). Captains at Fort Yamhill had the longest lengths of military service prior to their appoint to the post, Captain Smith had over eighteen years of experience, Captain Russell had almost twelve and Captain Floyd-Jones had nearly ten. The other three officers, Captains Rinearson, Scott and Lafollette all had less than a year of experience prior to being assigned to the post. It should also be noted, and not surprising, that the large difference between the lengths of military service between these officers is largely as a result of the type of Army they served in. The captains with the longest lengths of service, Captain Smith, Captain Russell and Captain Floyd-Jones were all commissioned in the U.S. Army Regular Service while the captains with the shortest lengths of service, Captains Rinearson, Scott and Lafollette were all commissioned in the U. S. Army Volunteer Service. In all, captains at Fort Yamhill had the longest average terms of military service at the post, averaging 6.8 years per officer.

Subaltern officers at Fort Yamhill had far shorter lengths of military service prior to their appointment to the post than captains and of the subaltern officers those

Table 4.6 Years of Military Service Prior to Assignment to Fort Yamhill or Fort Hoskins

	Fort Yamhill			Fort Hoskins		
	Capt.	1 st Lt.	2 nd Lt.	Capt.	1 st Lt.	2 nd Lt.
Mean	6.80	4.40	0.90	3.70	1.70	0.90
High	18.08	9.58	2.80	10.90	10.00	3.00
Low	0.25	0.25	0.08	0.10	0.10	0.10

with the grade of first lieutenant tended to have longer lengths of military service than those with the grade of second lieutenant. The first lieutenants with the most experience were First Lieutenant Taylor who served over nine years, First Lieutenant Forsythe who served just under nine years and First Lieutenant Owen who served over six years in the U. S. Army Regular Service. Just as with the captains at Fort Yamhill the first lieutenants with the shortest lengths of military service were also officers in the U. S. Army Volunteer Service including First Lieutenant Garden, First Lieutenant Catley and First Lieutenant Shipley who all served less than a year prior to their assignment to Fort Yamhill. In all, first lieutenants at Fort Yamhill had an average term of military service of only 4.4 years per officer.

The second lieutenants with the most experience were also officers in the U. S. Army Regular Service including Second Lieutenant Garber who served less than three years and Second Lieutenant Sheridan who served less than two years prior to their assignment to Fort Yamhill. All of the other second lieutenants served less than one year prior to their assignment to Fort Yamhill including Second Lieutenant Hazen and Second Lieutenant Wheeler Jr. who were officers in the U. S. Army Regular Service and Second Lieutenant Davison, Second Lieutenant Rathbun and Second Lieutenant Dunbar who were all officers in the U.S. Army Volunteer Service. In all, second lieutenants at Fort Yamhill had an average term of military service of only 0.9 years per officer.

At Fort Yamhill six commissioned officers had served in the United States Army long enough to earn a tenure bonus including three captains and three first lieutenants. Captains at Fort Yamhill earned the highest tenure bonuses including Captain Floyd-Jones and Captain Russell earning an additional \$18.00 per month in pay and Captain Smith who earned an additional \$27.00 per month in pay. Three first lieutenants at Fort Yamhill also earned tenure bonuses including First Lieutenant Taylor and First Lieutenant Forsythe who earned an additional \$18.00 per month in pay and First Lieutenant Owen who earned an additional \$9.00 per month in pay. No second lieutenant at Fort Yamhill had a served in the United States Army long enough to earn a tenure bonus.

Length of Service, Rank and Tenure Bonus of Commissioned Officers at Fort Hoskins. Commissioned officers at Fort Hoskins also had varying lengths of military service that tended to correlate with their military grade. In general the officers with the highest military grade at the post also tended to have the longest length of military service (Table 4.6). Captains at Fort Hoskins had the longest lengths of military service prior to their appointment to the post, Captain Augur had nearly eleven years of experience, Captain Dent had just over ten and Captain Floyd-Jones had nearly ten. Captain Scott had nearly two years military service prior to his appointment to Fort Hoskins. The other five officers, Captains Schmidt, Seidenstricker, Palmer, Currey and Waters all had less than four months of experience prior to being assigned to the post. It should also be noted, and not surprising, that the large difference between the lengths of military service between these officers is largely as a result of the type of Army they served in. The captains with the longest lengths of service, Captain Augur, Captain Dent and Captain Floyd-Jones were all commissioned in the U.S. Army Regular Service while the captains with the shortest lengths of service, Captains Schmidt, Seidenstricker, Scott, Palmer, Currey and Waters were all commissioned in the U. S. Army Volunteer Service. In all, captains at Fort Hoskins had the longest average terms of military service at the post, averaging 3.7 years per officer.

Subaltern officers at Fort Hoskins had far shorter lengths of military service prior to their appointment to the post than captains and of the subaltern officers those with the grade of first lieutenant tended to have longer lengths of military service than those with the grade of second lieutenant. The first lieutenants with the most experience were First Lieutenant Bonnycastle who served ten years in the U. S. Army Regular Service. Just as with the captains at Fort Hoskins the first lieutenants with the shortest lengths of military service were also officers in the U. S. Army Volunteer Service including First Lieutenant Davison who served just over two years and First Lieutenants Campbell, Funk, Garden, Walker, Catley and Randall who all served less than a year prior to their assignment to Fort Hoskins. First lieutenants at Fort Hoskins had an average term of military service of only 1.7 years per officer.

The second lieutenants with the most experience were also officers in the U. S. Army Regular Service including Second Lieutenant Sheridan who served just under two years, Second Lieutenant Garber who served three years and Second Lieutenant McCall who served just under three years prior to their assignment to Fort Hoskins. All of the other second lieutenants served less than one year prior to their assignment to Fort Hoskins including Second Lieutenant Gentry, Garber, Carlton, Andrews and Watson who were officers in the U. S. Army Regular Service and Second Lieutenants Herzer, Rathbun, Cullen and Balch who were all officers in the U.S. Army Volunteer Service. In all, second lieutenants at Fort Hoskins had an average term of military service of only 0.9 years per officer.

At Fort Hoskins three commissioned officers had served in the United States Army long enough to earn a tenure bonus including two captains and one first lieutenant. Captains at Fort Hoskins earned the highest tenure bonuses including Captain Augur and Captain Dent earning an additional \$18.00 per month in pay. Only one first lieutenant at Fort Hoskins earned a tenure bonus, First Lieutenant Bonnycastle who earned an additional \$18.00 per month in pay. No second lieutenant at Fort Hoskins had a served in the United States Army long enough to earn a tenure bonus.

Estimated Mean Monthly Salary

During the 19th century an Army officer's salary was dependent upon several factors including his grade, the type of regiment in which he served, the length time he had served in the Army and the specific military duties he served in his regiment, company and/or post. The Estimated Mean Monthly Salary (EMMS) of each commissioned officer stationed at both posts was calculated as a means to estimate and compare each officer's estimated income as United States Army officers. The EMMS was calculated as a function of the variables discussed above including the pay ascribed to the officers' military grade, corps, military role(s) the officer held and the length of their military service.

The historical context and the structure of the Army pay system can be found in Chapter 2 and a detailed description of the methods used to calculate these values is presented in Chapter 3. A narrative description of the variables for each commissioned officer can be found within the officer biographies presented in Appendix A and the formula and the data tables used to calculate the EMMS for each commissioned officer can be found in Appendix B. A summary of these values are discussed below and the high, low and mean EMMS values for each commissioned officer grade are presented in Table 4.7. It should be noted that the EMMS is used here as a rough and likely imperfect measure of economic status as it is only an estimate of a commissioned officer's salary and does not account for any additional sources of income. That being said it is a useful estimate of the economic status and one that may be used for understanding the economic inequality between officers of different military grades.

Estimated Mean Monthly Salary Values for Commissioned Officers at Fort Yamhill. At Fort Yamhill the EMMS of the commissioned officers tended to correlate strongly with their military grade where higher graded officers tended to have higher EMMS values and lower graded officers tended to have lower EMMS values. Officers with the rank of captain at Fort Yamhill had the highest mean, high and low EMMS values. The highest EMMS for an officer with the rank of captain was \$175.50 and was earned by Captain Smith and the lowest EMMS for an officer with the rank of captain was \$146.72 and was earned by Captain Scott. The mean EMMS for all captains was \$155.69.

Both of the subaltern officer grades had far lower EMMS values than their captains. The highest EMMS for an officer with the rank of first lieutenant was \$141.83 and was earned by First Lieutenant Catley and the lowest EMMS for an

Table 4.7 Estimated Mean Monthly Salaries for Officers at Fort Yamhill and Fort Hoskins

	<u>Fort Yamhill</u>			<u>Fort Hoskins</u>		
	Capt.	1 st Lt.	2 nd Lt.	Capt.	1 st Lt.	2 nd Lt.
Mean	155.69	137.06	120.58	159.99	130.08	116.01
High	175.50	141.83	130.06	173.69	156.50	123.50
Low	146.72	129.10	113.50	138.50	118.50	113.50

officer with the rank of first lieutenant was \$129.10 and was earned by First Lieutenant Garden. The mean EMMS for all second lieutenants was \$137.06. The highest EMMS for an officer with the rank of second lieutenant was \$130.06 and was earned by Second Lieutenant Wheeler Jr. and the lowest EMMS for an officer with the rank of second lieutenant was \$113.50 and was earned by Second Lieutenant Garber, Second Lieutenant Rathbun and Second Lieutenant Dunbar. The mean EMMS for all second lieutenants was \$120.58.

Estimated Mean Monthly Salary Values for Commissioned Officers at Fort Hoskins. At Fort Hoskins the EMMS of the commissioned officers tended to correlate strongly with their military grade where higher graded officers tended to have higher EMMS values and lower graded officers tended to have lower EMMS values. Officers with the rank of captain at Fort Hoskins had the highest mean, high and low EMMS values. The highest EMMS for an officer with the rank of captain was \$173.69 and was earned by Captain Augur and the lowest EMMS for an officer with the rank of captain was \$138.50 and was earned by three captains including Captains Palmer, Currey and Waters. The mean EMMS for all captains was \$159.99.

Both of the subaltern officer grades had far lower EMMS values than their captains. The highest EMMS for an officer with the rank of first lieutenant was \$156.50 and was earned by First Lieutenant Bonnycastle and the lowest EMMS for an officer with the rank of first lieutenant was \$118.50 and was earned by three first lieutenants including First Lieutenants Davison, Walker and Randall. The mean EMMS for all second lieutenants was \$130.08. The highest EMMS for an officer with the rank of second lieutenant was \$123.50 and was earned by Second Lieutenant Cullen and the lowest EMMS for an officer with the rank of second lieutenant was \$113.50 and was earned by five second lieutenants including Second Lieutenants Garber, McCall, Andrews, Watson and Balch. The mean EMMS for all second lieutenants was \$116.01.

Although the figures presented above are only estimates, the higher monthly salaries earned by the higher ranking officers suggests that these officers would have had more disposable and discretionary income than their lower ranking, and lower paid,

counterparts. A higher disposable income would have allowed officers to support a larger family and generally a more comfortable life-style and a higher discretionary income would have allowed officers and their families to purchase more luxury and non-essential items.

Commissioned Officer Age

During the 19th century the system of promotion within the United States Army was based strictly on seniority from private through captain within individual regiments, major through colonel within their corps and within the Army at large from Brigadier General and beyond (Utley 1981:31). The promotion of an officer from one grade to the next was usually the result of the necessity to fill position made vacant through death or retirement and the individual officer chosen was based on seniority rather than on merit. Because of this system promotion was slow and it could take an individual officer several years to be promoted from an assisting subaltern second lieutenant to a captain and the commander of a company. Therefore, the highest ranking officers at any given post should be, on average, the oldest commissioned officers at the post followed by his subaltern officers in ranked order, first lieutenant and second lieutenant.

Another influence on the average age of officers within each grade is the presence officer promoted to the commissioned ranks from the non-commissioned/enlisted ranks. Most non-commissioned officers that were promoted to the ranks of the commissioned officer class entered at the rank of second lieutenant and after a long military career of working upward through the enlisted rank and file. This long military service tended to make these officers much older than their second lieutenant counterparts who were commissioned in the Army after graduating from the United States Military Academy. Those promoted to the commissioned officer ranks from the enlisted ranks were also much less likely to be further promoted to the ranks above second lieutenant before they left military service. Because of their older starting age as a second lieutenant many of the commissioned officers promoted from

the rank and file did not have enough time left in their military careers to allow them to be promoted much further up the commissioned officer ranks. These factors tended to increase the average starting age of the second lieutenants more than the average age of the first lieutenants or captains.

Age of Commissioned Officers at Fort Yamhill. Commissioned officers at Fort Yamhill ranged in age from 25 years to 42 years old with an officer's age generally correlating with his military grade and rank. In general the officers with the highest military grade and rank within the grade tended to be oldest officers at the post (Table 4.8). Captains at Fort Yamhill were the oldest officers at the post with two officers over the age of 40 (Captain Rinearson aged 42 and Captain Smith aged 41) and four officers over the age of 30 (Captain Lafollette aged 36, Captains Russell and Scott aged 31 and Captain Floyd-Jones aged 30). The average overall age for captains at Fort Yamhill was 36.4 years and no captain was less than 30 years of age.

First lieutenants at Fort Yamhill tended to be the second oldest officers at the post with four officers over the age of 30 (First Lieutenants Taylor and Garden aged 32, First Lieutenant Garden aged 31 and First Lieutenant Forsythe aged 30) and two officers under the age of 30 (First Lieutenant Own aged 28 and first lieutenant Shipley aged 26). The average overall age for first lieutenants at Fort Yamhill was 29.4 years of age.

Second lieutenants at Fort Yamhill tended to be the youngest officers at the post with just two officers over the age of 30 (Second Lieutenant Davison aged 34 and Second Lieutenant Rathbun aged 33) and five officers under the age of 30 (Second Lieutenants Garber and Wheeler Jr. aged 27, Second Lieutenants Hazen and Dunbar aged 26 and Second Lieutenant Sheridan aged 25). The overall age of the second lieutenants at Fort Yamhill was 28.2 years of age.

Table 4.8 Commissioned Officer Age at Fort Yamhill and Fort Hoskins

	Fort Yamhill			Fort Hoskins		
	Capt.	1 st Lt.	2 nd Lt.	Capt.	1 st Lt.	2 nd Lt.
Mean	36.4	29.4	30.1	37.1	30.2	29.7
High	44	32	43	47	36	41
Low	30	26	25	31	26	22

Age of Commissioned Officers at Fort Hoskins. Commissioned officers at Fort Hoskins ranged in age from 22 years to 46 years old with an officer's age generally correlating with his military grade and rank. In general the officers with the highest military grade and rank within the grade tended to be oldest officers at the post (Table 4.8). Captains at Fort Hoskins were the oldest officers at the post with three officers over the age of 40 (Captain Seidenstricker aged 46, Captain Schmidt aged 42 and Captain Dent aged 41) and six officers over the age of 30 (Captain Palmer aged 37, Captain Augur aged 35, Captain Scott aged 34, Captains Currey and Waters aged 32 and Captain Floyd-Jones aged 31). The average overall age for captains at Fort Hoskins was 36.6 years and no captain was less than 31 years of age.

First lieutenants at Fort Hoskins tended to be the second oldest officers at the post with four officers over the age of 30 (First Lieutenant Davison aged 36, First Lieutenant Bonnycastle aged 34, First Lieutenant Garden aged 32 and First Lieutenant Catley aged 30) and four officers under the age of 30 (First Lieutenant Campbell aged 29, First Lieutenant Funk aged 28, First Lieutenant Randall aged 27 and First Lieutenant Walker aged 26). The average overall age for first lieutenants at Fort Hoskins was 30.2 years of age.

Second lieutenants at Fort Hoskins tended to be the youngest officers at the post with one officer over the age of 40 (Second Lieutenant Herzer aged 41), three officers over the age of 30 (Second Lieutenant Balch aged 39 and Second Lieutenants Watson and Rathbun aged 33) and six officers under the age of 30 (Second Lieutenant Garber aged 27, Second Lieutenant Cullen aged 26, Second Lieutenant Sheridan aged 25, Second Lieutenant Gentry aged 24, Second Lieutenant Carlton aged 23 and Second Lieutenant Andrews aged 22). The overall age of the second lieutenants at Fort Hoskins was 29.3 years.

Previous Professions

As discussed in Chapter 2 during the 19th century a person's social status and economic class was largely dependent upon their profession with jobs comprised of less manual labor duties or "white collar" jobs holding higher status and receiving higher pay than those professions with more manual labor duties or "blue collar" jobs which held lower status and were generally compensated with less pay. Although all of the positions held by the commissioned officers in the United States Army would be considered "white collar" managerial positions, with little to no manual labor, the same white collar-blue collar division of labor was present and positions that required more manual labor duties or working closer with those conducting the manual labor (i.e., commissaries or quartermasters) being perceived as "lower status" than those positions requiring less manual labor or were farther removed from those conducting the manual labor (i.e., commanders and adjutants) being perceived as "higher status". In all the commissioned officers at Fort Yamhill and Fort Hoskins held at least ten job types prior that have for the purposes of this study been divided and grouped based required skill and level of managerial duties into four job classes based on Warner et al. (1949): upper-middle, lower-middle, upper-lower and lower-lower (Table 4.9).

Table 4.9 Previous Job Type and Class for Officers at Fort Yamhill and Fort Hoskins

Job Class ¹	Job Type	Fort Yamhill			Fort Hoskins		
		Capt.	1 st Lt.	2 nd Lt.	Capt.	1 st Lt.	2 nd Lt.
Upper-Middle	Army Officer: Commander ²	3	-	-	3	-	-
	Lawyer	-	-	-	1	-	-
Lower-Middle	Army Officer: Subaltern ²	-	2	4	-	1	4
Upper-Lower	Hair Dresser	-	-	-	1	-	-
	Merchant	-	-	1	-	-	1
	Master Saddler	-	-	-	-	-	1
	Ambrotypist	1	-	-	-	-	1
	Brewer	-	-	-	1	-	-
	Enlisted Soldier	-	1	-	-	1	-
Lower-Lower	Miner	1	-	-	1	1	-
	Farmer	-	1	1	1	1	-
	Laborer	-	-	1	-	2	-
Unknown	Unknown	1	2	-	1	2	4
Totals		6	6	7	9	8	11

¹Job classification based on Warner et al. (1949); ²Includes only career Army officers who accepted their military commission directly after graduating from the United States Military Academy

Previous Professions of Commissioned Officers at Fort Yamhill. At Fort Yamhill three of the six (50.0%) captains held careers that would have been considered upper-middle class including Captain Floyd-Jones, Captain Smith and Captain Russell who were all career officers commissioned in the United States Army who held commanding positions. Two of the three remaining captains at Fort Yamhill held careers that would have been considered lower-middle class or below including one (16.7%) captain, Captain Lafollette, who held a career that would have been considered upper-lower class (ambrotypist) and one (16.7%) captain, Captain Scott, who held a career that would have been considered lower-lower classes (miner). The type of career for one (16.7%) captain, Captain Rinearson, is unknown prior to his commission in the United States Army.

Two of the six (33.3%) first lieutenants who served at Fort Yamhill held a career that would have been considered lower-middle class including First Lieutenant Taylor and First Lieutenant Forsythe, who were both career officers commissioned in the United States Army but neither had ever held a command position. One (16.7%) first lieutenant held a career that would have been considered upper-lower class, First Lieutenant Catley, who was a career enlisted soldier until his promotion to the commissioned officer ranks. One (16.7%) first lieutenant held a career that would have been considered lower-lower class, First Lieutenant Shipley, who was a farm laborer. The type of career for two first lieutenants (33.3%), First Lieutenant Owen and First Lieutenant Garden, are unknown prior to their commission in the United States Army.

Four of the seven (57.1%) second lieutenants who served at Fort Yamhill held a career that would have been considered lower-middle class including Second Lieutenants Hazen, Sheridan, Garber and Wheeler Jr. who were all career officers commissioned in the United States Army but never held a command position. One (14.3%) second lieutenant held a career that would have been considered upper-lower class, Second Lieutenant Rathbun, who was a merchant and enlisted soldier. Two (28.6%) second lieutenants held careers that would have been considered lower-lower class including Second Lieutenant Davison who was a laborer and Second Lieutenant Dunbar who was a farmer.

Previous Professions of Commissioned Officers at Fort Hoskins. At Fort Hoskins four of the nine (44.4%) captains held careers that would have been considered upper-middle class including Captain Augur, Captain Dent and Captain Floyd-Jones who were all career officers commissioned in the United States Army who held commanding positions and Captain Currey who was a lawyer. Two (22.2%) captains held careers that would have been considered upper-lower class including Captain Schmidt who was a hair dresser and Captain Seidenstricker who was a brewer. Two (22.2%) captains also held careers that would have been considered lower-lower class including Captain Scott who was a miner and Captain Waters who was a farmer. The type of career for one (11.1%) captain, Captain Palmer, is unknown prior to his commission in the United States Army.

One of the eight (12.5%) first lieutenants who served at Fort Hoskins held a career that would have been considered lower-middle class, First Lieutenant Bonnycastle, who was a career officer commissioned in the United States Army but who had never held a command position. One (12.5%) first lieutenant held a career that would have been considered upper-lower class, First Lieutenant Catley, who was a career enlisted soldier until his promotion to the commissioned officer ranks. Four (50.0%) first lieutenants held careers that would have been considered lower-lower class including First Lieutenant Campbell who was a miner, First Lieutenant Walker who was a farmer and First Lieutenants Davison and Randall who were laborers. The type of career for two first lieutenants (25.0%), First Lieutenant Funk and First Lieutenant Garden, are unknown prior to their commission in the United States Army.

Four of the eleven (36.4%) second lieutenants who served at Fort Hoskins held a career that would have been considered lower-middle class including Second Lieutenants Sheridan and Andrews who were all career officers commissioned in the United States Army but never held a command position. Three (27.3%) second lieutenant held careers that would have been considered upper-lower class including Second Lieutenant Rathbun who was a merchant, Second Lieutenant Cullen who was a master saddler and Second Lieutenant Balch who was an ambrotypist. The type of

career for four second lieutenants (36.4%), Second Lieutenants McCall, Carlton, Watson and Herzer are unknown prior to their commission in the United States Army.

United States Military Academy Attendance, Class Rank and Percentile.

As discussed above only 14 of the commissioned officers stationed at Fort Yamhill and Fort Hoskins had attended and graduated from the United States Military Academy in West Point, New York including five captains, two first lieutenants and seven second lieutenants (Table 4.10). It is worth to note that at both Fort Yamhill and Fort Hoskins all of the commissioned officers who attended and graduated from the United States Military Academy at West Point served as officers in regiments from the Regular United States Army while none of the commissioned officers who

Table 4.10 USMA Attendance and Class Rank for Officers at Fort Yamhill and Fort Hoskins

Fort	Grade	Officer	Class Year	Class Rank	Class Size	Rank Percentile	
Yamhill	Captain	Smith	1838	36	45	20 th	
		Russell	1845	38	42	9 th	
		Floyd-Jones	1846	45	59	23 rd	
						Captain Mean	17 th
	First Lieutenant	Taylor	1846	31	59	47 th	
		Forsythe	1848	13	38	65 th	
						First Lieutenant Mean	56 th
	Second Lieutenant		Garber	1852	43	43	1 st
			Sheridan	1853	34	52	35 th
			Hazen	1855	28	34	17 th
Wheeler Jr.			1855	18	34	47 th	
					Second Lieutenant Mean	25 th	
Hoskins	Captain	Augur	1843	16	39	58 th	
		Dent	1843	33	39	15 th	
		Floyd-Jones	1846	45	59	23 rd	
						Captain Mean	32 nd
	Second Lieutenant		Garber	1852	43	43	1 st
			Sheridan	1853	34	52	34 th
			Gentry	1856	36	49	26 th
			Carlton	1859	18	22	18 th
			Andrews	1860	33	41	19 th
						Second Lieutenant Mean	19 th

served in regiments from the Volunteer United States Army attended or graduated from West Point.

United States Military Academy Attendance. At Fort Yamhill only 9 of the 18 (50.0%) of the commissioned officers who served at the post attended and graduated from the United States Military Academy. Of the nine commissioned officers who graduated from West Point three (33.3%) were officers with the grade of captain, two (22.2%) were officers with the grade of first lieutenant and four (44.4%) were officers with the grade of second lieutenant. A similar pattern is seen at Fort Hoskins where only 8 of the 28 (28.6%) of the commissioned officers who served at the post attended and graduated from the United States Military Academy. Of the eight that did graduate three (37.5%) were officers with the grade of captain and 62.5% of the officers with the grade of second lieutenant. No commissioned officers who served at Fort Hoskins with the grade of first lieutenant graduated from the United States Military Academy.

United States Military Academy Class Rank and Percentile. The three captains at Fort Yamhill who graduated from the United States Military Academy all ranked in the bottom 23% or lower of their graduating class with Captain Floyd-Jones graduating 45th out of 59 (23rd percentile), Captain Smith graduating 36th out of 45 (20th percentile) and Captain Russell graduating 38th out of 42 (9th percentile). The two first lieutenants who graduated from the United States Military Academy all ranked in the bottom 65% or lower of their graduating class with First Lieutenant Forsythe graduating 13th out of 38 (65th percentile) and First Lieutenant Taylor graduating 31st out of 59 (47th percentile). The four second lieutenants who graduated from the United States Military Academy also ranked in the bottom 47% or lower of their graduating class with Second Lieutenant Wheeler graduating 18th out of 34 (47th percentile), Second Lieutenant Sheridan graduating 34th out of 52 (34th percentile), Second Lieutenant Hazen graduating 28th out of 34 (17th percentile) and Second Lieutenant Garber graduating 43rd out of 43 (1st percentile).

Worth of Officer Estates at Fort Yamhill. Reflecting the patterns observed in the EMMS above the reported values of the commissioned officers' estates tended to correlate strongly with their military grade where higher graded officers tended to have higher estate values and lower graded officers tended to have lower estate values. The captains at Fort Yamhill had the highest total, mean and high worth of estate values for all of the commissioned officers who served at the post. The captain with the highest valued estate was Captain Russell who had real and personal estates valued at \$4000. Only two other captains had values placed on their estates, Captain Lafollette who had real and personal estates valued at \$1,600 and Captain Scott who had real and personal estates valued at \$0. The value of the real and personal estates for the other three captains who served at the post could not be found for 1850 or 1860. The mean real and personal estate value for all captains at Fort Yamhill was \$1,867.

Both of the subaltern officer grades had far lower real and personal estate values than their captains. The first lieutenants at Fort Yamhill had the second highest total, mean and high worth of estate values. The first lieutenant with the highest valued estate was First Lieutenant Garden who had real and personal estates valued at \$300. Only two other first lieutenants had values placed on their estates, First Lieutenant Shipley who had real and personal estates valued at only \$100 and First Lieutenant Owen who had real and personal estates valued at \$0. The value of the real and personal estates for the other three first lieutenants who served at the post could not be found for 1850 or 1860. The mean real and personal estate value for all first lieutenants at Fort Yamhill was \$133.33. Census records for only half of the captains and first lieutenants were located but census records for six of the seven second lieutenants who served at Fort Yamhill were located. For all six of the second lieutenants reported on the *United States Census Records of 1850 or 1860* their real and personal estates were valued at \$0, each.

Worth of Officer Estates at Fort Hoskins. Also reflecting the patterns observed in the EMMS above the reported values of the commissioned officers' estates tended to correlate strongly with their military grade where higher graded officers tended to have higher estate values and lower graded officers tended to have lower estate values. The captains at Fort Hoskins had the highest total, mean and high worth of estate values for all of the commissioned officers who served at the post. The captain with the highest valued estate was Captain Waters who had real and personal estates valued at \$5500. Four other captains also had values placed on their estates including Captains Augur, Dent, Schmidt and Scott who had real and personal estates valued at \$0. The value of the real and personal estates for the other four captains who served at the post could not be found for 1850 or 1860. The mean real and personal estate value for all captains at Fort Hoskins was \$1,100.

Both of the subaltern officer grades had far lower real and personal estate values than their captains. The first lieutenants at Fort Hoskins had the lowest total, mean and high worth of estate values. The first lieutenant with the highest valued estate was First Lieutenant Walker who had real and personal estates valued at \$550. Only five other first lieutenants had values placed on their estates including First Lieutenants Garden and Randall who both had real and personal estates valued at \$300 and First Lieutenants Bonnycastle, Campbell and Davison who had real and personal estates valued at \$0. The value of the real and personal estates for two first lieutenants, First Lieutenants Funk and Catley, could not be found for 1850 or 1860. The mean real and personal estate value for all first lieutenants at Fort Hoskins was \$230.

The second lieutenants at Fort Hoskins had the second highest total, mean and high worth of estate values. The second lieutenant with the highest valued estate was First Lieutenant Cullen who had real and personal estates valued at \$1800. Six other second lieutenants had values placed on their estates including First Lieutenant Balch who had real and personal estates valued at \$1231 and First Lieutenants Sheridan, Gentry, Garber, Andrews and Rathbun who all had real and personal estates valued at \$0. The value of the real and personal estates for four second lieutenants, Second Lieutenants McCall, Carlton, Watson and Herzer could not be found for 1850 or

1860. The mean real and personal estate value for all second lieutenants at Fort Hoskins was \$606.

Marital Status and Number of Dependents

The number of dependents supported by each commissioned officer is also used in this study as an indirect measure of the disposable and discretionary income of the officer. As discussed above (Chapter 2) living in these frontier military posts was often expensive and therefore the ability to support dependents such as wives, children and other dependents on the frontier signified a level of affluence that not all officers, especially junior ones, had. Therefore, the number of dependents supported by each officer can be used as an indirect measure of their level of household income or family wealth. A list of all dependents (wives, children and wards) including their names, the date of marriage or date of birth for each commissioned officer can be found in Appendix A. An aggregate summary of these values are discussed below and the total, high, low and mean number of dependents for the commissioned officers by grade is presented in Table 4.12.

Marital Status and Number of Dependents of Commissioned Officers at Fort Yamhill. Twenty-seven dependants were supported by the commissioned officers at Fort Yamhill including 11 wives and sixteen children. Officers with the grade of captain supported 12 dependents including three wives and nine children. Captain Lafollette had the greatest number of dependents, five, including his wife and four children. Captain Scott had four dependents including his wife and three

Table 4.12 Number of Dependent for Commissioned Officers at Fort Yamhill and Fort Hoskins

	Fort Yamhill			Fort Hoskins		
	Capt.	1 st Lt.	2 nd Lt.	Capt.	1 st Lt.	2 nd Lt.
Total	12	9	6	31	5	10
Mean	2.0	1.5	1.0	3.4	0.7	1.2
High	5	3	2	8	3	4
Low	0	0	0	0	0	0

children and Captain Smith had three dependents including his wife and two children. The other three captains do not appear to have been married at the time of their assignment to the post nor is there any record they supported any dependents. In all the captains at Fort Yamhill supported 12 dependents, three wives and nine children, with an average number of dependents supported per captain of 2.00 dependents.

The subaltern officers at Fort Yamhill supported far few dependents. Officers with the grade of first lieutenant supported nine dependents including four wives and five children. First Lieutenant Catley appears to have had the greatest number of dependents, three, including his wife and two children. First Lieutenants Taylor, Owen and Shipley all had two dependents each including a wife and one child. Only one first lieutenant, First Lieutenant Garden, appears to have been a bachelor with no dependents at the time he was assigned to the post. And, it is unknown if the sixth first lieutenant, First Lieutenant Forsythe, was married or had children, but it is unlikely that he did have dependents while serving at the post due to the fact that no such dependents were mentioned in his obituary of February 2, 1861 (New York Times 1861). In all the first lieutenants at Fort Yamhill supported nine dependents, four wives and five children, with an average number of dependents supported per first lieutenant of 1.50 dependents.

Second lieutenants at Fort Yamhill appear to have supported the fewest number of dependents of all of the commissioned officers. Officers with the grade of second lieutenant supported six dependents including four wives and two children. Second Lieutenants Rathbun and Dunbar appear to have the greatest number of dependents, two each, with each officer supporting a wife and single child. Second Lieutenant Davison had one dependent, his wife. Three of the second lieutenants, Second Lieutenants Hazen, Sheridan and Garber, appear to have been bachelors with no dependents at the time they were assigned to the post. Although they were never officially married both Sheridan and Garber were known to have native mistresses who illicitly stayed with them in their quarters on post. And, it is unknown if the seventh second lieutenant, Second Lieutenant Wheeler Jr., was married or had children. In all the second lieutenants at Fort Yamhill supported six dependents, four

wives and two children, with an average number of dependents supported per second lieutenant of 1.00 dependents.

Marital Status and Number of Dependents of Commissioned Officers at Fort

Hoskins. Forty-six dependents were supported by the commissioned officers at Fort Hoskins including 14 wives and 32 children. Officers with the grade of captain supported 31 dependents including eight wives and 23 children. Captain Augur had the greatest number of dependents, eight, including his wife and seven children. Captain Schmidt had five dependents including his wife and four children. Captains Dent, Seidenstricker and Scott all had four dependents each including one wife and three children. Captain Waters had three dependents including his wife and two children. Captain Palmer had two dependents including his wife and one child and Captain Currey had only one dependent, his wife during the time they were assigned to Fort Hoskins. Only one captain, Captain Floyd-Jones, does not appear to have been married at the time of his assignment to the post nor is there any record he supported any dependents. In all the captains at Fort Hoskins supported 31 dependents, eight wives and 23, with an average number of dependents supported per captain of 3.4 dependents.

The subaltern officers at Fort Hoskins supported far fewer dependents. Officers with the grade of first lieutenant supported only five dependents including three wives and just two children. First Lieutenant Bonnycastle appears to have had the greatest number of dependents, three, including his wife and two children. First Lieutenants Davison and Randall both had only one dependent each, a wife. Four first lieutenants including First Lieutenants Campbell, Funk, Garden and Walker all appear to have been bachelors with no dependents at the time they were assigned to the post. And, it is unknown if the last first lieutenant, First Lieutenant Catley, was married or had children. In all the first lieutenants at Fort Hoskins supported only five dependents, three wives and two children, with an average number of dependents supported per first lieutenant of 0.7 dependents.

Officers with the grade of second lieutenant supported 10 depended including three wives and seven children. Second Lieutenants Cullen and Balch appear to have

the greatest number of dependents, four each, with each officer supporting a wife and three children. Only one other second lieutenant appears to have had dependents, Second Lieutenant Rathbun, who supported two dependents, a wife and a child. Five of the second lieutenants including Second Lieutenants Sheridan, Gentry, Garber, Carlton and Andrews all appear to have been bachelors with no dependents at the time they were assigned to the post. Although they were never officially married both Sheridan and Garber were known to have native mistresses who illicitly stayed with them in their quarters on post. It is unknown if the other three second lieutenants supported dependents while serving at the post including Second Lieutenants McCall, Watson and Herzer. In all the second lieutenants at Fort Hoskins supported ten dependents, three wives and seven children, with an average number of dependents supported per second lieutenant of 1.2 dependents.

CHAPTER 5: COMMISSIONED OFFICER CLOTHING AND SUBSISTENCE

ARTICLE PURCHASES

In this chapter I present the clothing and subsistence article purchases for several commissioned officers who served at Fort Hoskins as they are represented by the purchase records contained within the *Fort Hoskins Subsistence Account Book* (FHSAB). The *Fort Hoskins Subsistence Account Book* (FHSAB) was an official book keeping document maintained by the Assistant Commissary of Subsistence/Acting Assistant Commissary of Subsistence for the post that contained a detailed monthly account of the sales of subsistence stores from the post commissary to commissioned officers. In the account book is recorded the specific item purchased, quantity purchased, the unit cost for each item, the total cost for each item purchased, the date of the purchase and the name and rank of the officer who purchased the subsistence stores.

Unfortunately the FHSAB is incomplete and only contains the sale of clothing and subsistence stores to officers for 21 months between from June 1862 until February 1864 (FHSAB 1862). Although the book is incomplete it does contain 500 (487 food entries and 13 clothing entries) entries for articles purchased by all three of the company officers for Company D, 1st Washington Territorial Volunteers, including the Captain Frederick Seidenstricker, First Lieutenant Herman Funk and the Second Lieutenant Louis Herzer. In addition the FHSAB lists another purchaser of subsistence articles, “sales to officers”, which likely represents the partnering of subaltern officers (first and second lieutenants) to pool their money to purchase subsistence stores together as part of an officers’ mess.

Clothing Items Purchased

The *Fort Hoskins Subsistence Account Book* lists the sale of several items of clothing to the commissioned officers at Fort Hoskins. The FHSAB lists the sale of 13 clothing items to commissioned officers for only two months, July and September

1862, including blankets, trousers, flannel shirts, shoes, drawers, forage caps/hats and socks/stockings (Table 5.1). Although limited the data does display an interesting pattern.

Both First Lieutenant Funk (\$7.75) and Second Lieutenant Herzer (\$5.73) spent more on clothing items purchased from the Subsistence Department at Fort Hoskins than their commanding officer Captain Seidenstricker (\$3.98). As commissioned officers were required to purchase their uniforms (unlike enlisted soldiers who were given and uniform allowance) purchasing uniform items from the army was likely only done as a last resort when other civilian sources of purchase were not available. Given this, the items procured by the army for issue to enlisted men would have likely been of regulation pattern (type, style, color, etc.) for enlisted men not commissioned officers and would have therefore been of the most basic construction and made of the most economical materials and with little embellishment.

Table 5.1 Clothing Items Purchased by Commissioned Officers at Fort Hoskins, July 1862 to September 1862

Item	Cost (\$)	Capt. Seidenstricker	1st Lt. Funk	2nd Lt. Herzer
Blankets (Pair)	3.35	-	-	1
Trousers	2.50	1	2	-
Flannel Shirt	1.53	-	1	-
Shoes (Pair)	1.48	-	-	1
Drawers	0.90	-	1	-
Forage Cap/Hat	0.58	2	-	1
Socks/Stockings	0.32	1	1	1
Total Cost		\$3.98	\$7.75	\$5.73

Subsistence Articles Purchased: Totals by Cost and Month

In order to provide an overview of the total purchasing behavior over time the 487 individual entries have been condensed into the total subsistence purchases for each officer by month as well as summary figures such as total amount spent of subsistence stores and the average monthly expenses for subsistence items (Table 5.2). During nine months between July 1862 and March 1863 Captain Seidenstricker purchased a total of \$270.35 worth of subsistence stores and on average purchased \$30.03 worth of subsistence stores per month while stationed at the post. Both of the subaltern officers purchased far less subsistence stores from the post commissary than Captain Seidenstricker. During eight months between June 1862 and March 1863 where First Lieutenant Funk was listed in the FHSAB he purchased only \$57.47 worth of subsistence stores and on average purchased only \$7.18 worth of subsistence stores per month. Second Lieutenant Herzer purchased more stores than First Lieutenant Funk but far fewer than Captain Seidenstricker. During nine months between July 1862 and February 1864 where Second Lieutenant Herzer was listed in the FHSAB he purchased just \$77.87 worth of subsistence stores and on average only purchased \$8.65 worth of subsistence stores per month.

Beginning in April 1863 two major changes occur in the purchasing patterns of these commissioned officers. The first is the disappearance of Captain Seidenstricker from the *Fort Hoskins Subsistence Account Book* and the second is the appearance of a new category of purchaser, “sales to officers”. In March 1863 Captain Seidenstricker was reassigned to a different post and therefore no longer shows up as a purchaser of subsistence stores at Fort Hoskins (FHPR 1856, FHSAB 1862). Interestingly also beginning in April 1863, and coinciding with the departure of Captain Seidenstricker, some sales of subsistence stores are listed as “sales to officers” with no specifics as to which officer or officers made the purchases. Prior to his departure the bulk (by volume and cost) of the subsistence stores sold to officers at the post were purchased by Captain Seidenstricker with little food related subsistence items purchased by First Lieutenant Funk or Second Lieutenant Herzer.

Table 5.2 Cost of Subsistence Article Purchases By Month

Date	Capt. Seidenstricker	1st Lt. Funk	2nd Lt. Herzer	Sales To Officers
Jun 1862	-	8.84	-	-
Jul 1862	57.33	9.97	16.57	-
Aug 1862	35.75	4.32	-	4.41
Sept 1862	31.76	1.59	-	-
Oct 1862	24.28	8.19	-	-
Nov 1862	29.54	7.08	-	-
Dec 1862	15.80	15.50	-	-
Jan 1863	12.64	-	-	-
Feb 1863	31.51	-	-	-
Mar 1863	31.58	2.00	-	-
Apr 1863	-	-	2.50	18.04
May 1863	-	-	-	34.73
Jun 1863	-	-	4.38	33.39
Jul 1863	-	-	15.49	59.76
Aug 1863	-	-	11.25	39.94
Sept 1863	-	-	-	40.56
Oct 1863	-	-	10.04	40.16
Nov 1863	-	-	-	23.96
Dec 1863	-	-	2.16	15.88
Jan 1864	-	-	0.49	5.00
Feb 1864	-	-	15.00	15.89
Mean	\$30.03	\$7.18	\$8.65	\$27.64
Total	\$270.35	\$57.47	\$77.87	\$331.71

Most of the purchases made by the two lieutenants were for non-staple food items such as sugar, soap, candles and whiskey.

After Captain Seidenstricker departed the post the bulk of subsistence stores sold to officers at the post were labeled as “sales to officers”, again with only a few food related subsistence items being purchased by First Lieutenant Funk or Second Lieutenant Herzer individually. This may suggest that while Captain Seidenstricker was present at the post he purchased the bulk of the food stuffs and may have provided daily meals to his subaltern officers and when Captain Seidenstricker left the post in March 1863 the two lieutenants were presumably no longer provided with meals and therefore had to provide for themselves. As neither of these officers purchased enough food items alone to have provided a full diet it appears that they

purchased their subsistence stores together as part of an “officers’ mess” and listed as these purchases as “sales to officers” in the FHSAB.

This interpretation is further supported by the fact that the types, volume and cost of the subsistence stores purchased by Captain Seidenstricker and those “sold to officers” after Captain Seidenstricker’s departure from the post were nearly identical. As stated above Captain Seidenstricker purchased a total of \$270.35 worth of subsistence stores during the nine months prior to April 1863, this figure is very close to the subsistence stores “sold to officers” for the next eleven months after April 1863 (\$331.74). And the average monthly expenditures for Captain Seidenstricker (\$30.03) and those “sold to officers” (\$27.64) are also very similar. This further supports the interpretation that First Lieutenant Funk and Second Lieutenant Herzer may have been pooling their money and messing together and may explain why after March 1863 these officers have few individual entries in the FHSAB for the purchase of subsistence food items and the sudden appearance of “sales to officers” in the ledger.

Subsistence Articles Purchased by Food Class

In addition to the total cost of subsistence stores sold to the commissioned officers the *Fort Hoskins Subsistence Account Book* also provides a detailed list of each of the specific food article purchased including the amount of each food article purchased, the total amount paid by the officer and which officer made the purchase. Using these figures it is possible to determine how much of each food article each officer purchased and at what price the officer paid for those items.

In all thirty subsistence articles were purchased by the commissioned officers at Fort Hoskins. For the purposes of this analysis these thirty subsistence articles are grouped into eight food classes that best correspond with the prescribed rations of the U. S. Army between 1855 and 1865 (Eichelberger 2011:56; USWD 1855; USWD 1861b; USWD 1863). These eight food classes include three meats (ham, pork and beef), two breads (corn meal and flour), four vegetables (beans, rice, hominy and

potatoes), four beverages (tea, Java coffee, Costa Rica coffee and Rio coffee), four sweeteners (molasses, powdered sugar, crushed sugar and brown sugar), three seasonings (salt, pepper and vinegar), three non-edibles (sperm candles, adamantine candles and soap) and five indulgences (superior whiskey, common whiskey, pickles, pie fruits and lard). The subsistence articles purchased by each commissioned officer and the “sales to officers” are presented and discussed by quantity, variety and cost below.

Quantities of Subsistence Articles Purchased

Base on raw bulk counts (pounds, quarts and gallons) Captain Seidenstricker purchased far more subsistence articles by quantity than either of his subaltern officers (Table 5.3). Captain Seidenstricker purchased 749 pounds of meat (80 pounds of ham, 28 pounds of pork and 641 pounds of beef), 574 pounds of bread (all flour), 207.52 pounds of vegetables (three pounds of rice, 66.92 pounds of beans and 137.6 pounds of potatoes), 128.5 pounds of beverages (four pounds of tea, 10 pounds of Java coffee, 84.5 pounds of Costa Rica coffee and 30 pounds of Rio coffee), 153.47 pounds of sweeteners (72 pounds of crushed sugar, 62 pounds of brown sugar and 19.47 pounds of molasses), 22.13 quarts of seasoning (2.13 quarts of vinegar and 20 quarts of salt), 88 pounds of non-edibles (27 pounds of sperm candles, 60 pounds of adamantine candles and one pound of soap) and 43.13 gallons of indulgences (two gallons of pickles, 26.63 gallons of superior whiskey and 14.5 gallons of common whiskey).

Captain Seidensticker’s subaltern officers, First Lieutenant Funk and Second Lieutenant Herzer, purchased far fewer subsistence articles than their captain. First Lieutenant Funk purchased 81.75 pounds of meat (36 pounds of ham and 45.75 pounds of beef), 35 pounds of bread (all flour), three pounds of vegetables (all rice), seven pounds of beverages (two pounds of tea and five pounds of Costa Rica coffee), 35 pounds of sweeteners (eight pounds of powdered sugar, 11 pounds of crushed sugar and 16 pounds of brown sugar), no seasoning, 22 pounds of non-edibles (all sperm candles) and 16 gallons of indulgences (10 gallons of superior whiskey and six gallons of common whiskey).

Table 5.3 Total Quantities of Subsistence Articles Purchased

Food Class	Food Article	Index Value	Measure	Capt. Seidenstricker ¹	1 st Lt. Funk	2 nd Lt. Herzer	Sales to "Officers" ¹
Meat	Ham	2.00	Pound	80.00	36.00	24.00	202.50
	Pork	1.25	Pound	28.00	-	12.00	18.50
	Beef	1.00	Pound	641.00	45.75	-	788.25
Bread	Corn Meal	2.00	Pound	-	-	20.00	20.00
	Flour	1.00	Pound	574.00	35.00	5.00	693.00
Vegetable	Rice	3.25	Pound	3.00	3.00	-	28.50
	Beans	2.82	Pound	66.92	-	-	20.78
	Hominy	2.25	Pound	-	-	-	84.00
	Potatoes	1.00	Pound	137.60	-	-	100.00
Beverage	Tea	5.28	Pound	4.00	2.00	-	8.66
	Coffee, Java	2.26	Pound	10.00	-	-	79.50
	Coffee, Costa Rica	1.13	Pound	84.50	5.00	-	31.00
	Coffee, Rio	1.00	Pound	30.00	-	-	7.00
Sweetener	Sugar, Powdered	1.73	Pound	-	8.00	-	54.00
	Sugar, Crushed	1.63	Pound	72.00	11.00	4.00	206.50
	Sugar, Brown	1.49	Pound	62.00	16.00	5.00	147.00
	Molasses	1.00	Pound	19.47	-	2.97	44.55
Seasoning	Vinegar	N/A	Quart	2.13	-	-	1.50
	Salt	N/A	Quart	20.00	-	-	67.00
	Pepper	N/A	Pound	-	-	-	0.50
Non-Edible	Candles, Sperm	2.13	Pound	27.00	22.00	-	19.00
	Candles, Adamantine	1.00	Pound	60.00	-	22.00	35.00
	Soap	1.00	Pound	1.00	-	20.00	47.00
Indulgence	Pickles	N/A	Gallon	2.00	-	0.75	0.75
	Pie Fruits	N/A	Pound	-	-	-	8.00
	Lard	N/A	Pound	-	-	-	10.00
	Whiskey, Superior	3.33	Gallon	26.63	10.00	24.25	30.00
	Whiskey, Common	1.00	Gallon	14.50	6.00	1.25	0.25

¹Subsistence articles listed as "sales to officers" between April 1863 and February 1864.

Second Lieutenant Herzer purchased 36 pounds of meat (24 pounds of ham and 12 pounds of pork), 25 pounds of bread (20 pounds of corn meal and five pounds of flour), no vegetables, no beverages, 11.97 pounds of sweeteners (four pounds of crushed sugar, five pounds of brown sugar and 2.97 pounds of molasses), no seasoning, 42 pounds of non-edibles (22 pounds of adamantine candles and 20 pounds of soap) and 26.25 gallons of indulgences (0.75 gallons of pickles, 24.25 gallons of superior whiskey and 1.25 gallons of common whiskey).

The “sales to officers” was almost identical to those purchased by Captain Seidenstricker including 1,009.25 pounds of meat (202.5 pounds of ham, 18.5 pounds of pork and 788.25 pounds of beef), 713 pounds of bread (20 pounds of corn meal and 693 pounds of flour), 233.28 pounds of vegetables (28.5 pounds of rice, 20.78 pounds of beans, 84 pounds of hominy and 100 pounds of potatoes), 126.16 pounds of beverages (8.66 pounds of tea, 79.5 pounds of Java coffee, 31 pounds of Costa Rica coffee and seven pounds of Rio coffee), 452.05 pounds of sweeteners (54 pounds of powdered sugar, 206.5 pounds of crushed sugar, 147 pounds of brown sugar and 44.55 pounds of molasses), 68.5 quarts of seasoning (1.5 quarts of vinegar, 67 quarts of salt and 0.5 pounds of pepper), 101 pounds of non-edibles (19 pounds of sperm candles, 35 pounds of adamantine candles and 47 pounds of soap) and 31 gallons of indulgences (0.75 gallons of pickles, 30 gallons of superior whiskey, 0.25 gallons of common whiskey and eight pounds of pie fruits and 10 pounds of lard).

Cost of Subsistence Articles Purchased

Captain Seidenstricker also spent far more money (\$) on subsistence articles than either of his subaltern officers (Table 5.4). In all Captain Seidenstricker purchased \$260.79 worth of subsistence stores including \$66.88 worth of meat (\$12.80 of ham, \$2.80 of pork and \$51.28 of beef), \$20.09 worth of bread (all flour), \$7.89 worth of vegetables (\$5.25 of beans, \$0.20 of rice and \$2.34 of potatoes), \$23.38 worth of beverages (\$2.80 of tea, \$3.00 of Java coffee, \$12.68 of Costa Rica coffee and \$3.96 of Rio coffee), \$32.76 worth of sweeteners (\$17.04 of molasses, \$8.78 of crushed sugar and \$6.94 of brown sugar), \$0.79 worth of seasoning (\$0.19 of vinegar and \$0.60 of salt), \$28.24 worth of non-edibles (\$13.77 of sperm candles, \$14.40 of adamantine candles and \$0.07 of soap) and \$80.76 worth of indulgences (\$3.30 of pickles, \$66.58 of superior whiskey and \$10.88 of common whiskey).

Captain Seidenstricker’s subaltern officers, First Lieutenant Funk and Second Lieutenant Herzer, purchased far fewer subsistence articles than their captain. First Lieutenant Funk purchases just \$57.89 worth of subsistence stores including \$9.42 worth of meat (\$5.76 of ham and \$3.66 of beef), \$1.23 worth of bread (all flour), \$0.20 worth of vegetables (all rice), \$2.15 worth of beverages (\$1.40 of tea and \$0.75

of Costa Rica coffee), \$4.17 worth of sweetener (\$1.04 of powdered sugar, \$1.34 of crushed sugar and \$1.79 of brown sugar), no seasonings, \$11.22 worth of non-edibles (all sperm candles) and \$29.50 worth of indulgences (\$25.00 of superior whiskey and \$4.50 of common whiskey).

Second Lieutenant Herzer purchased \$79.76 worth of subsistence articles including \$5.04 worth of meats (\$3.84 of ham and \$1.20 of pork), \$1.58 worth of bread (\$1.40 of corn meal and \$0.18 of flour), no vegetables and no beverages, \$3.65 worth of sweetener (\$2.60 of molasses, \$0.49 of crushed sugar and \$0.56 of brown sugar), no seasoning, \$6.68 worth of non-edibles (\$5.28 of adamantine candles and \$1.40 of soap) and \$62.81 worth of indulgences (\$1.24 of pickles, \$60.63 of superior whiskey and \$0.94 of common whiskey).

The "sales to officers" was almost identical to those purchased by Captain Seidenstricker totaling \$357.09 worth of subsistence articles including \$97.31 worth of meat (\$32.40 of ham, \$1.85 of pork and \$63.06 of beef), \$25.66 worth of bread (\$1.40 of corn meal and \$24.26 of flour), \$8.99 worth of vegetables (\$1.66 of beans, \$1.85 of rice, \$3.78 of hominy and \$1.70 of potatoes), \$35.49 worth of beverages (\$6.06 of tea, \$23.85 of Java coffee, \$4.65 of Costa Rico coffee and \$0.92 of Rio coffee), \$87.66 worth of sweetener (\$7.02 of powdered sugar, \$39.98 of molasses, \$25.19 of crushed sugar and \$16.46 of brown sugar), \$2.15 worth of seasoning (\$0.14 of vinegar and \$2.01 of salt), \$21.38 worth of non-edibles (\$9.69 of sperm candles, \$8.40 of adamantine candles and \$3.29 of soap) and \$78.45 worth of indulgences (\$1.24 of pickles, \$2.02 of pie fruits, \$75.00 of superior whiskey and \$0.19 of common whiskey).

Table 5.4 Total Cost (\$) of Subsistence Articles Purchased by Commissioned Officers

Food Class	Subsistence Article	Index Value	Unit Cost (\$)	Capt. Seidenstricker ²	1st Lt. Funk	2nd Lt. Herzer	Sales To Officers ³
Meat	Ham	2.00	0.160	12.80	5.76	3.84	32.40
	Pork	1.25	0.100	2.80	-	1.20	1.85
	Beef	1.00	0.080	51.28	3.66	-	63.06
	Meat Sub Total			66.88	9.42	5.04	97.31
Bread	Corn Meal	2.00	0.070	-	-	1.40	1.40
	Flour	1.00	0.035	20.09	1.23	0.18	24.26
	Bread Sub Total			20.09	1.23	1.58	25.66
Vegetable	Rice	3.25	0.065	0.20	0.20	-	1.85
	Beans	2.82	0.048	5.25	-	-	1.66
	Hominy	2.25	0.045	-	-	-	3.78
	Potatoes	1.00	0.017	2.34	-	-	1.70
	Vegetable Sub Total			7.89	0.20	0	8.99
Beverage	Tea	5.28	0.700	2.80	1.40	-	6.06
	Coffee, Java	2.26	0.300	3.00	-	-	23.85
	Coffee, Costa Rica	1.13	0.150	12.68	0.75	-	4.65
	Coffee, Rio	1.00	0.132	3.96	-	-	0.92
	Coffee ¹	N/A	Unk	0.95	-	-	-
	Beverage Sub Total			23.38	2.15	0	35.49
Sweetener	Sugar, Powdered	1.73	0.130	-	1.04	-	7.02
	Sugar, Crushed	1.63	0.122	8.78	1.34	0.49	25.19
	Sugar, Brown	1.49	0.112	6.94	1.79	0.56	16.46
	Molasses	1.00	0.075	17.04	-	2.60	38.98
	Sweetener Sub Total			32.76	4.17	3.65	87.66
Seasoning	Vinegar ¹	N/A	0.090	0.19	-	-	0.14
	Salt ¹	N/A	0.030	0.60	-	-	2.01
	Seasoning Sub Total			0.79	0	0	2.15
Non-Edible	Candle, Sperm	2.13	0.510	13.77	11.22	-	9.69
	Candle, Adamantine	1.00	0.240	14.40	-	5.28	8.40
	Soap	1.00	0.070	0.07	-	1.40	3.29
	Non-Edible Sub Total			28.24	11.22	6.68	21.38
Indulgence	Pickles ¹	N/A	1.650	3.30	-	1.24	1.24
	Pie Fruits ¹	N/A	0.252	-	-	-	2.02
	Whiskey, Superior	3.33	2.500	66.58	25.00	60.63	75.00
	Whiskey, Common	1.00	0.750	10.88	4.50	0.94	0.19
	Indulgence Sub Total			80.76	29.50	62.81	78.45
Grand Total				260.79	57.89	79.76	357.09

¹No prices listed in the Fort Hoskins Subsistence Account Book; ²Subsistence articles purchased by Captain Seidenstricker from July 1862 to March 1863; ³Subsistence articles listed as "sales to officers" between April 1863 and February 1864.

Variety of Subsistence Articles Purchased

In addition to quantity and cost Captain Seidenstricker also purchased a much greater variety of subsistence articles than his subaltern officers (Table 5.5). In all, Captain Seidenstricker purchased 22 different types of subsistence stores including three types of meat (ham, pork and beef), one type of bread (flour), three types of vegetables (beans, rice and potatoes), four types of beverages (tea, Java coffee, Costa Rica coffee and Rio coffee), three types of sweetener (molasses, crushed sugar and brown sugar), two types of seasoning (vinegar and salt), three types of non-edibles (sperm candles, adamantine candles and soap) and three types of indulgences (pickles, superior whiskey and common whiskey).

Captain Seidenstricker subaltern officer's purchased far less variety of subsistence articles than their captain, just 12 different articles each. The 12 different articles purchases by First Lieutenant Funk included just two types of meat (ham and beef), one type of bread (flour), one type of vegetable (rice), two types of beverages (tea and Costa Roca coffee), three types of sweetener (powdered sugar, crushed sugar and brown sugar), no seasoning, one type of non-edible (sperm candles) and two types of indulgences (superior whiskey and common whiskey).

Second Lieutenant Herzer also only purchased 12 types of subsistence stores including two types of meat (ham and pork), two types of bread (corn meal and flour), no vegetables and no beverages, three types of sweetener (molasses, crushed sugar and brown sugar), no seasoning, two types of non-edibles (adamantine candles and soap) and three types of indulgences (pickles, superior whiskey and common whiskey).

Table 5.5 Variety of Subsistence Articles Purchased by Commissioned Officers

Food Class	Food Article	Capt. Seidenstricke r	1st Lt. Funk	2nd Lt. Herzer	Sales to Officers
Meat	Ham	X	X	X	X
	Pork	X		X	X
	Beef	X	X		X
Bread	Cornmeal			X	X
	Flour	X	X	X	X
Vegetable	Rice	X	X		X
	Beans	X			X
	Hominy				X
	Potatoes	X			X
Beverage	Tea	X	X		X
	Java Coffee	X			X
	Costa Rica Coffee	X	X		X
	Rio Coffee	X			X
Sweetener	Powdered Sugar		X		X
	Crushed Sugar	X	X	X	X
	Brown Sugar	X	X	X	X
	Molasses	X		X	X
Seasoning	Vinegar	X			X
	Salt	X			X
	Pepper				X
Non-Edible	Sperm Candles	X	X		X
	Adamantine Candles	X		X	X
	Soap	X		X	X
Indulgences	Pickles	X		X	X
	Pie Fruits				X
	Lard				X
	Superior Whiskey	X	X	X	X
	Common Whiskey	X	X	X	X
Total Types		22	12	12	28

Quality of Subsistence Articles Purchased

The quality of the subsistence articles purchased is measured here in terms of cost (\$). It is assumed that the higher cost of an individual food article reflects that item being perceived to be of higher quality than other food articles within the same food class. For example, the higher cost of ham over pork and beef is assumed to reflect that ham is perceived to be of higher quality than pork or beef and therefore more desirable. As demonstrated above Captain Seidenstricker purchased more subsistence articles, a

greater variety of subsistence articles and spent a greater amount of money on the purchase of subsistence articles from the Commissary Department. Although Captain Seidenstricker purchased a greater quantity and variety of all subsistence articles and ultimately spent far more money on subsistence items overall than his subaltern officers, cheaper and more moderately priced subsistence articles comprised a much larger proportion of his total purchases than higher priced ones. This is in direct contrast to the purchasing behaviors of First Lieutenant Funk and Second Lieutenant Herzer who although purchased far fewer subsistence articles and spent far less total money on these articles tended to purchase more expensive subsistence articles in greater quantities than the lower or moderately priced ones (Table 5.6).

Table 5.6 Percentages of Total Cost (\$) of Subsistence Article Purchases by Food Class

Food Class	Subsistence Article	Unit Cost (\$)	Index Value	Capt. Seidenstricker	1st Lt. Funk	2nd Lt. Herzer	Sales To Officers
Meat	Ham	0.160	2.00	10.7	44.0	66.7	20.1
	Pork	0.100	1.25	3.7	-	33.3	1.8
	Beef	0.080	1.00	85.6	56.0	-	78.1
Bread	Corn Meal	0.070	2.00	0.0	-	80.0	2.8
	Flour	0.035	1.00	100.0	100.0	20.0	97.2
Vegetable	Rice	0.065	3.25	1.4	100.0	-	12.2
	Beans	0.048	2.82	66.3	-	-	8.9
	Hominy	0.045	2.25	0.0	-	-	36.0
	Potatoes	0.017	1.00	32.2	-	-	42.9
Beverage	Tea	0.700	5.28	3.1	28.6	-	6.9
	Coffee, Java	0.300	2.26	7.8	-	-	63.0
	Coffee, Costa Rica	0.150	1.13	65.8	71.4	-	24.6
	Coffee, Rio	0.132	1.00	23.3	-	-	5.5
Sweetener	Sugar, Powdered	0.130	1.73	-	22.9	-	11.9
	Sugar, Crushed	0.122	1.63	46.9	31.4	33.4	45.7
	Sugar, Brown	0.112	1.49	40.4	45.7	41.8	32.5
	Molasses	0.075	1.00	12.7	-	24.8	9.9
Non-Edibles	Candle, Sperm	0.510	2.13	31.0	100.0	-	35.2
	Candle, Adamantine	0.240	1.00	69.0	-	100.0	64.8
Indulgences	Whiskey, Superior	2.500	3.33	64.7	62.5	95.1	99.2
	Whiskey, Common	0.750	1.00	35.2	37.5	4.9	0.8

Meat Purchases. Captain Seidenstricker purchased more of the low cost beef (85.6%) than the moderately priced pork (3.7%) or the high cost ham (10.7%). First Lieutenant Funk purchased more low cost beef (56%) than the high cost ham (44%) and no moderately priced pork (0%). Second Lieutenant Herzer purchased more high cost ham (66.7%) than moderately priced pork (33.3%) and no low cost beef. The “sales to officers” group was very similar to the purchasing pattern of Captain Seidenstricker where more low cost beef (78.1%) was purchased than moderately priced pork (1.8%) or high cost ham (20.1%).

Bread Purchases. Captain Seidenstricker purchased exclusively low cost flour (100.0) and no high cost corn meal (0%). First Lieutenant Funk also purchased exclusively low cost flour (100.0%) and no high cost corn meal (0%), but Second Lieutenant Herzer purchased more high cost corn meal (80.0%) than low cost flour (20.0%). The “sales to officers” group was very similar to the purchasing patterns of Captain Seidenstricker and First Lieutenant Funk where more low cost flour (97.2%) was purchased than high cost corn meal (2.8%).

Vegetable Purchases. Captain Seidenstricker purchased more low cost potatoes (66.3%) than moderately priced beans (32.2%) and high cost rice (1.4%). First Lieutenant Funk purchases exclusively high cost rice (100.0%) and no moderate priced or low cost vegetables and Second Lieutenant Herzer purchased no vegetables at all. Again, the purchasing pattern observed in the “sales to officers” group was very similar to that of Captain Seidenstricker where more low cost potatoes (42.9%) and moderately priced hominy (36.0%) and beans (8.9%) were purchased than high cost rice (12.2%).

Beverage Purchases. Captain Seidenstricker purchased more low cost Rio coffee (23.3%) and Costa Rica coffee (65.8%) than moderately priced Java coffee (7.8%) or high cost tea (3.1%). First Lieutenant Funk also purchased more low cost Costa Rica coffee (71.4%) than high cost tea (28.6%) but also proportionately purchased 9 times more high cost tea than Captain Seidenstricker. Second Lieutenant

Herzer made no purchases of beverages. The “sales to officers” was more mixed with more moderately priced Java coffee (63.0%) purchased than low cost Costa Rica coffee (24.6%) and Rio coffee (5.5) and high cost tea (6.9%).

Sweetener Purchases. Captain Seidenstricker purchased more moderately priced crushed sugar (46.9%) and brown sugar (40.4%) than low cost molasses (12.7%) and high cost powdered sugar (0%). First Lieutenant Funk also purchased more moderately priced brown sugar (45.7%) and crushed sugar (31.4%) but also more high cost sugar (22.9%) and no low cost molasses (0%). Second Lieutenant Herzer purchased more moderately priced brown sugar (41.8) and crushed sugar (33.4) than low cost molasses (24.8%) and high cost powdered sugar (0%) much like Captain Seidenstricker. The “sales to officers” group was also very similar to Captain Seidenstricker with more moderately priced crushed sugar (45.7%) and brown sugar (32.5%) were purchased than high cost powdered sugar (11.9%) or low cost molasses (9.9%).

Non-Edible (Candles) Purchases. Captain Seidenstricker purchased more low cost adamantine candles (69%) than high cost sperm candles (31%). First Lieutenant Funk purchases exclusively high cost sperm candles (100%) and Second Lieutenant Herzer purchased exclusively low cost adamantine candles (100%). The “sales to officers” group was almost identical to the purchases made by Captain Seidenstricker with more low cost adamantine candles (64.85) purchased than high cost sperm candles (35.2%).

Indulgence (Whiskey) Purchases. Captain Seidenstricker purchased more high cost superior whiskey (64.7%) than low cost common whiskey (35.2%). First Lieutenant Funk also purchased more high cost superior whiskey (62.5%) than low cost common whiskey (37.5%). Second Lieutenant Herzer purchased more high cost superior whiskey (95.1%) than low cost common whiskey (4.9%) as well. The “sales to officers” was very similar to the purchases made by Second Lieutenant Herzer with

much more high cost superior whiskey (99.2%) purchased than low cost common whiskey (0.8%).

Subsistence Account Book Index

Using the monthly sales of subsistence stores to the commissioned officers found in the *Fort Hoskins Subsistence Account Book* (FHSAB) it was possible to create a subsistence article index to compare the relative amount of money spent by each officer on the different classes of food articles. The method used here is similar to the method developed by Miller (1980, 1991) to compare the socioeconomic differences of ceramic assemblages but modified here to measure the socioeconomic differences in the different classes of food purchased by the commissioned officers at Fort Hoskins. Following Miller the cheapest food article within each food class was given a value of 1.00 and the values for all other food articles within that food class were then generated by dividing the cost of the cheapest food article into the cost of the other food articles of the same class. An index value for an each food class was then calculated by multiplying the amount of each food article in its food class by its index value to produce a total value for that food article. All of the total values for food articles within a food class were then added together and divided by the total amount of the food articles purchased in that food class. The resulting index value, called the *Fort Hoskins Subsistence Account Book Index* (FHSAB Index), represents the average cost of the food articles in each food class and can be compared between individual food article and class purchases regardless of the volume purchased. The actual index values for the individual food articles are included above in Tables 5.4 and 5.6 and the figures and tables used to calculate the index values for each food class can be found in Appendix C.

As discussed above the thirty subsistence articles purchased by the commissioned officers (ham, pork, beef, corn meal, flour, beans, rice hominy, potatoes, tea, coffee, molasses, sugar, salt, pepper, vinegar, candles, soap, whiskey, lard, pickles and pie fruits) are grouped into seven food classes (meat, bread, vegetable, beverages, sweetener, candles and indulgences) that best correspond with the prescribed U.S. Army rations of the period. The seasoning food class will not be

included in the subsistence account book index analysis as the individual food articles within the class lack comparability. The results of this analysis are presented in Table 5.7.

Meats. Second Lieutenant Herzer had the highest index value for meat (1.75) followed by First Lieutenant Funk (1.42), Sales to Officers (1.20) and lastly by Captain Seidenstricker (1.12). This higher meat index value for Second Lieutenant Herzer appears to indicate more expensive meats such as ham and pork comprised a much greater portion his meat purchases than for either of the higher ranking officers or for the Sales to Officer group. In contrast, the much lower meat index value for Captain Seidenstricker (1.12) suggests that his meat purchases were comprised of a much greater proportion of cheaper meats such as beef than the more expensive ham or pork. The moderate meat index value for First Lieutenant Funk (1.42) suggests that his meat purchases were comprised of relatively equal proportions of expensive meats (ham) and cheaper meats (beef). The lower meat index value (1.20) for the Sales to Officers group is somewhere between Captain Seidenstricker and First Lieutenant Funk and appears to indicated that although they purchased both expensive and cheap meats, the group tended to purchase more cheap meats than expensive ones.

Breads. Second Lieutenant Herzer also had the highest index value for bread (1.80) followed by Sales to Officers (1.02) and lastly followed by First Lieutenant

Table 5.7 Subsistence Account Book Index Values

Food Class	Capt. Seidenstricker	1st Lt. Funk	2nd Lt. Herzer	Sales to Officers
Meat	1.12	1.42	1.75	1.20
Bread	1.00	1.00	1.80	1.02
Vegetable	1.62	3.25	N/A	1.89
Beverages	1.32	2.31	N/A	2.12
Sweetener	1.49	1.59	1.41	1.53
Candles	1.35	2.13	1.00	1.40
Whiskey	2.51	2.43	3.21	3.31
All Classes	1.22	1.72	1.90	1.34

Funk (1.00) and Captain Seidenstricker (1.00). This higher bread index value for Second Lieutenant Herzer appears to indicate more expensive bread such cornmeal comprised a much greater portion his bread purchases than for either of the higher ranking officers or for the Sales to Officer group. In contrast, the much lower bread index value for Captain Seidenstricker (1.00) and First Lieutenant Funk (1.00) suggests that their bread purchases were comprised exclusively of the cheapest bread, flour. The slightly higher bread index value for the Sales to Officers group (1.03) suggests that these officers' bread purchases were almost exclusively cheap flour but did contain some instances where more expensive cornmeal was purchased but in negligible amounts.

Vegetables. First Lieutenant Funk had the highest index value for vegetables (3.25) followed by Sales to Officers (1.89) and lastly by Captain Seidenstricker (1.62). Second Lieutenant Herzer had no record of vegetable purchases recorded in the FHSAB. First Lieutenant Funk purchased exclusively the most expensive vegetables such rice giving him an extremely high index value of 3.25. The Sales to Officers group appears to have purchased relative equal quantities of the cheapest vegetables (hominy and potatoes) but also a small to moderate proportion of the vegetable purchases were comprised of the most expensive vegetable, rice. Captain Seidenstricker on the other hand purchased a much higher proportion of the cheapest vegetable (potatoes) than any other but also a moderate amount of moderate cost vegetables (beans) but a negligible proportion of the most expensive vegetables (rice).

Beverages. First Lieutenant Funk had the highest index value for beverages (2.31) followed by the Sales to Officers group (2.12) and lastly by Captain Seidenstricker (1.32). Again, Second Lieutenant Herzer had no record of beverage purchases recorded in the FHSAB. The higher beverage index value for First Lieutenant Funk (2.31) appears to indicate more expensive beverages such as tea comprised a much greater portion his beverage purchases than for Captain Seidenstricker or for the Sales to Officer group. In contrast, the much lower meat

index value for Captain Seidenstricker (1.32) suggests that his beverage purchases were comprised of a much greater proportion of cheaper beverages such as Costa Rica and Rio coffee than the more expensive tea of Java coffee. The beverage index value for the Sales to Officers group (2.11) was only slightly lower than of First Lieutenant Funk suggests that they likely spent similar amounts on beverages but tended to purchase much more moderately priced beverages (Java and Costa Rica coffee) but very little cheap beverages (Rio coffee) or expensive beverages (tea).

Sweeteners. First Lieutenant Funk had the highest index value for sweeteners (1.59) followed by the Sales to Officers group (1.53), Captain Seidenstricker (1.49) and lastly by Second Lieutenant Herzer (1.41). This higher sweetener index value for First Lieutenant Funk appears to indicate more expensive sweeteners such as ham powdered sugar comprised a much greater portion his sweetener purchases than for either Captain Seidenstricker or Second Lieutenant Herzer or for the Sales to Officer group. In fact, First Lieutenant purchases far more powdered sugar (the most expensive sweetener) than anyone else and purchased no molasses (the cheapest sweetener). In contrast, the much lower meat index values for Captain Seidenstricker (1.49) and Second Lieutenant Herzer (1.41) suggests that their sweetener purchases were comprised of a much greater proportions of moderately priced sweeteners (crushed sugar and brown sugar) and cheapest sweetener (molasses). In fact, neither Captain Seidenstricker nor Second Lieutenant Herzer purchases any of the highest priced sweetener (powdered sugar). The sweetener index value (1.53) for the Sales to Officers group indicates that they fall somewhere between First Lieutenant Funk and the other commissioned officers when it comes to the purchase of sweeteners. The moderately cost sweeteners such as crushed and brown sugar comprised the major of sweetener purchases for the Sales to Officers group with only small portions comprised of expensive sweeteners (powdered sugar) and cheap sweeteners (molasses).

Non-Edibles (Candles). First Lieutenant Funk had the highest index value for candles (2.13) which was higher than the Sales to Officers group (1.40), Captain

Seidenstricker (1.35) or Second Lieutenant Herzer (1.00). While First Lieutenant Funk purchased exclusively the most expensive candles (sperm) and thus the higher index value, the Sales to Officers group and Captain Seidenstricker tended to purchase a mix of high priced sperm candles and lower cost adamantine candles providing moderate index values (1.40 and 1.35, respectively) while Second Lieutenant purchased only the cheapest candles (adamantine) and therefore had the lowest index value (1.00).

Indulgences (Whiskey). The Sales to Officers group had the highest index value for indulgences (3.31) followed by Second Lieutenant Herzer (3.21), Captain Seidenstricker (2.51) and lastly by First Lieutenant Funk (2.43). The higher indulgence index values for the Sales to Officer group and Second Lieutenant Herzer appears to indicate that they tended to purchase the more expensive superior whiskey over the cheaper common whiskey. In contrast, the lower indulgence index values for Captain Seidenstricker and First Lieutenant Herzer suggests that these officers tended to purchase the cheaper common whiskey over the more expensive superior whiskey.

All Food Classes. Second Lieutenant Herzer had the highest average (mean) index value for all food classes (1.95), followed by First Lieutenant Funk (1.72) and more distantly by the Sales to Officers Group (1.35) and lastly by Captain Seidenstricker (1.22). Overall, Second Lieutenant Herzer and First Lieutenant Funk tended to purchase more expensive subsistence articles than cheaper ones and Captain Seidenstricker and the Sales to Officers group tended to purchase more of the cheaper subsistence articles than expensive ones.

CHAPTER 6: COMMISSIONED OFFICER STATUS AND THE BUILT ENVIRONMENT AT FORT YAMHILL AND FORT HOSKINS

In this chapter I present a description of the built environment of Fort Yamhill and Fort Hoskins and spatial data that displays socio-economic differences between the commissioned officers stationed at these posts. These data include the location, size, configuration and floor plan of the six commissioned officers' quarters used in this study and the spatial relationship of each of the officers' houses to the other fort buildings. This data are largely taken from historical maps, namely the 1864 Davison Map of Fort Yamhill drawn by First Lieutenant Davison and the 1864 Chase Map of Fort Hoskins drawn by post-surgeon E. Y. Chase. Each of these fort maps were georeferenced and scaled to archaeological features uncovered during the excavation of each of the officers' houses. The 1864 Davison Map was georeferenced and scaled to the extant foundations of FYH1 and FYH3 and the 1864 Chase Map was georeferenced and scaled to the extent sink shafts behind FHH1 and FHH2.

All measurements in this chapter are presented in feet and inches as the builders of Fort Yamhill and Fort Hoskins utilized the English system of measurement during the construction of the posts and therefore feet and inches will be used here for the sake of consistency with the historical record. All distance measurements between the officers' quarters and the other fort buildings were taken from the midpoint of the front porch to the center point of the building being measured and all measurements were rounded to the nearest tenth of an inch.

Officers' Row

At both Fort Yamhill and Fort Hoskins Officers' Row was the physical and ideological center of commissioned officer life. Occupying one side of the fort quadrangle Officers' Row was more than just the collection of the physical structures that provided shelter for officers and their families these areas were also the symbolic and ideological playground where individual and group notions of military rank, social status and the material expressions of these differences were on display and

often negotiated. At both posts the Officers' Rows were spatially (horizontal and vertical) and ideologically separated from all of the other structures.

Officers' Row at Fort Yamhill

At Fort Yamhill the Officers' Row occupied the eastern side of the fort quadrangle opposite the blockhouse on the western side, adjacent to the enlisted men's quarters (barracks, messhall and kitchen) on the southern side and adjacent to the adjutant's office, guardhouse and quartermaster warehouse on the northern side (Figure 6.1). Situated at the top of a west-facing slope that overlooked the entire post Officers' Row was perfectly positioned to provide surveillance over the entire post and the nearby road (Killamuck Trail) into the northern part of the Coast Reservation. The center of Officers' Row was also spatially located a considerable distance away from the other structures within the post, approximately 460 feet to the east and as it was situated at the top of the hill was also 53 feet above the rest of the structures at the post. At Fort Yamhill Officers' Row consisted of a collection of six quarters (FYH1, FYH2, FYH3, FYH4, FYH5 and FYH6) three of which will be used in this study (FYH1, FYH2 and FYH3). All of the officers' quarters were located side-by-side in a north-south oriented line and positioned to be facing west. Each of the officers' quarters contained several structures/features including a house and a sink which were separated from the rest of the post and the other officers' quarters by a fence. At Fort Yamhill the officers' quarters were grouped into two sets of three quarters, each with a large house on either end of the group with a smaller house in the middle. The first group of officers' quarters (FYH1, FYH2 and FYH3), which are the subject of this study, were all oriented so that their floor plans positioned the front door near the southwestern corner of the house. The second group of officers' quarters (FYH4, FYH5 and FYH6), which are not part of this study, had a mirror image orientation to the first group so that their floor plans positioned the front door near the northwestern corner of the house.

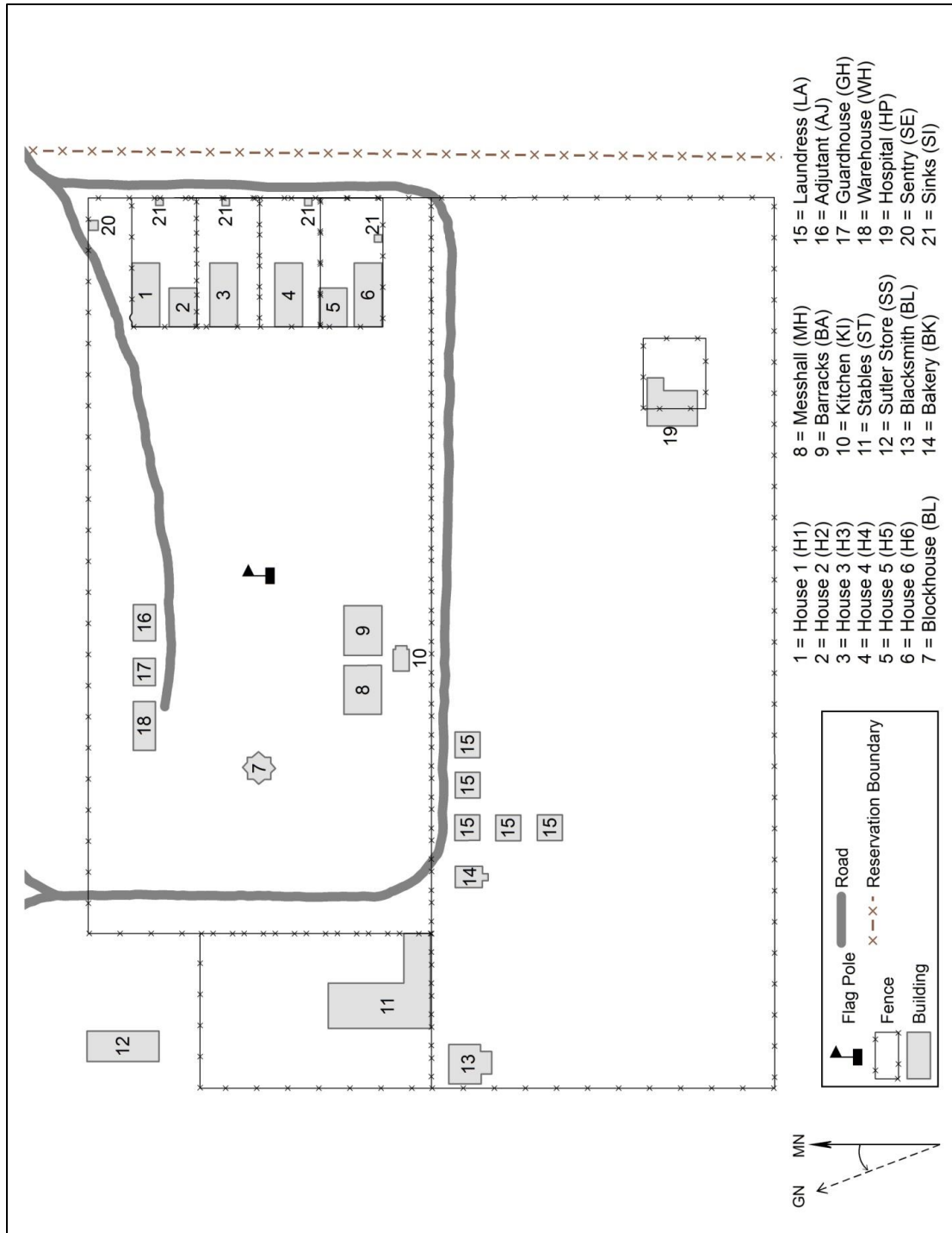


Figure 6.1 Map of Fort Yamhill, c. 1864. Redrawn from the Garden Map of 1858 and the Davison Map of 1864 in Adams (1991:50-51)

Officers’ Row at Fort Hoskins

At Fort Hoskins Officers’ Row occupied the southwestern side of the fort quadrangle opposite the enlisted men’s quarters (barracks), powder magazine and root cellar on

the northeastern side, adjacent to the warehouse on the northwestern side and adjacent to the adjutant's office and guardhouse on the southeastern side (Figure 6.2). Unlike at Fort Yamhill, Officers' Row at Fort Hoskins was not situated at the top of the hill but instead on the leading edge of a terrace that overlooked the Luckiamute River and Kings Valley to the south. Officers' Row at Fort Hoskins still "overlooked" the entire post as the rest of the post structures were laid out level on the same terrace. Because of its position on the leading edge of the terrace Officers' Row was perfectly positioned to provide surveillance over the entire post and the nearby road (Luckiamute Trail) into the middle portion of the Coast Reservation. Like at Fort Yamhill, the center of Officers' Row at Fort Hoskins was also horizontally distanced from the other structures within the post, approximately 223 feet to the southeast, but unlike at Fort Yamhill Officers' Row at Fort Hoskins was not vertically separated from the rest of the post. At Fort Hoskins Officers' Row consisted of a collection of only three quarters (FHH1, FHH2 and FHH3) each located side-by-side in a northwest-southeast oriented line and all positioned to be facing northeast. Each of the officers' quarters contained several structures/features including a house, an outbuilding (probably a shed) and a sink that were separated from the rest of the post and the other officers' quarters by a fence.

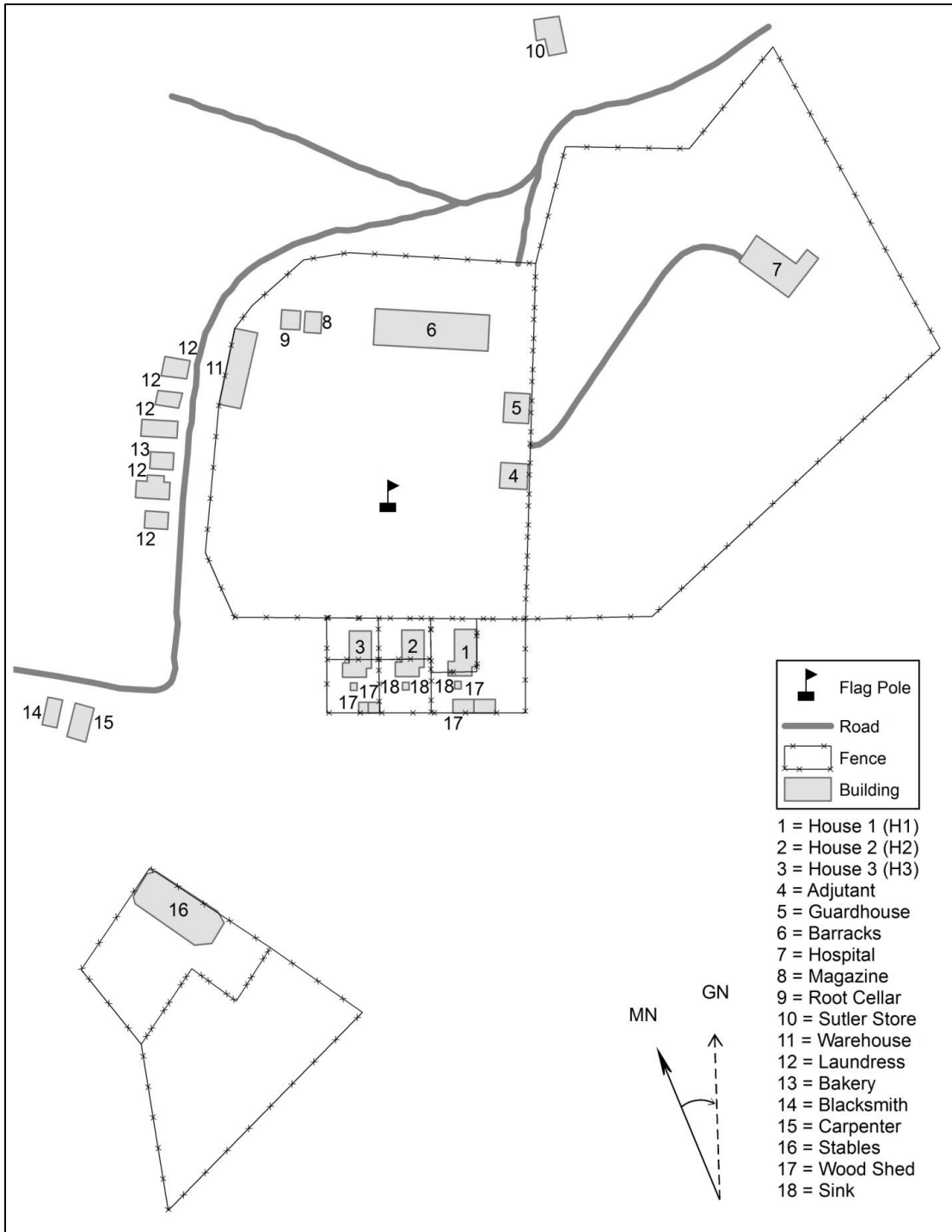


Figure 6.2 Map of Fort Hoskins, c. 1864. Redrawn from the Chase Map of 1864 in Bowyer (1992:25)

Individual Officers' Quarters

Six individual commissioned officers' quarters are used in this study including three from Fort Yamhill (FYH1, FYH2 and FYH3) and three from Fort Hoskins (FHH1, FHH2 and FHH3). Each fort was constructed with the specific number of individual officers' quarters needed to house the officers intended to garrison each post. As Fort Yamhill was originally designed to garrison two companies of soldiers the post needed six officer's quarters to house all of the company officers. Fort Hoskins was originally designed to garrison only one company of soldiers and therefore only needed three officers' quarters to house all of the company officers. Because of this it is assumed that each of the officers' quarters housed just one officer, and if present, his family. Although it was not uncommon for two subaltern officers to co-habitat in single quarters when housing was limited this does not appear to have been the case at either post. Therefore it is assumed that each commissioned officer's quarters house one officer and his dependents, if he was married and/or had children. As discussed above all of the officers' quarters were located on Officers' Row at each post and contained several structures/features including a house, fenced yard, sink and in the case of Fort Hoskins several outbuildings (probably sheds).

Each of the commissioned officers' quarters is described based on information from several sources including one contemporary oil painting of Fort Hoskins, several period Army maps, historical descriptions from commissioned officers, soldiers and other fort occupants, two extant officers' houses and archaeological remains. Two of the commissioned officers' quarters, both of the captains' quarters (FYH1, FHH1), are extant and are currently located on each of the fort properties, respectively. Each of the commissioned officers' quarters has been the subject of recent architectural study and restoration (Bryant 2014; Olson 2003, 2007). Collectively these sources provide and corroborate information on the location, size, and configuration of the structures/features associated with each of the officers' quarters.

Historical research and archaeological excavation revealed that eight attributes or features/structures would be useful in comparing, contrasting and evaluating each of the officers' quarters as material expressions of socio-economic status. These

attributes are: (1) location of the officers' quarters; (2) house size; (3) number of rooms and types of rooms; (4) number and size of porches; (5) number and size of fenced yards; (6) number and size of sinks; (7) number and size of outbuildings; and (8) distance to other post buildings (Table 6.1).

Table 6.1 Summary of Commissioned Officers' Quarters Attributes

Element	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
House						
Size of House (ft ²)	2,168	1,514	2,153	1,370	1,370	1,370
# of Rooms	8	3	8	6	6	6
Special Features (Bay Window)	1	0	0	0	0	0
Porch						
# of Porches	2	1	2	4	4	4
Total Area of Porches (ft ²)	257	184	257	761	761	761
Yard						
# of Yards	1	0	1	2	2	2
Total Area of Yard(s) (ft ²)	7,303	-	10,633	8,563	4,038	3,999
Outbuilding						
# of Sinks	1	0	1	1	1	1
# of Outbuildings (Sheds)	0	0	0	2	0	2
Size of Outbuildings (ft ²)	-	-	-	558	0	251
Proximity to (feet):						
Commanding Officer's House	-	32.7	79.0	-	29.9	57.8
Nearest Officer's House	32.7	23.3	23.3	29.9	27.9	27.6
Sentry and Post Gate	116.3	157.0	196.7	499.7	511.9	530.2
Adjutant's Office	467.4	466.3	470.3	222.6	239.2	268.2
Enlisted Barracks	486.8	455.6	433.7	388.7	386.8	380.6
Enlisted Messhall	551.5	524.1	507.4	N/A	N/A	N/A
Enlisted Kitchen	557.2	527.4	502.5	N/A	N/A	N/A
Guardhouse	549.0	545.8	551.0	314.5	327.1	350.5
Warehouse	630.1	629.0	630.7	425.0	395.1	374.7
Blockhouse	701.5	686.3	679.8	N/A	N/A	N/A
Hospital	757.4	702.5	657.5	582.1	616.0	654.4
Laundresses (Closest)	794.2	763.7	739.9	354.8	303.9	259.2
Bakery	976.1	953.1	931.5	413.7	370.6	337.5
Stables	1,031.7	1,011.6	995.9	454.9	420.4	387.8
Sutler's Store	1,128.6	1,128.9	1,131.2	787.8	797.4	811.5
Blacksmith Shop	1,234.4	1,214.3	1,195.8	451.1	395.1	341.3
Carpenter Shop	N/A	N/A	N/A	423.9	367.5	314.3
Root Cellar	N/A	N/A	N/A	436.9	415.9	409.4
Powder Magazine	N/A	N/A	N/A	447.3	422.7	411.8

Officers' Quarters at Fort Yamhill

Three commissioned officers' quarters at Fort Yamhill have been selected for inclusion in this study (FYH1, FYH2 and FYH3). All three of the officers' quarters included are in the first group of three officers' quarters along the northern end of Officers' Row (Figure 6.3). Fort Yamhill House 1 (FYH1) was the northern most officers' house on Officers' Row and was the primary residence for the captains who served at Fort Yamhill. Fort Yamhill House 2 (FYH2) was the second officers' house on Officers' Row just south of FYH1, but north of FYH3, and was likely the primary residence for the highest ranking subaltern officers at the post, usually a first lieutenant. Fort Yamhill House 3 (FYH3) was the next officers' house on Officers' Row immediately south of FYH2, but north of FYH4, and was likely the primary residence of the lower ranking subaltern officers at the post, usually a second lieutenant.

Fort Yamhill House 1 (FYH1). Fort Yamhill House 1 (FYH1) was the northern most officers' quarters on Officers' Row and was comprised of a house, fenced hard and sink. The house was rectangular and had one main floor measuring 60.9 feet long on the building's long or east-west axis and 22.9 feet wide on the building's short or north-south axis totaling approximately 1,408.6 square feet including the additional 14 square feet provided by a bay window. The house also had a "half-attic" on the second floor measuring approximately 33 feet long and 23 feet wide totaling 759 square feet. The square footage of the first floor and second floor combined gave FYH1 approximately 2167.6 square feet of livable floor space.

Rooms. The first floor of the house contained seven rooms including a hall, parlor and bedroom in the front half of the house and a dining room, kitchen and two storage rooms in the rear of the house. The second floor of the house appears to have been comprised of just one large open space or room. The front entrance to the house was offset to the south side of the façade near the southern corner of the house. As one entered the house they entered the hall measuring 6.4 feet wide and 32.9 feet long along the south side of the house and alongside the parlor and bedroom. Off the hall at the front of the house was the parlor.

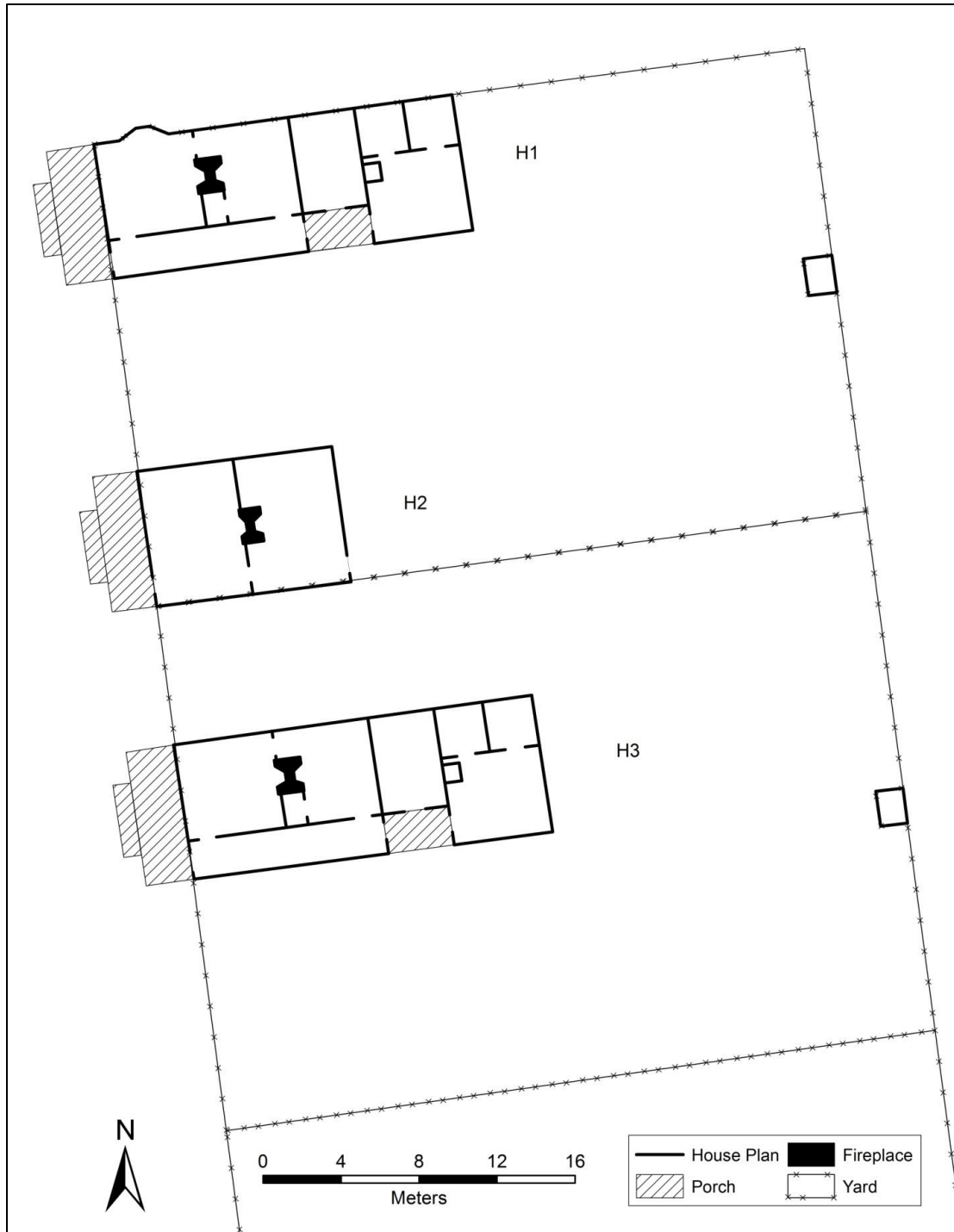


Figure 6.3 Detailed Plan View of Officers Row (FYH1-FYH3) at Fort Yamhill. Redrawn from the Davison Map of 1864 in Adams (1991:50-51)

The parlor was square and measured 16.3 feet by 16.6 feet with 285.6 square feet of livable space including the additional 14 square feet provided by a bay window. The parlor had two entrances one door on the western end of the south wall

to the hall and another on the northern end of the east which led to the bedroom. The parlor had three windows, two evenly spaced windows on the west wall looking out over the parade ground and one large bay window (unique to FYH1) centered on the north wall looking out toward the post gate/sentry box and the road into the post and onto the Coast Reservation. The parlor also contained one side of a double firebox which it shared with the bedroom that was centered on the east wall.

The bedroom was also square and measured 16.3 feet by 16.2 feet with 265.8 square feet of livable space. The bedroom had two entrances one door on the northern end of the west wall to the parlor and one door on the eastern end of the south wall which lead back to the hall. The bedroom had one window evenly spaced along the north wall looking out toward the post gate/sentry box and the road into the post and onto the Coast Reservation. The bedroom contained the other side of the double firebox it shared with the parlor and was centered on the west wall. The bedroom also had one closet in the southwestern corner of the room between the fireplace and the southern wall.

The dining room was rectangular and measured 16.4 feet long and 11.1 feet wide with 182.9 square feet of livable space. The dining room had just one entrance a door centered on the south wall leading back onto the exterior porch. The dining room also had one window centered on the north wall looking out toward the post gate/sentry box and the road into the post and onto the Coast Reservation.

The kitchen was square-ish measuring 16.6 feet long and 14.6 feet wide with 241.8 square feet of livable space. The kitchen had just one entrance a door on the southern end of the west wall leading back to the exterior porch and two doors evenly spaced on the north all leading to storage rooms. Both of the storage rooms were square measuring 8.4 feet by 8.6 feet each containing 72.24 square feet (144.48 square feet total) of usable space. The kitchen had two windows, one centered on the east wall looking out behind the house toward the sink and another centered on the south wall looking out toward FYH2. In the northwest corner of the kitchen was a sink.

Porches. FYH1 also had at least two exterior covered porches including a full width front porch and smaller side porch on the south side of the house. The front porch spanned the entire width of the house, 22.7 feet, and extended 8.1 feet away from the house providing 184.5 square feet of additional exterior living space. The front porch was elevated and had a set of stairs centered on the front measuring 12.7 feet wide and leading down to cobble paved path running down the front of Officers' Row and to the other structures at the post. The side porch was located off the rear door of the hallway between the front of the house and the rear of the house (dining room and kitchen) and measured 6.4 feet wide 11.1 feet long providing 72.7 square feet of additional exterior living space. The porch had three doors, one centered on the west wall leading back to the hallway, one centered on the north wall leading to the dining room and one centered on the east well leading to the kitchen. The porch likely served as the rear/side exit for the house and lead to the sink.

Yards and Outbuildings. FYH1 had one large rectangular fenced yard that measured approximately 120.7 feet long and 78.7 feet wide and after subtracting the area of the built structures contained within the fence the yard contributed an additional 7,303.8 square feet of exterior space to the FYH1 officers' quarters. The yard encompassed not only FYH1 but also FYH2 and a sink centered on the back/eastern fence.

Location, Viewshed and Presence. FYH1 was the northern most officers' quarters on Officers' Row and therefore was the closest of the officers' quarters to the post gate/sentry box (116.3 feet) and the furthest of the officers' quarters from the other officers' quarters (32.7 feet), adjutant's office (467.4 feet), enlisted men's barracks (486.8 feet), enlisted men's mess hall (551.5 feet), enlisted men's kitchen (557.2 feet), guardhouse (549.0 feet), warehouse (630.1 feet), blockhouse (701.5 feet), hospital (757.4 feet), laundresses (794.2 to 976.7 feet), bakery (976.1 feet), stables (1,031.7 feet), sutler's store (1,128.6 feet) and the blacksmith shop (1,234.4 feet).

FYH1 was the only officer's quarters with an unobstructed view of the entire post, and as the northern most officers' quarters on Officers' Row would have had the best view of the post gate/sentry box and the road into the post and onto the Coast Reservation. The post gate/sentry box would have been clearly visible from both the front porch and the bay window located on the north wall of the parlor. Additionally, FYH1 would have been the first of the officers' quarters encountered as one entered the post and the bay window would have added a level of refinement to FYH1 that was completely absent from the other officers' quarters.

Archaeological Features. Archaeological excavations of FYH1 confirmed many of the features /structures depicted on the 1864 Davison Map such as the location and dimensions of the officer's house, the location of the kitchen sink and the location of the sink. The excavations also discovered several new features/structures associated with FYH1 including a continuous sandstone foundation with a central cross support foundation, the unexcavated walls of the house dugout, stone foundations of the bay window, front porch and stair supports, a river cobble paved path and the possible foundations of a boardwalk (Figures 6.4 and 6.5).

Remnant foundations for FYH1 measure 60.9 feet from the front of the house to the rear of the house (east-west) and 22.9 feet side to side (north-south). The foundation is made of sandstone blocks and is continuous and outlines the original footprint of the house. Each block varies in its dimensions but typically measure 18 inches long, 18 inches wide and 8 inches thick. An elevation change of - 40 inches from the top of the first course of foundation stones for the east (rear) of the house to the west (front) of the house suggests that if the rear foundation was only one course high then the front foundation was at least five courses high in order to make the house level which would have placed the floor of the porch 40 inches above the ground. The foundation blocks were dressed and stacked with precision so that the exterior surface foundation was relatively smooth and formed a straight line, but the interior side of the foundation was unfinished. The local sloping topography of the site is artificially flattened (by a dugout) measuring approximately 33 feet to the east

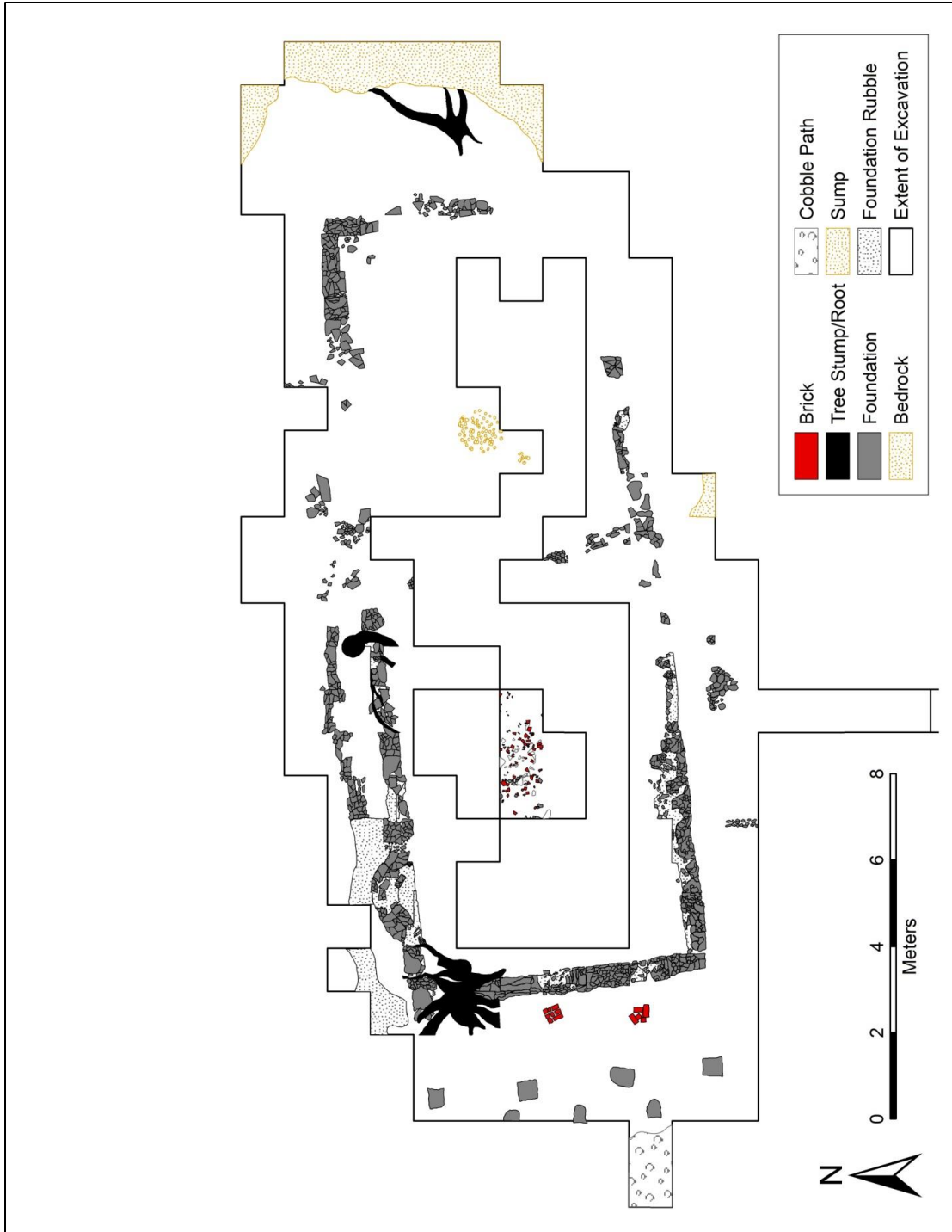


Figure 6.4 Feature Drawing of Fort Yamhill House 1 (FYH1)



Figure 6.5 Overview of Archaeological Remains of Fort Yamhill House 1; View to the East (Photograph by Author)

and at least 23 feet north-south and excavated to a depth of 12 inches in the west to 28 inches in the east. This dugout was excavated into the weathering bedrock subsoil the remnants of which were exposed during archaeological excavations (Figures 6.4 and 6.5).

Sandstone foundations for a bay window feature were uncovered at the northwest corner of the foundations. The foundations for the window are trapezoidal shaped, starting 6.1 feet east of the northwest corner of the building foundations, measure 6 feet wide and project 2.3 feet from the building. The bay window faces the northern side of the post and would have provided an unobstructed view of the post gate/sentry and the road into the post.

Evidence for the fireplace was also uncovered during the excavations. A small concentration of fragmented brick was exposed 18 feet east of the front foundation and centered within the front portion of the house. No intact support stones of fireplace features remain but the location of the concentration of brick

fragments were uncovered in the same location as double firebox fireplaces as depicted in the 1864 Davison Map.

Excavations at FYH1 also uncovered several support stones for the front porch and stairs. Four sandstone block and brick supports were uncovered in a line 7.75 feet west of the front house foundation. Each support consists of a square sandstone block, originally a column, supported by a brick pad spaced 7 feet from each other. The location of these supports suggests that the porch was approximately 8 feet wide and spanned the full width of the house, at approximately 23 feet. Two brick pads were also uncovered under the porch near the house foundation. Both pads square but are spaced unevenly and do not conform to any standard building dimensions and therefore might represent repair or secondary construction activity. Evidence of the porch stairs are represented by a line of three irregular shaped sandstone supports immediately west of the porch supports. Each stair support stone was placed 4.25 feet apart from each other spanning a total distance of 12.75 feet. The three stones are centered with the porch and house foundation stones and suggest that the front stairs were centered on the porch and with the house.

Evidence for a cobble walking path was also uncovered during the excavations. The eastern edge of the walking path is 4.75 feet west of the porch supports and appears to run north-south along the front of officers' row. The exact width of the path is unknown but is at least 5 feet wide. Evidence of the same feature at FYH3 and the observance of river cobble in mole hills and in the root wads of blown-over trees along the front of officers' row suggest that the path extends the full length of the officers' quarters from FYH1 to FYH6. Similar river cobbles observed in numerous mole hills throughout the parade ground suggests that this path was part of a network that also led to the flag pole, warehouse row and the enlisted men's quarters. All of the paths are composed of river cobbles probably quarried from the bed of Cosper Creek approximately 2,300 feet west of the post.

A cross foundation was uncovered approximately 34 feet east and parallel to the front and rear house foundations. The foundation measures 14 inches wide and extends at least 7.5 feet to the north before being destroyed by tree roots. The cross foundation was also constructed as part of the foundations for the kitchen addition and not as part

of the original or front house foundations as it is not connected and separated by a gap measuring 1.25 feet wide. The remains of foundation rubble in a linear alignment extending south from the north foundation wall suggests that the cross foundation spanned the width of the entire house. A similar feature at FYH3 (another completed or large house) and the lack of such a feature at FYH2 (an unfinished or small house) suggests that the cross-foundation features were added to support the western wall of the kitchen additions during the 1857 remodel of the completed or larger houses. Two potential boardwalk features were also uncovered at FYH1, one on the north side of the house and the other on the south. A linear alignment of sandstone rubble along the north side of the house may be a foundation for a boardwalk providing an elevated walking surface from the front to the back of the house. The rubble feature runs from the northwest corner (front) of the house 41.3 feet east toward the rear of the house. The linear feature measures approximately 18 inches wide and is consistently spaced 24 inches north from the house foundations. A distinct absence of artifacts recovered from the space between these foundations suggests that this area was covered. A similar boardwalk feature was uncovered on the south side of the house as well. At least two irregular sandstone blocks and a linear alignment of sandstone rubble were uncovered in a linear alignment running parallel to the house foundation. Similar to boardwalk supports on the north side of the house both blocks and the linear rubble alignment on the south side are consistently 24 inches away from the house foundations. These supports are located in the immediate area of the back porch as depicted on the 1864 Davison Map (Figure 6.3) and may have supported a boardwalk feature that would have provided an elevated walking surface from the front to the back of the house, the sink and from FYH1 to FYH2.

A sump feature was also uncovered during excavations of FYH1. The sump feature is located 10.25 feet east of the cross-foundation and centered within the kitchen addition. The sump is roughly circular in shape and measures approximately 3.25 feet in diameter. The sump is comprised of a pit excavated into the bedrock subsoil to an unknown depth and then filled with cobbles of weathering bedrock. Supporting the interpretation of this feature as a sump is the fact that an identical feature in the same location was uncovered at FYH3 and the location of both of these

bedrock filled pits are in the same location as the sinks depicted on the 1864 Davison map (Figure 6.3).

Fort Yamhill House 2 (FYH2). Fort Yamhill House 2 was the second officers' quarters from the north on Officers' Row and was different than FYH1 and FYH3 in that it comprised of a smaller house without hall, dining room, kitchen or storage rooms, did not have a side porch and it shared the yard and sink with FYH1. The house was rectangular and had one main floor measuring 33 feet long on the building's long or east-west axis and 22.9 feet wide on the building's short or north-south axis totaling approximately 755.7 square feet. It is presumed that the house also had a "half-attic" on the second floor measuring approximately 33 feet long and 23 feet wide totaling 759 square feet. The square footage of the first floor and the second floor combined gave FYH2 approximately 1,514.7 square feet of livable floor space.

Rooms. The first floor of the house contained just two rooms presumably a parlor and bedroom. The second floor of the house appears to have been comprised on just one large open space or room. As with FYH1 the front entrance to the house was offset to the south side of the façade near the southern corner of the house but unlike FYH1 as one enter the house they did not enter a hall but instead entered directly into the front room (parlor).

The front room (parlor) was rectangular and measured 16.3 feet by 22.9 feet with 373.27 square feet of livable space. The front room (parlor) had two entrances, one door on the southern end of the west wall leading to the exterior of the house and one door on the southern end of the east wall leading to the back room (bedroom). The front room (parlor) had three windows, two evenly spaced windows on the west wall looking out over the parade ground and on window centered on the north wall looking out toward FYH1. The front room (parlor) also contained one side of a double firebox which it shared with the back room (bedroom) that was centered on the east wall.

The back room (bedroom) was the same size and shape as the front room (parlor), rectangular and measured 16.3 feet by 22.9 feet with 373.27 square feet of living space. The back room (bedroom) had two entrances, one door on the southern end of the west wall leading to the front room (parlor) and one door on the southern end of the east wall exiting the building and likely leading to the sink. The back room (bedroom) had at least two windows, one evenly spaced on the south wall looking toward FYH3 and one centered on the east wall looking out behind the house toward the sink.

Porches. FYH2 had only one porch on the front of the house. The porch appears to be of the same size and shape as the front porch on FYH1 spanning the entire width of the house, 22.7 feet, and extending 8.1 feet away from the house providing 184.5 square feet of additional exterior living space. The front porch for FYH2 was also elevated and had a set of stairs centered on the front measuring 12.7 feet wide and leading down to the same cobble paved path running in front of FYH1 and down the front of Officers' Row and to the other structures at the post.

Yards and Outbuildings. FYH2 does not appear to have had its own fenced yard or outbuildings and instead shared the yard and sink with FYH1.

Location, Viewshed and Presence. FYH2 the second officers' quarters from the north on Officers' Row and was further away from the post gate/sentry box than FYH1 (157.0 feet) and one of the closest officers' quarters to the other officers' quarters (23.3 feet), adjutant's office (466.3 feet), enlisted men's barracks (455.6 feet), enlisted men's mess hall (524.1 feet), enlisted men's kitchen (527.4 feet), guardhouse (545.8 feet), warehouse (629.0 feet), blockhouse (686.38 feet), hospital (702.5 feet), laundresses (763.7 to 933.20 feet), bakery (953.18 feet), stables (1,011.6 feet), sutler's store (1,128.9 feet) and the blacksmith shop (1,214.3 feet). FYH2 would have had a relatively unobstructed view of the entire post except for the post gate/sentry box. All of the windows on the north side of FYH2, facing the post

gate/sentry box, would have looked directly at FYH1 which would have obscured any view of the post gate/sentry box and the entrance road.

Archaeological Features. As at FYH1 the archaeological excavations of FYH2 confirmed many of the features/structures depicted on the 1864 Davison Map such as the location and dimensions of the officer's house. The excavations also discovered several new features/structures associated with FYH2 including a continuous sandstone foundation and front porch supports (Figures 6.6 and 6.7).

Remnant foundations for FYH2 measure 30.75 feet from the front of the house to the rear of the house (east-west) and 23.1 feet side to side (north-south). Similar to the foundations at FYH1 the foundation of FYH2 is made of sandstone blocks and is continuous and outlines the original footprint of the house. Again, the dimensions of each block varies but are consistent in size and shape with those used in the foundation of FYH2 and typically measure 18 inches long, 18 inches wide and 8 inches thick. An elevation change of - 24 inches from the top of the first course of foundation stones for the east (rear) of the house to the west (front) of the house suggests that if the rear foundation was only one course high then the front foundation was at least three courses high in order to make the house level which would have placed the floor of the porch 24 inches above the ground. Just as at FYH1 the foundation blocks at FYH2 were dressed and stacked with precision so that the exterior surface foundation was relatively smooth and formed a straight line, but the interior side of the foundation was unfinished.

Unlike the FYH1 foundations the foundations for FYH2 were not placed within a large dugout feature. Instead the foundations appear to have been placed directly on the 1856 ground surface, although the ground was probably graded to make a flat surface. The lack of a dugout at FYH2 suggests that the dugout features for the houses were not "planned" as part of the original construction of each house and were later excavated to accommodate the kitchen additions in 1857 for the larger or "completed" houses (FYH1, FYH3, FYH4 and FYH6). The foundation at FYH2 also lacks the cross foundation uncovered at FYH1 and FYH3. As FYH1 and FYH3,

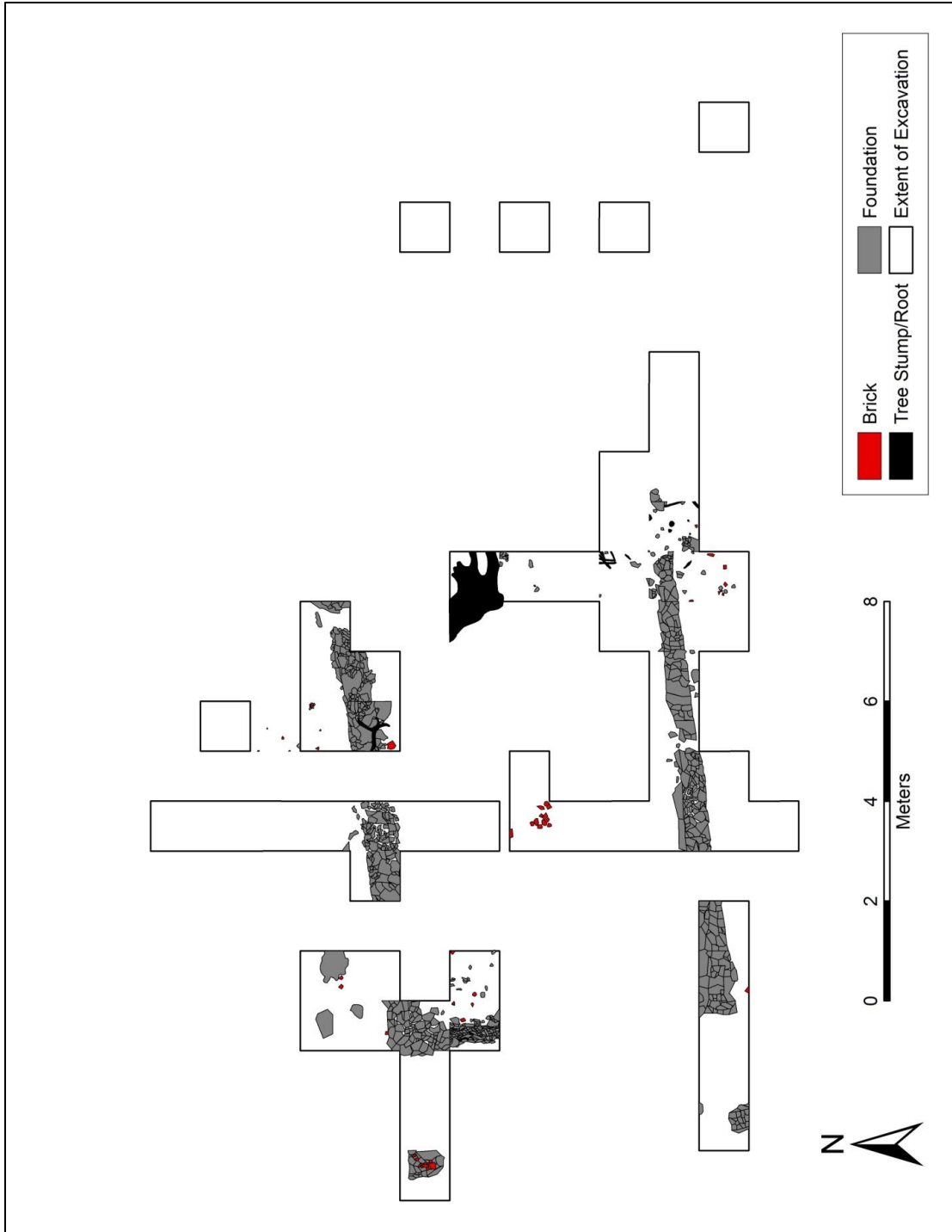


Figure 6.6 Feature Drawing of Fort Yamhill House 2 (FYH2)



Figure 6.7 Overview of Archaeological Remains of Fort Yamhill House 2 (FYH2); View to the Northeast (Photograph By Author)

both large or “completed” houses with the kitchen additions, have the cross foundation it was probably constructed as the foundation for the west wall of the kitchen addition as opposed to being constructed as the foundation for the east wall of the original house. This interpretation is supported by the presence of a gap measuring 1.25 feet between the back of the front foundations and the cross foundation at both FYH1 and FYH3 suggesting that the cross foundation was a later addition and not part of the original house foundation.

Similar to FYH1 evidence for the fireplace at FYH2 was also uncovered during the excavations. A small concentration of fragmented brick was exposed 14.1 feet east of the front foundation and centered within the front portion of the house. Just as at FYH1 and FYH3 no intact support stones of fireplace features remain but the location of the concentration of brick fragments were uncovered in the same location as double firebox fireplaces as depicted in the 1864 Davison Map.

Excavations at FYH2 uncovered at two outside support stones for the front porch. The two sandstone blocks were uncovered in a line 8.1 feet west of the front

house foundation. The supports are evidenced by square sandstone blocks, probably the base stone of a column, spaced 23.1 feet from each other. The location of these supports suggests that the porch was approximately 8 feet wide and spanned the full width of the house, at approximately 23 feet. The intervening space between these porch supports has yet to be excavated but placement of the excavated supports suggests that the front porch supports for FYH2 are of the same number and configuration at those found at FYH1. The placement and configuration of the front porch stairs supports and the presence of the cobble walking path are also unconfirmed at FYH2 as these areas have also yet to be excavated.

Fort Yamhill House 3 (FYH3). Fort Yamhill House 3 was the third officers' quarters from the north on Officers' Row and the last officers' quarters in the first group of three officers' quarters on Officers' Row and was comprised of a house, fenced hard and sink. The house was rectangular and had one main floor measuring 60.9 feet long on the building's long or east-west axis and 22.9 feet wide on the building's short or north-south axis totaling approximately 1,394.61 square feet. The house also had a "half-attic" on the second floor measuring approximately 33 feet long and 23 feet wide totaling 759 square feet. The square footage of the first floor and second floor combined gave FYH3 approximately 2153.61 square feet of livable floor space.

Rooms. The first floor of the house contained seven rooms including a hall, parlor and bedroom in the front half of the house and a dining room, kitchen and two storage rooms in the rear of the house. The second floor of the house appears to have been comprised of just one large open space or room. The front entrance to the house was offset to the south side of the façade near the southern corner of the house. As one entered the house they entered the hall measuring 6.4 feet wide and 32.9 feet long along the south side of the house and alongside the parlor and bedroom. Off the hall at the front of the house was the parlor.

The parlor was square and measured 16.3 feet by 16.6 feet with 271.6 square feet of livable space. The parlor had two entrances one door on the western end of

the south wall to the hall and another on the northern end of the east which led to the bedroom. The parlor had three windows, two evenly spaced windows on the west wall looking out over the parade ground and one window centered on the north wall looking toward FYH2. The parlor also contained one side of a double firebox which it shared with the bedroom that was centered on the east wall.

The bedroom was also square and measured 16.3 feet by 16.2 feet with 265.8 square feet of livable space. The bedroom had two entrances one door on the northern end of the west wall to the parlor and one door on the eastern end of the south wall which lead back to the hall. The bedroom had one window evenly spaced along the north wall looking toward FYH2. The bedroom contained the other side of the double firebox it shared with the parlor and was centered on the west wall. The bedroom also had one closet in the southwestern corner of the room between the fireplace and the southern wall.

The dining room was rectangular and measured 16.4 feet long and 11.1 feet wide with 182.9 square feet of livable space. The dining room had just one entrance a door centered on the south wall leading back onto the exterior porch. The dining room also had one window centered on the north wall looking out toward FYH2.

The kitchen was square-ish measuring 16.6 feet long and 14.6 feet wide with 241.8 square feet of livable space. The kitchen had just one entrance a door on the southern end of the west wall leading back to the exterior porch and two doors evenly spaced on the north all leading to storage rooms. Both of the storage rooms were square measuring 8.4 feet by 8.6 feet each containing 72.24 square feet (144.48 square feet total) of usable space. The kitchen had two windows, one centered on the east wall looking out behind the house toward the sink and another centered on the south wall looking out toward FYH4. In the northwest corner of the kitchen was a sink.

Porches. FYH3 also had at least two exterior covered porches including a full width front porch and smaller side porch on the south side of the house. The front porch spanned the entire width of the house, 22.7 feet, and extended 8.1 feet away from the house providing 184.5 square feet of additional exterior living space. The

front porch was elevated and had a set of stairs centered on the front measuring 12.7 feet wide and leading down to cobble paved path running down the front of Officers' Row and to the other structures at the post. The side porch was located off the rear door of the hallway between the front of the house and the rear of the house (dining room and kitchen) and measured 6.4 feet wide 11.1 feet long providing 72.7 square feet of additional exterior living space. The porch had three doors, one centered on the west wall leading back to the hallway, one centered on the north wall leading to the dining room and one centered on the east well leading to the kitchen. The porch likely served as the rear/side exit for the house and lead to the sink.

Yards and Outbuildings. FYH3 had one large rectangular fenced yard that measured approximately 120.7 feet long and 88.1 feet wide and after subtracting the area of the built structures contained within the fence the yard contributed an additional 10,633.7 square feet of exterior space to the FYH3 officers' quarters. The yard encompassed not only the house but also a sink centered on the back/eastern fence.

Location, Viewshed and Presence. FYH3 was the third officers' quarters from the north and the southernmost officers' quarters used in this study. As the third officers' quarters on Officers' Row FYH3 was the furthest of the officers' quarters to the post gate/sentry box (196.7 feet) and one of the closest of the officers' quarters to the other officers' quarters (23.3 feet), adjutant's office (470.3 feet), enlisted men's barracks (433.7 feet), enlisted men's mess hall (507.4 feet), enlisted men's kitchen (502.5 feet), guardhouse (551.0 feet), warehouse (630.7 feet), blockhouse (679.8 feet), hospital (657.5 feet), laundresses (739.9 to 916.4 feet), bakery (931.5 feet), stables (995.9 feet), sutler's store (1,131.26 feet) and the blacksmith shop (1,195.8 feet). Similar to FYH2, FYH3 would have had a relatively unobstructed view of the entire post except for the post gate/sentry box. All of the windows on the north side of FYH3, facing the post gate/sentry box, would have looked directly at FYH2 which would have obscured any view of the post gate/sentry box and the entrance road.

Archaeological Features. As at FYH1 and FYH2 the archaeological excavations of FYH3 confirmed many of the features /structures depicted on the 1864 Davison Map such as the location and dimensions of the officer's house, the location of the kitchen sink and the location of the sink. The excavations also discovered several new features/structures associated with FYH3 including a continuous sandstone foundation with a central cross support foundation, the unexcavated walls of the house dugout, a single front porch support, a river cobble paved path and pavement of sandstone rubble (Figures 6.8 and 6.9).

Remnant foundations for FYH3 measure 60.1 feet from the front of the house to the rear of the house (east-west) and 22.6 feet side to side (north-south). Similar to FYH1 and FYH2 the foundation at FYH3 is made of continuous sandstone blocks, each typically measuring 18 inches long, 18 inches wide and 8 inches thick, although some do vary in these dimensions. Fort Yamhill House 3 had the same change in elevation, - 40 inches, from the top of the first course of foundation stones at the east (rear) of the house to the west (front) of the house. As at FYH1 this suggests that if the rear foundation at FYH3 was also only one course high then the front foundation of FYH3 was at least five courses high which would have placed the floor of the porch 40 inches above the ground. Similar to FYH1 the foundation blocks at FYH3 were dressed and stacked with precision so that the exterior surface foundation was relatively smooth and formed a straight line, but the interior side of the foundation was unfinished.

The local sloping topography at FYH3 also required that the hillside be artificially flattened (by a dugout). The dugout at FYH3 measures approximately 27.6 feet to the east-west and at least 21.7 feet north-south and excavated to a depth of about 1.7 feet in the west to over 3 feet in the east. Similar to FYH1 the dugout at FYH3 was excavated into the weathering bedrock subsoil to accommodate the 1857 kitchen addition.

Just as at FYH1 and FYH2 evidence for the fireplace at FYH3 is minimal. Although archaeological excavations were conducted in the area of where the fireplace is depicted on the 1864 Davison Map no intact fireplace supports were uncovered but only a light concentration of broken brick. The exposed concentration

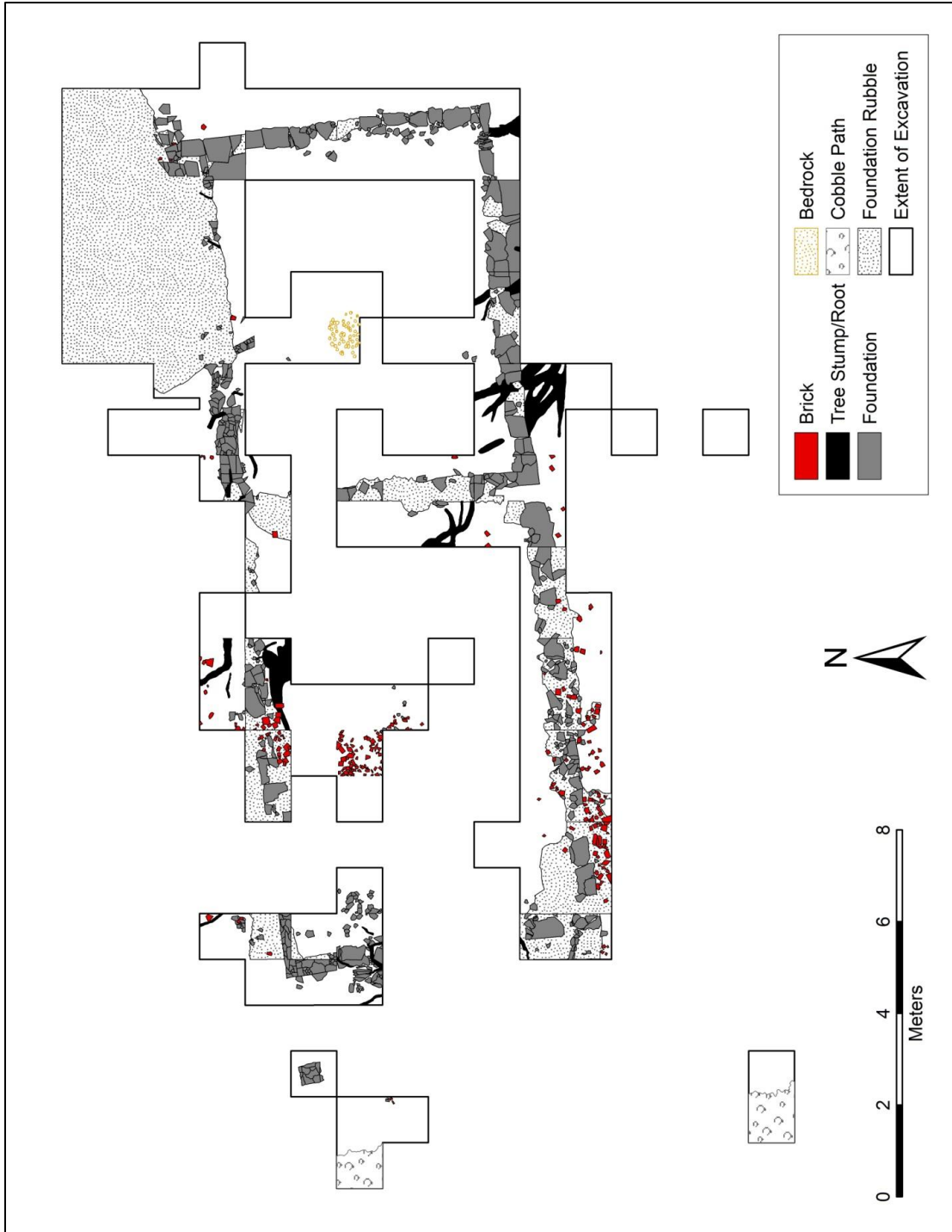


Figure 6.8 Feature Drawing of Fort Yamhill House 3 (FYH3)



Figure 6.9 Overview of Archaeological Remains of Fort Yamhill House 3 (FYH3); View to the Southwest (Photograph by Author)

of fragmented brick was located 15 feet east of the front foundation and centered within the front portion of the house just as at FYH1 and FYH2.

A single foundation support for the front porch was also uncovered at FYH3. The stone is almost cube measuring 18.1 inches by 18.1 inches square by 6 inches high. Although only one support stone has been uncovered to date its location at the northwest corner of the porch and its distance west of the front foundation of FYH3 (7.7 feet) suggests that front porch at FYH3 is of the same size and shape as those found at FYH1 and FYH3. The cobble walking path running in front of Officers' Row is also evidenced at FYH3. The eastern edge of the walking path is 5.4 feet west of the porch support and also has an east-west orientation. As at FYH1 total width of the path is unknown but measures at least 5 feet wide.

A similar cross foundation was uncovered at FYH3 as was uncovered at FYH1. The foundation at FYH3 is fragmented but measures 1.1 feet wide and extends the entire width of the house (23 feet). The gap between the front foundation

and the cross foundation at FYH3 measures 1.25 feet wide similar in size to the gap at FYH1. As at FYH1 the cross foundation at FYH3 was probably constructed as part of the foundations for the west wall of the kitchen addition and not as part of the foundations for the east or back wall of the original house.

Although no evidence for the boardwalk features observed at FYH1 was uncovered at FYH3 a large pavement of sandstone rubble was uncovered near the northeast (back) corner of the house. The full extent of the pavement is unknown but what was uncovered measures at least 22 feet long by 12.8 feet wide and extend up the north side of the dugout toward FYH2. The exact function of this pavement is unknown but it may have been a “paved” walking surface or a method used to stabilize the side of the dugout and to keep runoff and/or soil away from the house. Lastly, a sump feature, similar to the sump feature uncovered at FYH1, was also uncovered during excavations of FYH3. The sump feature is located 10.9 feet east of the cross-foundation and centered within the kitchen addition. The sump is roughly circular in shape and measures approximately 2.9 feet in diameter. Just like FYH1 the sump at FYH3 appears of have been excavated into the bedrock subsoil to an unknown depth and then filled with cobbles of weathering bedrock. Supporting the interpretation of this feature, and the same feature at FYH1, is a sump is the fact that both of these bedrock filled pits are in the same general area as the sinks depicted on the 1864 Davison map (Figure 6.3).

Officers’ Quarters at Fort Hoskins

The three commissioned officers’ quarters at Fort Hoskins have also been selected for inclusion in this study (FHH1, FHH2 and FHH3) (Figure 6.10). Fort Hoskins House 1 (FHH1) was the northeastern most officers’ house on Officers’ Row and was the primary residence for the captains who served at Fort Hoskins. Fort Hoskins House 2 (FHH2) was the next officers’ house on Officers’ Row just northwest of FHH1, but southeast of FHH3, and was the primary residence for the highest ranking subaltern officers at the post, usually a first lieutenant. Fort Hoskins House 3 (FHH3) was the next officers’ house on Officers’ Row immediately northwest of FHH2 and was the

primary residence of the lower ranking subaltern officers at the post, usually a second lieutenant.

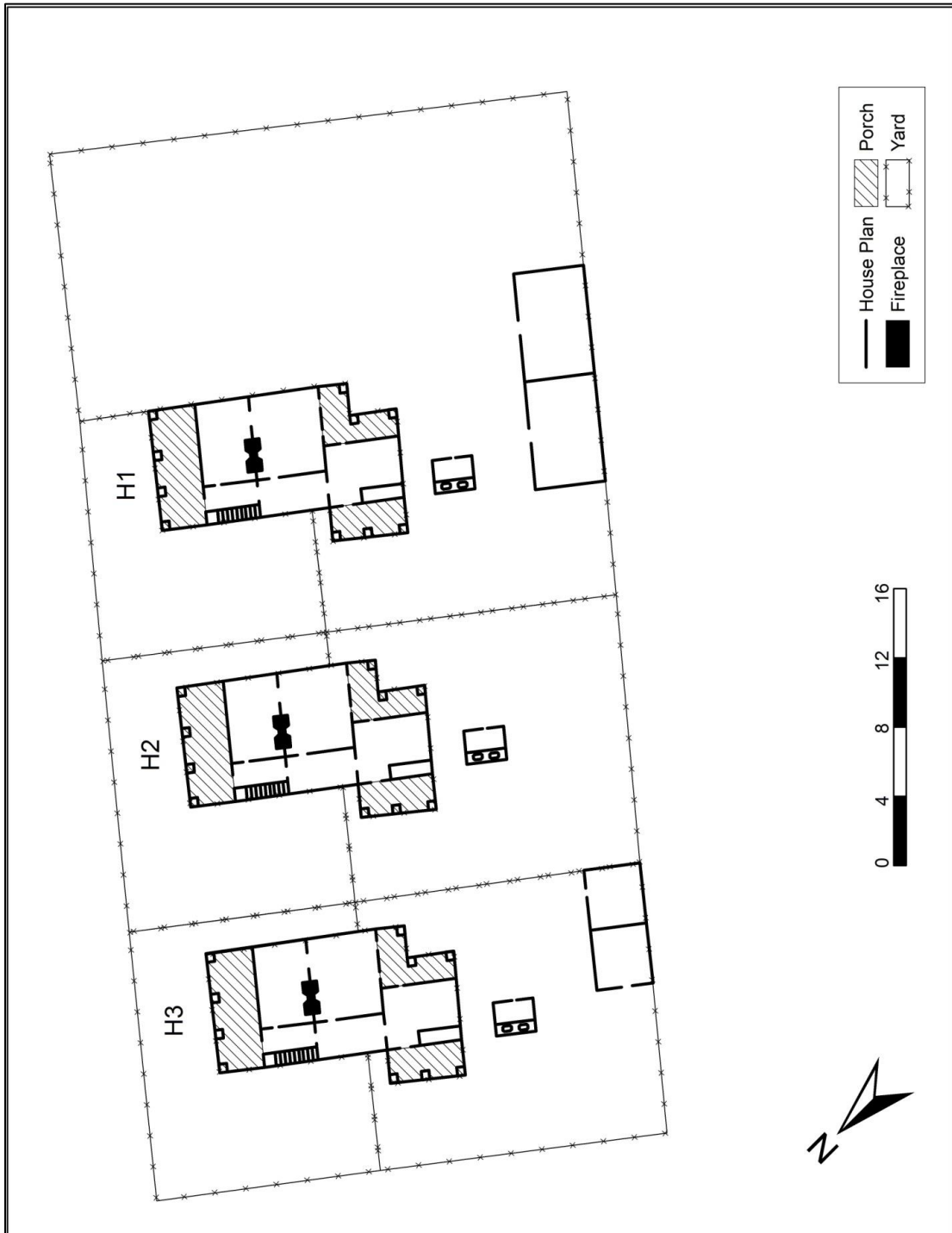


Figure 6.10 Detailed Plan View of Officers' Row (FHH1-FHH3) at Fort Hoskins. Redrawn from Chase Map of 1864 in Bowyer (1992:25)

Fort Hoskins House 1 (FHH1). Fort Hoskins House 1 (FHH1) was the southeastern most officers' quarters on Officers' Row and was comprised of a house, fenced yard, two outbuildings and double sink. The house was L-shaped with the main floor of the building measuring 26.8 feet long and 25.2 feet wide with an attached kitchen wing measuring 15.9 feet long and 13.4 feet wide totaling approximately 888.4 square feet. The house also had one large room on the second floor measuring approximately 26.8 feet long and 18 feet wide totaling 482.4 square feet. The square footage of the first floor and second floor combined gave FHH1 approximately 1,370.8 square feet of livable floor space.

Rooms. The first floor of the house contained five rooms including a hall, parlor, bedroom, dining room and kitchen. The second floor of the house was comprised of just one large open space or room. The front entrance of the house was offset to the northwest side of the façade near the northern corner of the house. As one entered the house they entered the hall measuring 8.4 feet wide and 13.4 feet long along the northwest side of the house and alongside the parlor and bedroom. The hall had three entrances, one door centered on the northeast wall which exited the house and led to the front porch, one door on the eastern end of the southeast wall leading to the parlor and one door centered on the southwest wall leading to the dining room. The hall also contained the stair on the northwest wall leading to the second floor.

The parlor was rectangular and measured 16.8 feet by 13.4 feet with 225.12 square feet of living space. The parlor had two entrances, one door on the northern end of the northwest wall which led to the hall and another on the southern end of the southwest wall which led to the bedroom. The parlor had three windows, two evenly spaced windows on the northeast wall overlooking the parade ground and one double window centered on the southeast wall looking out toward the post gate/sentry box, guardhouse, adjutant's office, hospital and Kings Valley to the southeast. The parlor also contained one side of a double firebox which it shared with the bedroom on the northwestern end of the southwest wall.

The bedroom was also rectangular and measured 16.8 feet by 11.7 feet with 196.56 square feet of living space. The bedroom had two entrances, one door on the

eastern end of the northeast wall which led to the parlor and another on the northern end of the northwest wall which led to the dining room. The bedroom had four windows, two evenly spaced windows on the southeast wall and two windows evenly spaced on the southwest wall. The bedroom also contained one side of a double firebox which it shared with the parlor on the north end of the northeast wall. In the southern corner of the room was an indoor water pipe.

The dining room was rectangular and measured 8.4 feet by 11.7 feet with 98.3 square feet of living space. The dining room had three entrances, one centered on the northeast wall leading to the hall, one on the eastern end of the southeast wall leading to the bedroom and another centered on the southwest wall leading to the kitchen. The dining room had just one window centered on the northwest wall and looking out toward FHH2.

The kitchen was rectangular and measured 13.4 feet by 15.9 feet with 213.1 square feet of living space. The kitchen had three entrances, one on the north end of the northeast wall leading to the dining room, another on the east end of the southeast wall leading to an exterior L-shaped porch and one on the north end of the northwest wall also leading to an exterior porch. The kitchen had two windows, one on the south side of the southeast wall and another centered on the northwest wall. In the western corner of the kitchen was a sink connected to an indoor water pipe.

Porches. FHH1 had at least four covered porches including a full width front porch on the first floor with a second full width front porch on the second floor and two porches off the kitchen, one smaller side porch on the northwest side and one larger L-shaped porch on the southern corner. The two front porches (on the first and second stories) spanned the entire width of the house, 25.2 feet and extended approximately 9.8 feet away from the house providing 246.9 square feet of additional living space on the first floor and another 246.9 square feet of additional living space on the second floor. The smaller side porch was located off the northwest door of the kitchen and measured approximately 8 feet wide and 15.9 feet long providing an additional 127.2 square feet of additional living space. The L-shaped porch was

located off the southeast door of the kitchen and measured approximately 15.9 feet by 11.8 feet providing an estimated 140.7 square feet of additional living space.

Yards and Outbuildings. FHH1 had two yards, one rectangular shaped yard encompassing the front and northwest side of the house and one L-shaped yard encompassing the back and southeast side of the house. The front yard was the smaller of the two yards, measuring 1,322 square feet, and containing the front porch and a portion of the yard on the northwest side of the house. The back yard was considerably larger measuring 7,241 square feet and encompassed a double sink and two outbuildings. Together the fenced yards totaled 8,563 square feet.

FHH1 also had three outbuildings including one double sink and two unidentified buildings that were probably sheds. The sink is located approximately 10 feet to the southeast of the kitchen and measures approximately 6 feet by 6 feet square (36 square feet) and with a single door centered on the southeast wall. The interior of the sink is depicted on the 1864 Chase Map as being a double sink with two seats. The two out buildings are located approximately 30 feet southeast of the house and measure approximately 13.1 feet by 21.3 feet (279 square feet) and are depicted with a single door centered on the northeast wall of each shed. Together the sheds totaled 558 square feet.

Location, Viewshed and Presence. FHH1 was the southeastern most officers' quarters on Officers' Row and therefore was the closest of the officer' quarters to the adjutant's office (222.6 feet), guardhouse (314.5 feet), post gate/sentry box (499.7 feet), hospital (582.1 feet) and sutler's store (787.8 feet) and the furthest of the officers' quarters from the other officers' quarters (29.9 feet), laundresses (354.8 to 460.4 feet), enlisted men's barracks (388.7 feet), bakery (413.7 feet), carpenter shop (423.9 feet), warehouse (425 feet), root cellar (436.9 feet), powder magazine (447.3 feet), blacksmith shop (451.1 feet) and the stables (454.9 feet).

As the southeastern most officers' quarters on Officers' Row FHH1 would have had the best view of the post gate/sentry box and the road into the post from Corvallis. FHH1 would have also had a clear view of the entire post with the

exception of the stables, carpenter shop and blacksmith shop which would have been obscured from view by FHH2 and would have had a completely unobstructed view of Kings Valley and the Luckiamute River to the south and west. In addition, FHH1 would have been the first of the officers' quarters seen from the road leading from Corvallis and Kings Valley into the post.

Archaeological Features. Only one archaeological feature, the sink shaft, was uncovered during the excavation of FHH1 (Figure 6.11) (Bowyer 1992). The sink shaft was located approximately 10 feet southwest of the house proper and in line with the northwest wall. The sink shaft measures approximately 2.5 feet by 4.5 feet and 7.2 feet deep.



Figure 6.11 Excavated Privy Feature Behind Fort Hoskins House 1 (FHH1)
(Photograph on File at Department of Anthropology, Oregon State University)

Fort Hoskins House 2 (FHH2). Fort Hoskins House 2 (FHH2) was the middle officers' quarters on Officers' Row and was comprised of a house, fenced yard and double sink. The size and layout of the FHH2 house is depicted on the 1864 Chase Map as identical to FHH1 and FHH3. The house was L-shaped with the main floor of the building measuring 26.8 feet long and 25.2 feet wide with an attached kitchen wing measuring 15.9 feet long and 13.4 feet wide totaling approximately 888.4 square feet. The house also had one large room on the second floor measuring approximately 26.8 feet long and 18 feet wide totaling 482.4 square feet. The square footage of the first floor and second floor combined gave FHH2 approximately 1,370.8 square feet of livable floor space.

Rooms. The first floor of the house contained five rooms including a hall, parlor, bedroom, dining room and kitchen. The second floor of the house was comprised of just one large open space or room. The front entrance of the house was offset to the northwest side of the façade near the northern corner of the house. As one entered the house they entered the hall measuring 8.4 feet wide and 13.4 feet long along the northwest side of the house and alongside the parlor and bedroom. The hall had three entrances, one door centered on the northeast wall which exited the house and led to the front porch, one door on the eastern end of the southeast wall leading to the parlor and one door centered on the southwest wall leading to the dining room. The hall also contained the stair on the northwest wall leading to the second floor.

The parlor was rectangular and measured 16.8 feet by 13.4 feet with 225.12 square feet of living space. The parlor had two entrances, one door on the northern end of the northwest wall which led to the hall and another on the southern end of the southwest wall which led to the bedroom. The parlor had three windows, two evenly spaced windows on the northeast wall overlooking the parade ground and one double window centered on the southeast wall looking out toward FHH1. The parlor also contained one side of a double firebox which it shared with the bedroom on the northwestern end of the southwest wall.

The bedroom was also rectangular and measured 16.8 feet by 11.7 feet with 196.56 square feet of living space. The bedroom had two entrances, one door on the

eastern end of the northeast wall which led to the parlor and another on the northern end of the northwest wall which led to the dining room. The bedroom had four windows, two evenly spaced windows on the southeast wall and two windows evenly spaced on the southwest wall. The bedroom also contained one side of a double firebox which it shared with the parlor on the north end of the northeast wall. In the southern corner of the room was an indoor water pipe.

The dining room was rectangular and measured 8.4 feet by 11.7 feet with 98.3 square feet of living space. The dining room had three entrances, one centered on the northeast wall leading to the hall, one on the eastern end of the southeast wall leading to the bedroom and another centered on the southwest wall leading to the kitchen. The dining room had just one window centered on the northwest wall and looking out toward FHH3.

The kitchen was rectangular and measured 13.4 feet by 15.9 feet with 213.1 square feet of living space. The kitchen had three entrances, one on the north end of the northeast wall leading to the dining room, another on the east end of the southeast wall leading to an exterior L-shaped porch and one on the north end of the northwest wall also leading to an exterior porch. The kitchen had two windows, one on the south side of the southeast wall and another centered on the northwest wall. In the western corner of the kitchen was a sink connected to an indoor water pipe.

Porches. FHH2 had at least four covered porches including a full width front porch on the first floor with a second full width front porch on the second floor and two porches off the kitchen, one smaller side porch on the northwest side and one larger L-shaped porch on the southern corner. The two front porches (on the first and second stories) spanned the entire width of the house, 25.2 feet and extended approximately 9.8 feet away from the house providing 246.9 square feet of additional living space on the first floor and another 246.9 square feet of additional living space on the second floor. The smaller side porch was located off the northwest door of the kitchen and measured approximately 8 feet wide and 15.9 feet long providing an additional 127.2 square feet of additional living space. The L-shaped porch was

located off the southeast door of the kitchen and measured approximately 15.9 feet by 11.8 feet providing an estimated 140.7 square feet of additional living space.

Yards and Outbuildings. FHH2 had two yards, one rectangular shaped front yard and one square shaped back yard. The front yard was the smaller of the two yards, measuring approximately 1,597 square feet, and containing the front porch and a portion of the yard on the northwest and southeast sides of the house. The back yard was considerably larger measuring 2,441 square feet and contained just a sink. Together the fenced yards totaled 4,038 square feet.

The only other feature associated with FHH2 was a sink. The sink is located approximately 10 feet to the southeast of the kitchen and measures approximately 6 feet by 6 feet square (36 square feet) and with a single door centered on the southeast wall. The interior of the sink is depicted on the 1864 Chase Map as being a double sink with two seats.

Location, Viewshed and Presence. FHH2 was the middle officers' quarters on Officers' Row and therefore was the second closest officers' quarters to the adjutant's office (239.2 feet), guardhouse (327.1 feet), post gate/sentry box (511.9 feet) and hospital (616 feet) and the sutler's store (797.4 feet) and the second furthest of the officers' quarters from the other officers' quarters (27.6 feet), laundresses (303.9 to 425.2 feet), enlisted men's barracks (386.8 feet), bakery (370.6 feet), carpenter shop (367.5 feet), warehouse (395.1 feet), root cellar (415.9 feet), powder magazine (422.7 feet), blacksmith shop (395.1 feet) and the stables (420.4 feet).

As the middle officers' quarters on Officers' Row FHH2 would still have had a clear view of most of the post especially those building surrounding the parade ground but the view would have been obstructed on either side by FHH1 and FHH3 especially the view of Kings Valley and the Luckiamute River to the south and west which would have been obstructed by FHH1.

Archaeological Features. Only one archaeological feature, the sink shaft, was uncovered during the excavation of FHH2 (Figure 6.12) (Bowyer 1992). The sink



Figure 6.12 Partially Excavated Privy Feature Behind Fort Hoskins House 2 (FHH2) (Photograph on File at Department of Anthropology, Oregon State University)

shaft was located approximately 10 feet southwest of the house proper and in line with the northwest wall. The sink shafts measure approximately 2.5 feet by 4.5 feet and 7.8 feet deep.

Fort Hoskins House 3 (FHH3). Fort Hoskins House 3 (FHH3) was the northwestern most officers' quarters on Officers' Row and was comprised of a house, fenced yard, two outbuildings and double sink. The size and layout of the FHH3 house is depicted in the 1864 Chase Map as identical to FHH1 and FHH2. The house was L-shaped with the main floor of the building measuring 26.8 feet long and 25.2 feet wide with an attached kitchen wing measuring 15.9 feet long and 13.4 feet wide totaling approximately 888.4 square feet. The house also had one large room on the second floor measuring approximately 26.8 feet long and 18 feet wide totaling 482.4 square feet. The square footage of the first floor and second floor combined gave FHH3 approximately 1,370.8 square feet of livable floor space.

Rooms. The first floor of the house contained five rooms including a hall, parlor, bedroom, dining room and kitchen. The second floor of the house was comprised of just one large open space or room. The front entrance of the house was offset to the northwest side of the façade near the northern corner of the house. As one entered the house they entered the hall measuring 8.4 feet wide and 13.4 feet long along the northwest side of the house and alongside the parlor and bedroom. The hall had three entrances, one door centered on the northeast wall which exited the house and led to the front porch, one door on the eastern end of the southeast wall leading to the parlor and one door centered on the southwest wall leading to the dining room. The hall also contained the stair on the northwest wall leading to the second floor.

The parlor was rectangular and measured 16.8 feet by 13.4 feet with 225.12 square feet of living space. The parlor had two entrances, one door on the northern end of the northwest wall which led to the hall and another on the southern end of the southwest wall which led to the bedroom. The parlor had three windows, two evenly spaced windows on the northeast wall overlooking the parade ground and one double window centered on the southeast wall looking out toward FHH2. The parlor also contained one side of a double firebox which it shared with the bedroom on the northwestern end of the southwest wall.

The bedroom was also rectangular and measured 16.8 feet by 11.7 feet with 196.56 square feet of living space. The bedroom had two entrances, one door on the eastern end of the northeast wall which led to the parlor and another on the northern end of the northwest wall which led to the dining room. The bedroom had four windows, two evenly spaced windows on the southeast wall and two windows evenly spaced on the southwest wall. The bedroom also contained one side of a double firebox which it shared with the parlor on the north end of the northeast wall.

The dining room was rectangular and measured 8.4 feet by 11.7 feet with 98.3 square feet of living space. The dining room had three entrances, one centered on the northeast wall leading to the hall, one on the eastern end of the southeast wall leading to the bedroom and another centered on the southwest wall leading to the kitchen. The dining room had just one window centered on the northwest wall and looking out toward the laundresses, bakery, carpenter and blacksmith shops and the stables.

The kitchen was rectangular and measured 13.4 feet by 15.9 feet with 213.1 square feet of living space. The kitchen had three entrances, one on the north end of the northeast wall leading to the dining room, another on the east end of the southeast wall leading to an exterior L-shaped porch and one on the north end of the northwest wall also leading to an exterior porch. The kitchen had two windows, one on the south side of the southeast wall and another centered on the northwest wall. In the western corner of the kitchen was a sink connected to an indoor water pipe.

Porches. FHH3 had at least four covered porches including a full width front porch on the first floor with a second full width front porch on the second floor and two porches off the kitchen, one smaller side porch on the northwest side and one larger L-shaped porch on the southern corner. The two front porches (on the first and second stories) spanned the entire width of the house, 25.2 feet and extended approximately 9.8 feet away from the house providing 246.9 square feet of additional living space on the first floor and another 246.9 square feet of additional living space on the second floor. The smaller side porch was located off the northwest door of the kitchen and measured approximately 8 feet wide and 15.9 feet long providing an additional 127.2 square feet of additional living space. The L-shaped porch was located off the southeast door of the kitchen and measured approximately 15.9 feet by 11.8 feet providing an estimated 140.7 square feet of additional living space. Unlike FHH1 and FHH2 where the water pipe entered the bedroom, the water pipe at FHH3 remained outside and is depicted on stopping on the L-shaped porch.

Yards and Outbuildings. FHH3 had two yards, one rectangular shaped front yard and one square shaped back yard. The front yard was the smaller of the two yards, measuring approximately 1,578 square feet, and containing the front porch and a portion of the yard on the northwest and southeast sides of the house. The back yard was considerably larger measuring 2,421 square feet and contained just a sink. Together the fenced yards totaled 3,999 square feet.

FHH3 also had three outbuildings including one double sink and two unidentified buildings that were probably sheds. The sink is located approximately

10 feet to the southeast of the kitchen and measures approximately 6 feet by 6 feet square (36 square feet) and with a single door centered on the southeast wall. The interior of the sink is depicted on the 1864 Chase Map as being a double sink with two seats. The two out buildings are located approximately 30 feet southeast of the house and measure approximately 11.2 feet by 11.2 feet square (125.8 square feet). Both sheds are depicted with a single door, the northern shed with the door centered on the northwest wall and the southern shed with the door centered on the northeast wall. Together the sheds totaled 251.6 square feet.

Location, Viewshed and Presence. FHH3 was the northwestern most officers' quarters on Officers' Row and therefore was the furthest of the officer' quarters to the adjutant's office (268.2 feet), guardhouse (350.5 feet), post gate/sentry box (530.2 feet), hospital (654.4 feet) and sutler's store (811.5 feet) and the closest of the officers' quarters from the other officers' quarters (27.6 feet), laundresses (259.25 to 399.7 feet), enlisted men's barracks (380.6 feet), bakery (337.5 feet), carpenter shop (314.3 feet), warehouse (374.7 feet), root cellar (409.4 feet), powder magazine (411.8 feet), blacksmith shop (341.3 feet) and the stables (387.8 feet).

As the northwestern most officers' quarters on Officers' Row FHH3 would have had the best view of stables, carpenter shop and blacksmith shop and a clear view of the rest of the post but the worst view of Kings Valley and the Luckiamute River to the south and west as these views would have been obstructed by FHH1 and FHH2.

Archaeological Features. No archaeological features were uncovered during the excavation of FHH3 (Bowyer 1992).

CHAPTER 7: MANIFESTATIONS OF STATUS IN THE MATERIAL CULTURE FROM FORT YAMHILL AND FORT HOSKINS OFFICERS' QUARTERS

In this chapter I present the results of the analysis of the 1,721 artifacts recovered during the excavation of the six officers' quarters (FYH1, FYH2 and FYH3 from Fort Yamhill and FHH1, FHH2 and FHH3 from Fort Hoskins) used in this study. The artifacts included in this study were chosen because they have either been previously demonstrated to be sensitive indicators of social status or because they were used within the context of specific behaviors such as calling, dining, hunting and personal adornment where status was expressed. The specific artifacts chosen for inclusion in this study have been sorted into three broad artifact groups (Domestic, Military and Personal) based on their functional context and then further sorted into 15 artifact classes by function, and 43 artifact types by function and/or form (Table 7.1).

All artifact counts represent either minimum number of objects (MNO), minimum number of vessels (MNV) or number of individual specimens/minimum number of butcher cuts (NISP/MNBC) depending on artifact type. Only a summary of the artifacts used in this study is provided in this chapter with the detailed artifact description including its size, material of construction, method of manufacture, decoration, content labels and maker/manufacture marks are provided in the Appendix D.

Table 7.1 Artifact Typology

Group	Class	Type	Example Artifacts
Domestic	Housewares	Furniture	Caster, Chamberstick, Oil Lamp, Stove, Figurine, Flower Pot, Tintype Frame
		Lighting	
		Heating	
		Decoration	
	Culinary	Storage Vessels	Stoneware Jar, Dish, Baking Dish, Kettle, Cook Stove
		Preparation Vessels Cooking Vessels Cooking Appliances	
Gustatory	Glassware	Tumbler, Stemware, Decanter, Plate, Bowl, Butter Dish, Compote/Celery Vase, Cup/Mug, Saucer, Tea/Coffee Pot, Creamer/Sugar, Platter, Tureen, Pitcher, Butter Tub, Dish, Mess Pan, Fork, Spoon, Knife	
	Ceramicware Tinware Cutlery		
Foodstuffs	Food Remains	Bone, Shell, Seed, Food Canister, Food Bottle, Condiment Bottle	
	Food Containers		
Maintenance	Sewing	Needlework Clamp, Scissors, Thimble, Safety Pin, Straight Pin, Cement/Glue	
	General Repair		
Military	Uniform	Military Button	Frock Coat/Jacket/Vest Buttons, Chinstrap Buckle, Corps, Regiment and Company Insignia
		Military Headwear	
		Military Insignia	
Arms and Ammunition	Arms	Revolver, Bayonet, Sidearm Projectiles, Sidearm Percussion Cap, Percussion Cap Box	
	Projectiles Ignition Systems		
Accouterments	Canteen	Stopper/Spout, Buckle, Triangle Loop	
	Cartridge Box Knap Sack		
Personal	Indulgences	Alcoholic Beverage	Beverage Bottle, Smoking Pipe, Spittoon
		Non-Alcoholic Beverage	
		Tobacco	
	Health	Medical Items	Medicine Bottle, Syringe, Cologne/Perfume, Hair Tonic, Cosmetic Jar, Comb, Mirror, Toothbrush, Toothpick, Soap Box, Wash Basin, Chamber Pot
		Grooming Items	
	Adornment	Hair Accessory	Headband, Hair Pin, Button, Belt Buckle, Suspender, Corset, Pocket Watch, Pendant, Bracelet, Finger Ring, Bead, Boot/Shoe
		Civilian Button Civilian Buckle/Fastener Jewelry and Accessories Footwear	
	Administration	Office Supplies	Pen Nib, Ink Pot, Ink Bottle, Slate Pencil, Slate Tablet, Graphite Pencil, Sealing Wax
		Recreation	
Pocket Items	Toys and Games	Tea Set, Doll, Marble, Domino, Harmonica, Mouth Harp, Chordophone, Aerophone, Firearm, Percussion Cap, Projectile, Fish Hook	
	Musical Instruments Hunting Implements Fishing Implements		
Transportation	Tools	Spectacles, Pocket/Pen Knife, Coin	
	Currency		
Transportation	Luggage	Carpet Bag, Stirrup, Saddle Cinch Buckle, Crotal Bell, Horseshoe	
	Horse Furniture		

Functional Artifact Groups

One thousand seven hundred and twenty-one artifacts recovered from Fort Yamhill and Fort Hoskins will be used in this study including 365 objects recovered from Fort Yamhill House 1 (FYH1), 209 objects recovered from Fort Yamhill House 2 (FYH2), 178 objects recovered from Fort Yamhill House 3 (FYH3), 474 objects recovered from Fort Hoskins House 1 (FHH1), 323 from Fort Hoskins House 2 (FHH2) and 172 from Fort Hoskins House 3 (FHH3). Using a modified typology from Sprague (1981) the total artifact assemblage was classified into three broad functional artifact groups: Domestic, Military and Personal (Table 7.2).

Table 7.2 Total Artifact Assemblages By Functional Group

Group	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
Domestic	214	101	106	243	92	96
Military	11	7	6	26	48	21
Personal	140	101	66	205	183	55
Total	365	209	178	474	323	172

Domestic Artifact Group

The Domestic Artifact Group contains artifacts pertaining to the furnishing of the home, the storage, preparation, presentation, serving and the consumption of food and drink, the food containers and remains of the foods consumed and artifacts pertaining to the general maintenance and repair of the household and its members. A total of 852 domestic artifacts will be used in this study including 214 that were recovered from FYH1, 101 that were recovered from FYH2 and 106 that were recovered from FYH3 and of 431 artifacts recovered from Fort Hoskins including 243 that were recovered from FHH1, 92 that were recovered from FHH2 and 96 that were recovered from FHH3. For the purposes of this study the domestic artifact group has been sorted into five functional artifact classes: Housewares, Culinary, Gustatory, Foodstuffs and Maintenance (Table 7.3).

Table 7.3 Domestic Group Artifact Assemblages by Functional Class

Class	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
Housewares	3	3	3	6	1	2
Culinary	-	-	-	6	3	-
Gustatory	123	39	49	145	34	25
Foodstuffs	86	58	51	80	44	69
Maintenance	2	1	3	6	10	-
Total	214	101	106	243	92	96

Houseware Artifacts. The Houseware Artifact Class contains artifacts pertaining to the furnishing and decoration of the home such as tables, chairs, lamps, wood stoves, pictures, potted plants and decorative bric-a-brac. A total of eighteen houseware artifacts will be used in this study including three recovered from FYH1, three that were recovered from FYH2, three that were recovered from FYH3, six that were recovered from FHH1, one that was recovered from FHH2 and two that were recovered from FHH3. For the purposes of this study the houseware artifact class has been sorted into four functional artifact types: Furniture, Lighting Devices, Heating Devices and Decorative Items (Table 7.4).

Nine houseware artifacts were recovered at Fort Yamhill (FYH1=3, FYH2=3 and FYH3=3). The three houseware items recovered from FYH1 includes one furniture item (a furniture caster wheel), one lighting device (an oil lamp represented by several glass chimney fragments) and a single heating device (a stove represented by a spark grate and various cast irons parts). The three houseware items recovered from FYH2 also includes one furniture item (a furniture caster frame), one lighting device (an oil lamp represented by a brass burner and several glass chimney fragments) and a single heating device (a stove represented by several cast irons parts). The three houseware items recovered from FYH3 also includes one furniture item (a furniture caster frame) and one lighting device (an oil lamp represented by several glass chimney fragments) but also one decorative item (a porcelain figurine molded in the form of “Little Red Riding Hood”).

Nine houseware artifacts were also recovered at Fort Hoskins (FHH1=6, FHH2=1 and FHH3=2). The six houseware items recovered from FHH1 include three lighting devices (two oil lamps represented at least two complete glass chimney

Table 7.4 Houseware Artifact Assemblages By Functional Type

Type	Artifact	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
Furniture							
	Caster	1	1	1	-	-	-
Lighting Device							
	Chamber Stick	-	-	-	1	-	-
	Oil Lamp	1	1	1	2	1	1
Heating Device							
	Stove Parts	1	1	-	1	-	-
Decorative Item							
	Figurine	-	-	1	1	-	-
	Flower Pot	-	-	-	1	-	-
	Tintype Frame	-	-	-	-	-	1
Total		3	3	3	6	1	2

bases and one porcelain chamber stick), one heating device (a stove is represented by several cast iron parts) and two decorative items (a porcelain figurine molded in the form of the Greek goddess Athena/Roman goddess Minerva and a redware flower pot). The single houseware item recovered from FHH2 is a lighting device, represented by a complete glass chimney. The two houseware items recovered from FHH3 includes one lighting device (an oil lamp represented by several glass chimney fragments) and one decorative item (a brass ¼-plate tin type picture frame).

Culinary Artifacts. The Culinary Artifact Class contains artifacts pertaining to the storage and preparation of food and drink such stoneware crocks, mixing bowls, baking vessels, kettles and cook stoves. A total of nine culinary artifacts will be used in this study, all of which were recovered from Fort Hoskins, including six recovered from FHH1 and three that were recovered from FHH2. No culinary artifacts were recovered from FHH3. For the purposes of this study the houseware artifact class has been sorted into four functional artifact types: Storage Vessels, Preparation Vessels, Cooking Vessels and Cooking Appliances (Table 7.5).

All nine culinary artifacts were recovered from Fort Hoskins (FHH1=6 and FHH2=3). The six culinary artifacts recovered from FHH1 include three storage vessels (all stoneware crocks/jars made of three different pastes and glazed with three different glazes), one preparation vessel (a yellowware dish, probably a bowl) and

Table 7.5 Culinary Artifact Assemblages by Functional Type

Type	Artifact	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
Storage Vessels							
	Jar	-	-	-	3	2	-
Preparation Vessels							
	Dish	-	-	-	1	-	-
Cooking Vessels							
	Baking Dish	-	-	-	1	-	-
	Kettle	-	-	-	1	-	-
Cooking Appliances							
	Cook Stove	-	-	-	-	1	-
	Total	0	0	0	6	3	0

two cooking vessels (a yellowware baking dish and a cast iron kettle). The three culinary artifacts recovered from FHH2 include two storage vessels (one redware crock/jar lid and one brown stoneware crock/jar base) and one cooking stove (represented by a cast iron stove leg decorated with an ornate scroll pattern).

Gustatory Artifacts. The Gustatory Artifact Class contains artifacts pertaining to the presentation and consumption of food and drink such as drinking, eating and serving vessels made of glass, ceramic and metal and eating utensils such as spoons, forks and knives. A total of 415 gustatory artifacts will be used in this study including 123 recovered from FYH1, 39 recovered from FYH2, 49 recovered from FYH3, 145 recovered from FHH1, 34 recovered from FHH2 and 25 recovered from FHH3. For the purposes of this study the gustatory artifact class has been sorted into four functional artifact types: Glassware, Ceramicware, Tinware and Cutlery (Table 7.6).

Glassware. The glassware assemblage contains vessels used in the presentation and the consumption of food and drink and as the name suggests are made of glass and includes items such as tumblers, stemware, shot glasses, decanters, plates, bowls, butter dishes, compotes and celery vases. A total of 95 glassware vessels will be used in this study including 22 recovered from FYH1, eight recovered from FYH2, six

Table 7.6 Gustatory Artifact Assemblages By Functional Type

Type	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
Glassware	22	8	6	45	10	4
Ceramicware	93	31	40	95	21	19
Tinware	-	-	-	1	-	-
Cutlery	8	-	3	4	3	2
Total	123	39	49	145	34	25

recovered from FYH3, 45 recovered from FHH1, 10 recovered from FHH2 and four recovered from FHH3. For the purposes of this study the glassware artifact type has been sorted into three functional artifact categories: Drinkware, Tableware and Servingware.

Glassware Vessel Forms. Eleven glassware vessel forms have been identified in the assemblage including six drinkware vessel forms (tumblers, cordials, ale glasses, wine glasses/goblets, shot glasses and decanters), two tableware vessel forms (plates and bowls) and two servingware vessel forms (butter dishes and compotes/celery vases) (Table 7.7).

Thirty-six glassware vessels were recovered from Fort Yamhill (FYH1=22, FYH2=8 and FYH3=6). The 22 glassware vessels recovered from FYH1 include 15 drinkware vessels (eight tumblers, two cordials, one ale glass, two wine glasses/goblets and two shot glasses), four tableware vessels (one plate and four bowls) and three servingware vessels (one butter dish and one compote or celery vase). One indeterminate hollow glassware vessel was also recovered from FYH1. The eight glassware vessels recovered from FYH2 include seven drinkware vessels (six tumblers and one wine glass/goblet) and one servingware vessel (a butter dish). The six glassware vessels recovered from FYH3 include two drinkware vessels (both tumblers) and four tableware vessels (all bowls).

Fifty-nine glassware vessels were recovered from Fort Hoskins (FHH1=45, FHH2=10 and FHH3=4). The 45 glassware vessels recovered from FHH1 include 44 drinkware vessels (30 tumblers, nine wine glasses/goblets, two shot glasses and three decanters) and one tableware vessel (a bowl). The 10 glassware vessels recovered from FHH2 are all drinkware vessels including five tumblers, three wine

Table 7.7 Glassware Assemblages By Vessel Form

Form	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
Tumbler	8	6	2	30	5	4
Cordial	2	-	-	-	-	-
Ale Glass	1	-	-	-	-	-
Wine Glass/Goblet	2	1	-	9	3	-
Shot Glass	2	-	-	2	1	-
Decanter	-	-	-	3	1	-
<i>Total Drinkware</i>	<i>15</i>	<i>7</i>	<i>2</i>	<i>44</i>	<i>10</i>	<i>4</i>
Plate	1	-	-	-	-	-
Bowl	3	-	4	1	-	-
<i>Total Tableware</i>	<i>4</i>	<i>0</i>	<i>4</i>	<i>1</i>	<i>0</i>	<i>0</i>
Butter Dish	1	1	-	-	-	-
Compote/Celery Vase	1	-	-	-	-	-
<i>Total Serving</i>	<i>2</i>	<i>1</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>
Ind. Hollow Vessel	1	-	-	-	-	-
Total	22	8	6	45	10	4

glasses/goblets, one shot glass and one decanter. The four glassware vessels recovered from FHH3 are also all drinkware vessels and include just tumblers.

Glassware Vessel Decoration. At least seventeen decorative patterns have been identified in the glassware assemblage recovered from Fort Yamhill and Fort Hoskins including one cut glass pattern (*Flute/Paneled*), fifteen pressed glass patterns (*Flute/Paneled*, *Cincinnati*, *Paneled Oval*, *Prism*, *Ashburton*, *Union*, *Star and Dart*, *Mitre Diamond*, *Fine Diamond*, *Huber*, *Jefferson Colonial*, *Banded Argus*, *Bohemian*, *Thumbprint* and *Plain*) and one roughed pattern (*Plain*) (Table 7.8).

Ten decorative patterns were identified in the glassware assemblage recovered from FYH1 including two vessels cut with the *Flute/Paneled* pattern (cordials), four vessels pressed in the *Flute/Paneled* pattern (tumblers), three vessels pressed in the *Cincinnati* pattern (tumblers), three vessels pressed in the *Paneled Oval* pattern (bowls), one vessel pressed in the *Prism* pattern (tumbler), one vessel pressed in the *Ashburton* pattern (ale glass), one vessel pressed in the *Union* pattern (wine glass/goblet), one vessel pressed in the *Star and Dart* pattern (butter dish), one vessel pressed in the *Mitre Diamond* pattern (compote or celery vase) and one undecorated

Table 7.8 Glassware Vessel Assemblages By Decorative Type and Pattern

Type	Pattern	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
Cut	Flute/Paneled	2	1	-	3	1	-
	Unidentified	-	-	-	-	1	-
	<i>Total Cut</i>	2	1	0	3	2	0
Pressed	Flute/Paneled	4	3	2	26	6	-
	Cincinnati	3	-	-	2	-	-
	Paneled Oval	3	-	-	-	-	-
	Prism	1	1	-	-	-	-
	Ashburton	1	1	-	4	-	2
	Union	1	-	-	-	-	-
	Star and Dart	1	1	-	-	-	-
	Mitre Diamond	1	-	-	-	-	-
	Fine Diamond	-	-	1	-	-	-
	Huber	-	-	1	-	-	-
	Jefferson Colonial	-	-	1	-	-	-
	Banded Argus	-	-	-	1	-	-
	Bohemian	-	-	-	1	1	-
	Thumbprint	-	-	-	1	-	-
	Unidentified	4	1	1	1	-	2
<i>Total Pressed</i>	19	7	6	36	7	4	
Roughed	Plain	-	-	-	2	-	-
Undecorated	Plain	1	-	-	4	1	-
Total Vessels		22	8	6	45	10	4

vessel (shot glass). Four vessels (one tumbler, one wine glass/goblet, one plate and one indeterminate hollow vessel) pressed in unidentified patterns were also recovered from FYH1.

Five decorative patterns were identified in the glassware assemblage recovered from FYH2 including one vessel cut with the *Flute/Paneled* pattern (wine glass/goblet), three vessels pressed in the *Flute/Paneled* pattern (tumblers), one vessel pressed in the *Prism* pattern (tumbler), one vessel pressed in the *Ashburton* pattern (tumbler) and one vessel pressed in the *Star and Dart* (butter dish) pattern. One vessel (tumbler) pressed in an unidentified pattern was also recovered from FYH2.

Four decorative patterns were identified in the glassware assemblage recovered from FYH2 including two vessels pressed in the *Flute/Paneled* pattern (tumblers), one vessel pressed in the *Fine Diamond* pattern (bowl), one vessel pressed

in the *Huber* pattern (bowl) and one vessel pressed in the *Jefferson Colonial* pattern (bowl). One vessel (bowl) pressed in an unidentified pattern was also recovered from FYH3.

Nine decorative patterns were identified in the glassware assemblage recovered from FHH1 including three vessels cut with the *Flute/Paneled* pattern (one tumbler and two decanters), 26 vessels pressed in the *Flute/Paneled* pattern (21 tumblers, four wine glasses/goblets and one shot glass), two vessels pressed in the *Cincinnati* pattern (tumblers), four vessels pressed in the *Ashburton* pattern (tumblers), one vessel pressed in the *Banded Argus* pattern (wine glass/goblet), one vessel pressed in the *Bohemian* pattern (tumbler), one vessel pressed in the *Thumbprint* pattern (wine glass/goblet), two vessels roughed with *plain* decoration (tumblers) and four undecorated vessels (two tumblers, one shot glass and one bowl). One vessel (one wine glass/goblet) pressed in unidentified patterns were also recovered from FHH1.

Four decorative patterns were identified in the glassware assemblage recovered from FHH2 including one vessel cut with the *Flute/Paneled* pattern (decanter), six vessels pressed in the *Flute/Paneled* pattern (four tumblers and two wine glasses/goblets), one vessel pressed in the *Bohemian* pattern (tumbler) and one undecorated vessel (shot glass). One vessel (wine glass/goblet) cut with an unidentified pattern was also recovered from FHH2.

One decorative pattern was identified in the glassware assemblage recovered from FHH3 and included just two vessels pressed in the *Ashburton* pattern (tumblers). Two vessels (tumblers) pressed in unidentified patterns were also recovered from FHH3.

Matching Sets of Glassware Vessels. Multiple vessels with the same decorative pattern were recovered from each of the officers' houses and suggest that at least some of the vessels may have been part of larger matching sets. Of the seventeen glassware patterns identified at least seven patterns were identified as decorating more than one vessel indicating that those vessels "matched" and likely were part of a matching set of glassware vessels. A total of at least fourteen matching

Table 7.9 Matching Sets of Glassware Vessels

Matching Set Patterns	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
<i>Flute/Paneled</i> (Pressed)	1	1	1	1	1	-
<i>Flute/Paneled</i> (Cut)	1	-	-	2	-	-
<i>Cincinnati</i>	1	-	-	-	-	-
<i>Paneled Oval</i>	1	-	-	-	-	-
<i>Ashburton</i>	-	-	-	1	-	1
Roughed Plain	-	-	-	1	-	-
Undecorated Plain	-	-	-	1	-	-
# of Matched Sets	4	1	1	6	1	1

sets of glassware vessels were recovered from Fort Yamhill and Fort Hoskins (Table 7.9).

Four matched sets were identified in the glassware assemblage recovered from FYH1 including two vessels (both cordials) cut with the *Flute/Paneled* pattern, four vessels (three tumblers and one shot glass) pressed in the *Flute/Paneled* pattern, three vessels (all tumblers) pressed in the *Cincinnati* pattern and three vessels (all bowls) pressed in the *Paneled Oval* pattern. Far fewer matched sets were identified in the glassware assemblages recovered from FYH2 and FYH3. One matched set was identified in the glassware assemblage recovered from FYH2, represented by three vessels (all tumblers) pressed in the *Flute/Paneled* pattern. And, one matched set was identified in the glassware assemblage recovered from FYH3 and was represented by just two vessels (both tumblers) also pressed in the *Flute/Paneled* pattern.

Six matched sets were identified in the glassware assemblage recovered from FHH1 including two sets (two decanters and a tumbler) cut with the *Flute/Paneled* pattern, nine vessels (four tumblers, four stemware vessels, and a shot glass) pressed in the *Flute/Paneled* pattern, four vessels (all tumblers) pressed in the *Ashburton* pattern, two vessels (tumblers) roughed with a *plain* pattern and two vessels (a shot glass and bowl) that were undecorated. Far fewer matched sets were identified in the glassware assemblages recovered from FHH2 and FHH3. One matched set was identified in the glassware assemblage recovered from FHH2 and was represented by six vessels (all tumblers) pressed in the *Flute/Paneled* pattern. And, one matched set was identified in the glassware assemblage recovered from FHH3 and was represented by just two vessels (both tumblers) decorated in the *Ashburton* pattern.

Ceramicware. The ceramicware assemblage contains artifacts used in the presentation and the consumption of food and drink and as the name suggests are made of ceramic and includes items such as tea and coffee cups, tea and coffee pots, creamer, sugars, plates, bowls, platters, tureens, pitchers, butter tubs and dishes. A total of 299 ceramicware vessels will be used in this study including 93 recovered from FYH1, 31 recovered from FYH2, 40 recovered from FYH3, 95 recovered from FHH1, 21, recovered from FHH2 and 19 recovered from FHH3. For the purposes of this study the ceramicware artifact type has been sorted into three functional artifact categories: Teaware, Tableware and Servingware.

Ceramicware Vessel Forms. Ten ceramicware vessel forms have been identified in the assemblage including three teaware vessel forms (cups/mugs, saucers and pots/creamers/sugars), two tableware forms (plates and bowls) and five servingware vessel forms (platters, tureens, pitchers, butter tubs and dishes) (Table 7.10).

Table 7.10 Ceramicware Assemblages By Vessel Form

Vessel Form	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
Cups/Mugs	24	7	6	9	7	3
Saucers	24	8	9	17	3	2
Pot/Creamer/Sugar	2	1	-	6	-	2
<i>Total Teaware</i>	<i>50</i>	<i>16</i>	<i>15</i>	<i>32</i>	<i>10</i>	<i>7</i>
Plate	20	8	12	33	5	5
Bowl	10	3	11	15	2	3
<i>Total Tableware</i>	<i>30</i>	<i>11</i>	<i>23</i>	<i>48</i>	<i>7</i>	<i>8</i>
Platter	5	-	2	4	-	1
Tureen	1	-	-	1	-	-
Pitcher	3	-	-	3	-	-
Butter Tub	-	-	-	1	-	-
Dish	-	-	-	1	-	-
<i>Total Servingware</i>	<i>9</i>	<i>0</i>	<i>2</i>	<i>10</i>	<i>0</i>	<i>1</i>
Ind. Flat Vessel	3	3	-	2	3	3
Ind. Hollow Vessel	1	1	-	3	1	-
<i>Total Ind. Vessel</i>	<i>4</i>	<i>4</i>	<i>0</i>	<i>5</i>	<i>4</i>	<i>3</i>
Total	93	31	40	95	21	19

One hundred and sixty-four ceramicware vessels were recovered from Fort Yamhill (FYH1=93, FYH2=31 and FYH3=40). The 93 ceramicware vessels recovered from FYH1 include 50 teaware vessels (24 cups/mugs, 24 saucers and two pots/creamers/sugars), 30 tableware vessels (20 plates and 10 bowls) and nine servingware vessels (five platters, one tureen and three pitchers). Three indeterminate flat vessels and one indeterminate hollow vessel were also recovered from FYH1. The 31 ceramicware vessels recovered from FYH2 include 16 teaware vessels (seven cups/mugs, eight saucers and one pot/creamer/sugar), 11 tableware vessels (eight plates and three bowls) and no servingware vessels. The 40 ceramicware vessels recovered from FYH3 include 15 teaware vessels (six cups/mugs and nine saucers), 23 tableware vessels (12 plates and 11 bowls) and two servingware vessels (platters).

One hundred and thirty-five ceramicware vessels were recovered from Fort Hoskins (FHH1=95, FHH2=21 and FHH3=19). The 95 ceramicware vessels recovered from FHH1 include 32 teaware vessels (nine cups/mugs, 17 saucers and 6 pots/creamers/sugars), 48 tableware vessels (33 plates and 15 bowls) and 10 servingware vessels (four platters, one tureen, three pitchers, one butter tub and one dish). Two indeterminate flat vessels and three indeterminate hollow vessels were also recovered from FHH1. The 21 ceramicware vessels recovered from FHH2 include 10 teaware vessels (seven cups/mugs and three saucers) and seven tableware vessels (five plates and two bowls). Three indeterminate flat vessels and three hollow vessels were also recovered from FHH2. The 19 ceramicware vessels recovered from FHH3 include seven teaware vessels (three cups/mugs, two saucers and two pots/creamers/sugars), eight tableware vessels (five plates and three bowls) and one servingware vessel (platter). Three indeterminate flat vessels were also recovered from FHH3.

Ceramicware Vessel Paste. Four paste or fabric types have been identified in the ceramicware assemblage recovered from Fort Yamhill and Fort Hoskins used in this study including porcelain, ironstone, whiteware and yellowware (Table 7.11). The term “porcelain” is used here to refer to a ceramic fabric that is relatively thin in

cross-section, with a very white appearance, a high level of translucency, high mechanical strength and high chip resistance. The term “ironstone” will be used here to refer to vessels with a very durable white earthenware fabric, usually thick in cross-section and sometimes vitrified or semi-vitrified. The term “whiteware” will be used here to refer to vessels with a soft, water-absorbent earthenware body usually white, cream or ivory in color and made impermeable only by glazing. The term “yellowware” will be used here to refer to vessels with a fine grained body yellow in color that is sturdier than redware but less dense than stoneware. A more detailed discussion of ceramic paste classification with citations can be found in Appendix D.

Four pastes/fabrics were identified in the ceramicware assemblage recovered from FYH1 including 14 porcelain vessels (three cups/mugs, two saucers, two pots/creamers/sugars, five plates, one tureen and one indeterminate flat vessel), 66 ironstone vessels (18 cups/mugs, 17 saucers, one pot/creamer/sugar, 15 plates, eight bowls, four platters, two pitchers and two indeterminate flat vessels), 12 whiteware vessels (three cups/mugs, five saucers, two bowls, one platter and one indeterminate hollow vessel) and one yellowware vessel (pitcher).

Three pastes/fabrics were identified in the ceramicware assemblage recovered from FYH2 including two porcelain vessels (plates), 24 ironstone vessels (six cups/mugs, six saucers, one pot/creamer/sugar, six plates, two bowls, two indeterminate flat vessels and one indeterminate hollow vessel) and five whiteware vessels (one cup/mug, two saucers, one bowl and one indeterminate flat vessel).

Three pastes/fabric were identified in the ceramicware assemblage recovered from FYH3 including one porcelain vessel (cup/mug), 29 ironstone vessels (three

Table 7.11 Ceramicware Assemblages By Vessel Paste

Paste	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
Porcelain	14	2	1	35	5	2
Ironstone	66	24	29	45	11	13
Whiteware	12	5	10	15	5	4
Yellowware	1	-	-	-	-	-
Total	93	31	40	95	21	19

cups/mugs, five saucers, 12 plates, 8 bowls and one platter) and 10 whiteware vessels (two cups/mugs, four saucers, three bowls and one platter).

Three pastes/fabrics were identified in the ceramicware assemblage recovered from

FHH1 including 35 porcelain vessels (six cups/mugs, five saucers, three pots/creamers/sugars, 15 plates, two bowls, one tureen, one pitcher and one indeterminate flat vessel), 45 ironstone vessels (one cup/mug, 12 saucers, two pots/creamers/sugars, 13 plates, five bowls, two platters, one butter tub, one dish, two pitchers, one indeterminate flat vessel and three indeterminate hollow vessels) and 15 whiteware vessels (five plates, seven bowls, two platters and one indeterminate flat vessel).

Three pastes/fabrics were identified in the ceramicware assemblage recovered from FHH2 including five porcelain vessels (one cup/mug, one saucer, one plate, one indeterminate flat vessel and one indeterminate hollow vessel), 11 ironstone vessels (three cups/mugs, two saucers, four plates and two indeterminate flat vessels) and five whiteware vessels (three cups/mugs and two bowls).

Three pastes/fabrics were identified in the ceramicware assemblage recovered from FHH3 including two porcelain vessels (one pot/creamer/sugar and one plate), 13 ironstone vessels (two cups/mugs, two saucers, one pot/creamer/sugar, four plates, one bowl, one platter and two indeterminate flat vessels) and four whiteware vessels (one cups/mug, one plate and two bowls).

Ceramicware Vessel Decoration. Eight decorative types (gilded, hand-painted, transfer-printed, molded, sponge decorated, annular/banded, edge decorated and undecorated) and 59 distinct decorative patterns have been identified in the ceramicware assemblage. Most of the decoration types were limited to one or a few paste types for example gilded decoration was only found on porcelain vessels, hand-painted decoration on porcelain and whiteware vessels, transfer-print decoration on porcelain and whiteware vessels, molded decoration on porcelain and ironstone vessels, sponge decorated only on whiteware vessels, annular/banded decoration on whiteware and yellowware vessels and edge decoration only on whiteware vessels. Undecorated or plain vessels were found within all paste types with the exception of

yellowware vessels. The eight decorative types and 59 distinct decorative patterns identified in the ceramicware assemblage recovered from each officers' house is summarized below in tabular format (Table 7.12).

Table 7.12 Ceramicware Assemblages By Vessel Decoration Type and Pattern, 1 of 3

Decoration and Pattern¹	Paste²	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
<u>Gilded</u>							
<i>Rococo Berlin</i>	P	-	-	-	3	-	-
Band/Line	P	4	-	-	-	-	-
Total Gilded		4	0	0	3	0	0
<u>Hand-Painted</u>							
Gerbera Daisies	P	5	1	-	-	-	-
Blue and Pink Flowers	W	1	-	1	-	-	-
Green Zig-Zag	W	-	1	-	-	-	-
Polychrome Floral	W	-	1	1	1	2	-
Total Hand-Painted		6	3	2	1	2	0
<u>Transfer-Printed</u>							
Blue Plum Blossom	P	-	-	-	1	-	-
<i>Dr. Franklin's Maxims</i>	W	2	-	-	-	-	-
<i>Black Rhone Scenery</i>	W	1	-	-	-	-	-
<i>Blue Formosa</i>	W	-	-	-	1	-	-
Purple Flowers	W	1	-	1	-	-	-
Purple Line	W	-	1	-	-	-	-
Blue Floral 1	W	-	-	-	1	-	-
Blue Floral 2	W	-	-	-	1	-	-
Black Floral	W	-	-	-	1	1	-
Flow Blue Floral	W	-	-	-	-	-	1
Total Transfer-Printed		4	1	1	5	1	1
<u>Sponge Decorated</u>							
Red Quatrefoils	W	1	-	-	-	-	-
Blue Diamonds	W	1	-	-	-	-	-
Pink Ovals	W	1	-	-	-	-	-
Total Sponge Decorated		3	0	0	0	0	0
<u>Edge Decorated (Blue)</u>							
Neoclassical Scalloped	W	-	1	1	2	-	-
Unscalloped	W	-	-	-	2	-	-
Total Edge Decorated		0	1	1	4	0	0

¹ Official pattern names are italicized; ² Vessel Paste Type: P = Porcelain, W = Whiteware, I = Ironstone and Y = Yellowware

Table 7.12 Ceramicware Assemblages By Vessel Decoration Type and Pattern, 2 of 3

Decoration and Pattern¹	Paste²	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
<u>Molded</u>							
<i>Water Lily</i>	P	-	-	-	1	-	-
<i>Gothic</i>	I	8	-	-	3	2	-
<i>Lily of the Valley</i>	I	2	1	1	-	-	-
<i>Pomegranate Shape</i>	I	2	1	1	-	-	-
<i>Sharon Arch</i>	I	2	1	1	1	-	-
<i>Columbia Shape</i>	I	2	1	1	-	-	1
<i>Hebe Shape</i>	I	2	-	1	-	-	-
<i>Sydenham</i>	I	1	-	-	1	-	-
<i>Fig/Round</i>	I	1	-	-	-	-	-
<i>Lily</i>	I	1	-	-	-	-	-
<i>Fig/Union Shape</i>	I	1	-	-	-	-	-
<i>Rolling Star</i>	I	1	-	-	-	-	-
<i>Scalloped Decagon</i>	I	1	1	-	-	-	-
<i>Double Sydenham</i>	I	1	-	1	3	-	-
<i>Vintage Shape</i>	I	-	2	1	-	-	-
<i>Pearl Sydenham</i>	I	-	1	-	1	-	-
<i>Trent Shape</i>	I	-	-	1	-	1	-
<i>Boote's 1851 Round</i>	I	-	-	1	-	-	-
<i>Western Shape</i>	I	-	-	-	1	1	-
<i>Arch Loop</i>	I	-	-	-	1	-	-
<i>True Scallop</i>	I	-	-	-	1	-	-
<i>Prize Puritan</i>	I	-	-	-	1	-	-
<i>Hanging Leaves</i>	I	-	-	-	-	1	-
<i>Triple Boarder</i>	I	-	-	-	-	1	-
<i>Portland Shape</i>	I	-	-	-	-	-	1
Unidentified	I	10	8	2	14	2	5
Total Molded		35	16	11	28	8	7
<u>Annular/Banded</u>							
Green Line 1	W	1	-	-	-	-	-
Green Line 2	W	-	-	4	-	-	-
Green Band	W	3	1	1	-	-	-
Blue Band	W	-	-	-	3	1	-
Blue Bands (Three)	W	-	-	-	2	1	1
Black Line	W	-	-	1	-	-	-
Brown Line	W	-	-	-	2	-	1
White Lines	Y	1	-	-	-	-	-
Total Annular/Banded		5	1	6	7	2	2

¹ Official pattern names are italicized; ² Vessel Paste Type: P = Porcelain, W = Whiteware, I = Ironstone and Y = Yellowware

Table 7.12 Ceramicware Assemblages By Vessel Decoration Type and Pattern, 3 of 3

<u>Undecorated</u>							
Sided (Dodecagon)	P	-	-	-	5	-	-
Round (Straight Rim)	P	2	1	1	19	2	-
Round (Straight Rim)	I	31	8	18	20	5	8
Round (Flared Rim)	I	3	-	-	3	-	-
Round (Straight Rim)	W	-	-	-	-	1	-
Total Undecorated		36	9	19	47	8	9
Total Ceramicware Vessels		93	31	40	95	21	19

¹ Official pattern names are italicized; ² Vessel Paste Type: P = Porcelain, W = Whiteware, I = Ironstone and Y = Yellowware

Twenty-eight decorative patterns were identified in the ceramicware assemblage recovered from FYH1 including one unidentified gilded pattern (band/line), two unidentified hand-painted patterns (gerbera daisies, blue and pink flowers), three transfer-printed patterns (*Dr. Franklin Maxims*, *Rhone Scenery*, and one unidentified purple flower pattern), 13 molded patterns (*Gothic*, *Lily of the Valley*, *Pomegranate Shape*, *Sharon Arch*, *Columbia Shape*, *Hebe Shape*, *Sydenham*, *Fig/Round*, *Lily*, *Fig/Union*, *Rolling Star*, *Scalloped Decagon*, *Double Sydenham*), three unidentified sponge decorated patterns (red quatrefoils, blue diamonds and pink ovals), three unidentified annular/banded patterns (green line, green band and white lines) and three types of plain/undecorated vessels (porcelain vessels with straight rims, ironstone vessels with straight rims and ironstone vessels with flared rims). Ten ironstone vessels with unidentified molded patterns were also recovered from FYH1.

Fifteen decorative patterns were identified in the ceramicware assemblage recovered from FYH2 including three unidentified hand-painted patterns (gerbera daisies, green zig-zag and polychrome floral), one unidentified transfer-printed pattern (purple flowers), seven molded patterns (*Lily of the Valley*, *Pomegranate Shape*, *Sharon Arch*, *Columbia Shape*, *Scalloped Decagon*, *Vintage Shape* and *Pearl Sydenham*), one unidentified annular/banded pattern (green band), one edge decorated pattern (blue neoclassical scalloped) and two types of plain/undecorated vessels (porcelain vessels with straight rims and ironstone vessels with straight rims). Eight ironstone vessels with unidentified molded patterns were also recovered from FYH2.

Eighteen decorative patterns were identified in the ceramic assemblage recovered from FYH3 including two unidentified hand-painted patterns (blue and pink flowers and polychrome floral), one unidentified transfer-printed pattern (purple flowers), nine molded patterns (*Lily of the Valley*, *Pomegranate Shape*, *Sharon Arch*, *Columbia Shape*, *Hebe Shape*, *Double Sydenham*, *Vintage Shape*, *Trent Shape* and *Boote's 1851 Round*), three unidentified annular/banded patterns (green line 2, green band and black line), one edge decorated pattern (blue neoclassical scalloped) and two types of plain/undecorated vessels (porcelain vessels with straight rims and ironstone vessels with straight rims). Two ironstone vessels with unidentified molded patterns were also recovered from FYH3.

Twenty-six decorative patterns were identified in the ceramic assemblage recovered from FHH1 including one gilded pattern (*Rococo Berlin*), one unidentified hand-painted pattern (polychrome floral), five transfer-printed patterns (*Formosa*, three unidentified blue floral patterns and one unidentified black floral pattern), ten molded patterns (*Water Lily*, *Gothic*, *Sharon Arch*, *Sydenham*, *Double Sydenham*, *Pearl Sydenham*, *Western Shape*, *Arch Loop*, *True Scallop* and *Prize Puritan*), three unidentified annular/banded patterns (blue band, three blue bands and brown line), two edge decorated patterns (neoclassical scalloped and unscalloped) and four types of plain/undecorated vessels (dodecagon sided porcelain vessels, porcelain vessels with straight rims, ironstone vessels with straight rims and ironstone vessels with flared rims). Fourteen ironstone vessels with unidentified molded patterns were also recovered from FHH1.

Twelve decorative patterns were identified in the ceramic assemblage recovered from FHH2 including one unidentified hand-painted pattern (polychrome floral), one unidentified transfer-printed pattern (black floral), five molded patterns (*Gothic*, *Trent Shape*, *Western Shape*, *Hanging Leaves*, and *Triple Boarder*), two unidentified annular/banded patterns (blue band and three blue bands) and three types of plain/undecorated vessels (porcelain vessels with straight rims, ironstone vessels with straight rims and whiteware vessels with straight rims). Eight ironstone vessels with unidentified molded patterns were also recovered from FHH2.

Six decorative patterns were identified in the ceramic assemblage recovered from FHH3 including one unidentified transfer-printed pattern (flow blue floral), two molded patterns (*Columbia Shape* and *Portland Shape*), two unidentified annular/banded patterns (three blue bands and brown line) and one type of plain/undecorated vessel (ironstone vessels with straight rims). Five ironstone vessels with unidentified molded patterns were also recovered from FHH3.

Ceramicware Matching Sets. Multiple vessels with the same decorative pattern were recovered from each of the officers' houses and suggests that at least some of the vessels may have been part of larger matching sets. Of the 59 ceramicware patterns identified at least 22 patterns were identified as decorating more than one vessel and suggests that those vessels were likely part of a matching set of ceramicware vessels. A total of at least 34 matching sets of ceramicware vessels were recovered from Fort Yamhill and Fort Hoskins (Table 7.13).

Table 7.13 Matching Sets of Ceramicware Vessels

Decorative Type	Matching Set Pattern	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
Gilded	Rococo Berlin	-	-	-	1	-	-
	Band/Line	1	-	-	-	-	-
Hand-Painted	Gerbera Daisies	1	-	-	-	-	-
	Polychrome Floral	-	-	-	-	1	-
Transfer-Printed	Dr. Franklins Maxims	1	-	-	-	-	-
Molded	Gothic	1	-	-	1	1	-
	Lily of the Valley	1	-	-	-	-	-
	Pomegranate Shape	1	-	-	-	-	-
	Sharon Arch	1	-	-	-	-	-
	Columbia Shape	1	-	-	-	-	-
	Hebe Shape	1	-	-	-	-	-
	Double Sydenham	-	-	-	1	-	-
	Vintage Shape	-	1	-	-	-	-
Annular/Banded	Green Lines	1	-	1	-	-	-
	Blue Band (Single)	-	-	-	1	-	-
	Blue Bands (Three)	-	-	-	1	-	-
	Brown Line	-	-	-	1	-	-
Edge Decorated	Blue Neoclassical	-	-	-	1	-	-
	Scalloped Blue Unscaloped	-	-	-	1	-	-
Undecorated	Sided (Dodecagon)	-	-	-	1	-	-
	Round (Straight Rim)	2	1	1	2	2	1
	Round (Flared Rim)	1	-	-	1	-	-
Total		13	2	2	12	4	1

At Fort Yamhill thirteen matched sets were identified in the ceramicware assemblage recovered from FYH1 including two porcelain saucers gilded with a *band/line* pattern, one porcelain cup/mug, three porcelain plates and one porcelain tea pot or sugar lid hand-painted with gerbera daisies pattern, two whiteware cups/mugs transfer-printed with a *Dr. Franklin's Maxims* pattern, one ironstone cup/mug, three ironstone saucers, one ironstone plate and one ironstone pitcher molded with the *Gothic* pattern, two ironstone plates molded with the *Lily of the Valley* pattern, an ironstone cup/mug and an ironstone saucer molded with the *Pomegranate* pattern, an ironstone cup/mug and an ironstone saucer molded with the *Sharon Arch* pattern, an ironstone cup/mug and an ironstone plate molded with the *Columbia Shape* pattern, two ironstone platters molded with the *Hebe Shape* pattern, a whiteware saucer and a whiteware bowl banded with green lines, three plain/undecorated round-shaped porcelain vessels (one cup/mug and one porcelain plate) with and 30 plain/undecorated round-shaped ironstone vessels (eight cups/mugs, eight saucers, seven plates, five bowls and two platters) with straight rims, and three plain/undecorated round-shaped ironstone vessels (all bowls) with flared rims.

Four matched sets were identified in the ceramicware assemblages recovered from FYH2 and FYH3. Two matched sets were identified in the ceramicware assemblage recovered from FYH2 including two ironstone plates molded with the *Vintage Shape* pattern and six plain/undecorated round ironstone vessels (two cups/mugs, two saucers and two bowls with straight rims) and two matched set were also identified in the ceramic assemblage recovered from FYH3 represented 17 plain/undecorated round ironstone vessels (one cup/mug, two saucers, seven plates and seven bowls with straight rims) and four whiteware bowls banded with green lines.

Twelve matched sets were identified in the ceramicware assemblage recovered from FHH1 including one porcelain cup/mug and a teaware vessel lid gilded with the *Rococo Berlin* pattern, one ironstone cup/mug, one ironstone pitcher and one ironstone butter dish molded with the *Gothic* pattern, three ironstone plates molded with the *Double Sydenham* pattern, three whiteware bowls banded with a single blue band, two whiteware bowls banded with three blue lines, two whiteware

bowls banded with a single brown line, one whiteware plate and one whiteware platter are edge decorated with a blue neoclassical scalloped pattern, one whiteware plate and one whiteware platter are edge decorated with a blue unscalloped pattern, five plain/undecorated dodecagon-shaped (10-sided) porcelain vessels (four cups/mugs and one saucer), nine plain/undecorated round-shaped porcelain vessels (four saucers, two plates, two bowls and one teaware vessel lid), 16 plain/undecorated round-shaped ironstone vessels (two cups/mugs, one saucer, seven plates, three bowls, two platters and one teaware vessel lid) with straight rims and three plain/undecorated round-shaped ironstone vessels (one saucer and two bowls) with flared rims.

Five matched sets were identified in the ceramicware assemblages recovered from FHH2 and FHH3. Four matched sets were identified in the ceramicware assemblage recovered from FHH2 including one porcelain cup and one porcelain indeterminate flat vessel hand-painted with an identical polychrome floral pattern, one ironstone cup/mug and one indeterminate flat vessel molded with the *Gothic* pattern, two plain/undecorated round-shaped porcelain vessels (one saucer and one plate) and three plain/undecorated round-shaped ironstone vessels (one cup/mug, one saucer and one plate) with straight rims. One matched set was identified in the ceramicware assemblage recovered from FHH3 and is represented by six plain/undecorated round-shaped ironstone vessels (one saucer, three plates, one bowl and one platter) with straight rims.

Miller CC Index Values. In order to analyze the entire ceramicware assemblage as a whole, instead of by individual ceramicware vessel attributes (i.e., vessel form, paste/vessel type and decoration), the Miller CC Index Value (Miller 1980, 1991) method was used to calculate a mean index value for each of the ceramicware assemblages by vessel form (teas, flatware and bowls) and an ceramicware assemblage mean. The detailed methods used to calculate each of the index values are presented in the calculation tables in Appendix E which include the specific vessel forms, decoration, the index year and value and number of vessels used in these calculations.

In all 262 ceramicware vessels were categorized using the Miller CC Index Value typology including 151 vessels recovered from Fort Yamhill and 111 vessels recovered from Fort Hoskins. At Fort Yamhill 83 ceramicware vessels were used to calculate the index values for FYH1 including 48 teas, 25 flatware vessels and 10 bowls; 28 ceramicware vessels were used to calculate the index values for FYH2 including 15 teas, nine flatware vessels and four bowls; and 40 ceramicware vessels were used to calculate the index values for FYH3 including 15 teas, 14 flatware vessels and 11 bowls. At Fort Hoskins 78 ceramicware vessels were used to calculate the index values for FHH1 including 26 teas, 37 flatware vessels and 15 bowls; 17 ceramicware vessels were used to calculate the index values for FHH2 including 10 teas, five flatware vessels and two bowls; and 16 ceramicware vessels were used to calculate the index values for FHH3 including five teas, eight flatware vessels and three bowls. The index values calculated are presented in Table 7.14.

At Fort Yamhill the ceramicware assemblage recovered from FYH1 had the highest Miller CC Index Values for all three vessel forms and the highest mean for all vessel forms (2.98 for teas, 2.62 for flatware, 2.22 for bowls and a total mean of 2.78). The ceramicware assemblage recovered from FYH2 had the second highest values for all three vessel forms and the mean for all vessel forms (2.07 for teas, 2.31 for flatware, 2.15 for bowl and a total mean of 2.16). And, the ceramicware assemblage recovered from FYH3 had the lowest values for all three vessel forms and the mean for all vessel forms (1.96 for teas, 1.98 for flatware, 2.12 for bowls and a total mean of 2.01).

A similar pattern is reflected in the analysis of the ceramicware assemblage recovered from Fort Hoskins where FHH1 also had the highest index values for all three vessel forms and the mean for all vessel forms (2.96 for teas, 2.90 for flatware, 1.83 for bowls and a total mean of 2.71). The ceramicware assemblage recovered from FHH2 had the second highest values for teas (2.25) but the lowest values for flatware (2.34), bowls (1.14) and the lowest value mean for all vessel forms (2.04). And, the ceramicware assemblage recovered from FHH3 had the lowest value for teas (1.95) but the second highest values for flatware (2.43), bowls (1.59) and mean for all vessel forms (2.12).

Table 7.14 Miller CC Index Values for Ceramicware Vessels

Vessel Form	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
Teas	2.98	2.07	1.96	2.96	2.25	1.95
Flatware	2.62	2.31	1.98	2.90	2.34	2.43
Bowls	2.22	2.15	2.12	1.83	1.14	1.59
Total Mean	2.78	2.16	2.01	2.71	2.04	2.12

Tinware. The tinware assemblage contains artifacts made of tin or tinned iron and were used in the consumption of food and drink. Only one tinware vessel will be used in this study, a mess pan, recovered from Fort Hoskins. The single tinware vessel is represented by the partial base and sides of a tinned iron mess pan recovered from FHH1. The mess pan is crushed but the vessel measures approximately 8 inches in diameter and 4 inches high, measurements consistent with mess pans dating to the 1860s. Additionally, the mess pan is extremely corroded which made further analysis and identification difficult.

Cutlery. The cutlery assemblage contains artifacts that are specifically used in the preparation, serving and the consumption of food and for the purposes of this study are sorted into four functional categories: Forks, Spoons, Knives and Indeterminate Utensils. A total of 20 cutlery utensils were recovered from Fort Yamhill and Fort Hoskins and will be used in this study including four forks, seven spoons, five knives and four indeterminate utensils represented by handles (Table 7.15).

Eleven cutlery artifacts were recovered from Fort Yamhill (FYH1=8, FYH2=0 and FYH3=3). The eight cutlery items recovered from FYH1 includes four spoons (two salt/sugar spoons made of pewter and molded with a Rococo Revival clam shell motif and two tea/table spoons also made of pewter and molded with a pattern similar to *Hannover*), three table knives (two of which were made of iron with bovine bone handles inlaid with a union shield) and one indeterminate utensil handle (made of pewter and undecorated). The three cutlery items recovered from FYH3 includes one spoon (tea/table spoon made of pewter and molded with a pattern similar to *Hannover*), one table knife (represented by an iron blade tip) and one indeterminate utensil tang (made of iron with rivet holes for attaching the handles/scales).

Table 7.15 Cutlery Assemblages By Utensil Form and Type

Utensil Form and Type	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
Fork						
Three-Tined Fork	-	-	-	2	1	1
<i>Total Forks</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>2</i>	<i>1</i>	<i>1</i>
Spoon						
Salt/Sugar Spoon	2	-	-	-	-	-
Tea/Table Spoon	2	-	1	-	-	-
Serving Spoon	-	-	-	1	-	1
<i>Total Spoons</i>	<i>4</i>	<i>0</i>	<i>1</i>	<i>1</i>	<i>0</i>	<i>1</i>
Knife						
Table Knife	3	-	1	1	-	-
<i>Total Knives</i>	<i>3</i>	<i>0</i>	<i>1</i>	<i>1</i>	<i>0</i>	<i>0</i>
Indeterminate Utensils						
N/A	1	-	1	-	2	-
<i>Total Indeterminate Utensils</i>	<i>1</i>	<i>0</i>	<i>1</i>	<i>0</i>	<i>2</i>	<i>0</i>
Total Utensils	8	0	3	4	3	2

Nine cutlery artifacts were recovered from Fort Hoskins (FHH1=4, FHH2=3 and FHH3=2). The four cutlery items recovered from FHH1 includes two forks (three-tined with a wood handles), one serving spoon (made of Britannia pewter with the handle molded in the *Fiddle Thread* pattern) and one table knife (with wood handles). The three cutlery artifacts recovered from FHH2 includes one fork (likely three-tined with a wood handle) and two indeterminate utensil handles (made of iron). The two cutlery artifacts recovered from FHH3 includes one fork (three-tined and made of iron) and one serving spoon (made of pewter and molded with a scroll motif).

Foodstuffs. The foodstuff assemblage includes the physical remains of the foods consumed and the containers in which food was packaged such and the remains of cows, pigs, chickens, deer, elk, geese, oysters, clams food canisters, food bottles and condiment bottles. A total of 388 foodstuff artifacts will be used in this study (Table 7.16) including 86 recovered from FYH1, 58 recovered from FYH2, 51 recovered from FYH3, 80 recovered from FHH1, 44 recovered from FHH2 and 69

Table 7.16 Foodstuff Assemblages By Type and Category

Type	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
Food Remains						
Faunal	43	52	45	58	26	58
Botanical	2	-	-	-	-	-
<i>Total Food Remains</i>	45	52	45	58	26	58
Food Containers						
Food Canister	24	0	3	7	6	5
Food Bottle	-	-	1	2	4	-
Condiment Bottle	17	6	2	13	8	6
<i>Total Food Containers</i>	41	6	6	22	18	11
Total	86	58	51	80	44	69

recovered from FHH3. For the purpose of this study the foodstuffs artifact class has been sorted into two functional artifact types: food remains and food containers.

Food Remains. The food remains artifact assemblage contains the physical remains of the food consumed by the occupants of the commissioned officers' houses and includes the faunal remains (teeth, bones, scales and shells) of consumed animals and the botanical remains of consumed fruits. A total of 284 food remains will be used in this study including 45 recovered from FYH1, 52 recovered from FYH2, 45 recovered from FYH3, 58 recovered from FHH1, 25 recovered from FHH2 and 58 recovered from FHH3. For the purposes of this study the food remains artifact type has been sorted into two typological categories: Faunal Food Remains and Botanical Food Remains.

Faunal Food Remains. Two hundred and eight-two faunal food remains have been positively identified in the assemblage and will be used in this study including at least eleven domesticated and wild species: cow (*Bos taurus*), pig (*Sus scrofa*), chicken (*Gallus gallus domesticus*), deer (*Odocoileus sp.*) elk (*Cervus sp.*), geese (*Anser sp.*), indeterminate fowl (*Galliform*), fish (*Osteichthyes*), oysters (*Ostrea lurida*), clams (*Tresus sp.* and *Protothaca Staminea*) and cockles (*Clinocardium nuttallii*) (Table 7.17).

Table 7.17 Faunal Remains Assemblages By Taxa

Common Name (Scientific Name)	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
Domesticated						
Cow (<i>Bos taurus</i>)	20	16	29	-	3	15
Pig (<i>Sus scrofa</i>)	3	8	1	-	2	1
Chicken (<i>Gallus gallus domesticus</i>)	3	1	1	1	4	3
<i>Total Domestic Fauna</i>	26	25	31	1	9	19
Wild Terrestrial						
Deer (<i>Odocoileus</i> sp.)	16	26	14	-	1	6
Elk (<i>Cervus</i> sp.)	1	-	-	-	-	-
Goose (<i>Anser</i> sp.)	-	-	-	-	1	-
Ind. Fowl (Galliform)	-	1	-	-	3	-
<i>Total Wild Terrestrial Fauna</i>	17	27	14	0	5	6
Wild Aquatic						
Fish (<i>Osteichthyes</i>)	-	-	-	1	-	-
Oyster (<i>Ostrea lurida</i>)	-	-	-	55	11	19
Clam (<i>Tresus</i> sp.)	-	-	-	-	-	13
Clam (<i>P. staminea</i>)	-	-	-	1	-	-
Cockle (<i>C. nuttallii</i>)	-	-	-	1	-	1
<i>Total Wild Aquatic Fauna</i>	0	0	0	58	11	33
Total	43	52	45	59	25	58

Butchery Cuts. In order to facilitate analysis all faunal material was identified to consumable unit either as whole animal (chickens, geese, indeterminate fowl, fish, oysters and clams) or as butchery cuts (cow, pig and deer) (Table 7.17). To identify butchery cuts all faunal remains were first identified by taxa and element to determine number of individual specimens (NISP). As cows, pigs and deer are not consumed whole but instead in parts the remains were further identified by portion and compared to historic butchery sources to indentify and determine the minimum number of butchery cuts (MNBC). Since chicken, geese, fowl and the wild aquatic fauna (oysters and clams) are generally consumed whole instead of in parts these remains were further analyzed to determine the minimum number of individuals (MNI) present. The figures below represent consumable units or butchery cuts quantified as MNI for chicken, chicken eggs, geese, indeterminate fowl, fish and shellfish and as MNBC for cows, pigs, chickens, deer and elk.

Table 7.17 Butchery Cut Assemblages By Taxa and Butchery Cut

Taxa/Butchery Cut	Preference	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
<u>Cow (Beef)</u>							
Sirloin	High (9)	-	-	4	-	-	7
Chuck	High (8)	-	1	1	-	1	-
Round	High (7)	6	3	8	-	-	1
Rump	Medium (6)	2	1	5	-	-	-
Ribs	Medium (6)	6	4	4	-	-	1
Shoulder	Medium (5)	4	-	3	-	2	-
Short Plate	Low (3)	2	3	-	-	-	-
Leg	Low (2)	-	1	1	-	-	2
Foreshank	Low (2)	-	-	3	-	-	2
Foot	Low (1)	-	1	-	-	-	2
<i>Total Beef</i>		20	14	29	0	3	15
<u>Pig (Pork)</u>							
Loin	Medium (6)	-	2	1	-	1	-
Shoulder	Medium (4)	-	1	-	-	-	-
Foreleg	Low (3)	3	-	-	-	-	-
Head/Jowl	Low (1)	-	1	-	-	1	1
Side Meat/Bacon	N/A	-	4	-	-	-	-
<i>Total Pork</i>		3	8	1	0	2	1
<u>Deer/Elk (Venison)</u>							
Round	High (7)	-	-	6	-	-	1
Rump	Medium (6)	4	7	3	-	-	3
Ribs	Medium (6)	1	5	2	-	-	-
Shoulder	Medium (5)	3	1	-	-	-	-
Short Plate	Low (3)	1	4	-	-	-	-
Leg	Low (2)	2	3	-	-	1	1
Foreshank	Low (2)	1	3	3	-	-	1
Foot	Low (1)	5	-	-	-	-	-
<i>Total Venison</i>		17	23	14	0	1	6
<u>Poultry</u>							
Chicken Egg	High (7)	2	-	-	-	-	1
Chicken	Medium (6)	4	7	3	-	-	3
Anseriform	Medium (6)	1	5	2	-	-	-
Galliform	Medium (5)	3	1	-	-	-	-
<i>Total Poultry</i>		3	2	1	1	8	3
<u>Shellfish</u>							
Oysters	High (8)	-	-	-	55	11	19
Clams	Low (2)	-	-	-	1	-	14
<i>Total Shell Fish</i>		0	0	0	56	11	33
Total		43	47	45	57	25	58

At Fort Yamhill 43 butchery cuts were identified in the faunal assemblage recovered from FYH1 including 20 cuts of beef (six rounds, two rumps, six ribs, four shoulders and two short plates), three cuts of pork (all forelegs), 17 cuts of venison (four rumps, one ribs, three shoulders, one short plate, two legs, one foreshank and five feet) and three poultry units (one chicken and two chicken eggs).

Forty-seven butchery cuts were identified in the faunal assemblage recovered from FYH2 including 14 cuts of beef (one chuck, three rounds, one rump, four ribs, three short plates, one leg and one foot), eight cuts of pork (two loins, one shoulder, one head/jowl and four side meat/bacon), 23 cuts of venison (seven rumps, five ribs, one shoulder, four short plates, three legs and three foreshanks) and two poultry units (one chicken and one galliform fowl).

And, 45 butchery cuts were identified in the faunal assemblage recovered from FYH3 including 29 cuts of beef (four sirloins, one chuck, eight rounds, five rumps, four ribs, three shoulders, one leg and three foreshanks), one cut of pork (a loin), 14 cuts of venison (six rounds, three rumps, two ribs and three foreshanks) and one poultry unit (a chicken).

At Fort Hoskins 57 butchery cuts were identified in the faunal remains recovered from FHH1 including one poultry cut (a chicken) and 56 shellfish (55 oysters and one clam).

Twenty-five butchery cuts were identified in the faunal remains recovered from FHH2 including three cuts of beef (one chuck and two shoulders), two cuts of pork (one loin and one head/jowl), one cut of venison (a leg), eight cuts of poultry (four chickens, one anseriform and three galliforms) and 11 shellfish (all oysters).

Fifty-eight butchery cuts were identified in the faunal remains recovered from FHH3 including 15 beef cuts (seven sirloins, one round, one rib, two legs, two foreshanks and two feet), one pork cut (a head/jowl), six venison cuts (one round, three rumps, one leg and one foreshank), three cuts of poultry (all chicken) and 33 shellfish (19 oysters and 14 clams).

Butchery Cut Preference Index. To better understand the consumer choices concerning meat consumption the butchery cuts recovered from both Fort Yamhill and Fort Hoskins were analyzed in reference to their historical preference (Table 7.18). Each butchery cut was ranked by preference as either High, Medium or Low and with corresponding preference value ranging from 9 to 1, with values of 9, 8 or 7 for the high preferred butchery cuts, 6, 5 or 4 for medium preferred butchery cuts and 3, 2 or 1 for low preferred butchery cuts. The butchery cut ranks and preference values used here are relative to each other regardless of taxa and are based on variables such as tenderness, cooking and consumption methods, meat yield and availability. Butchery cut preference and rank values were based on Horton (2014:383-384) and modified using Adams (2009:101-102). A detailed description of the butchery cuts and their analysis can be found in Appendix F.

At Fort Yamhill the butchery cut assemblage recovered from FYH1 contained a relatively low number of high preference butchery cuts (n=9 or 20.9%), a higher number of medium preference butchery cuts (n=20 or 46.5%) and a moderate number of the low preference butchery cuts (n=14 or 32.5%) and as a result the assemblage has the highest preference index value for poultry (8.66), second highest preference index values for beef (5.65), and pork (3.00), the lowest butchery cut preference index value for venison (3.47) and the second highest overall mean preference index value (4.81) for all taxa.

The butchery cut assemblage recovered from FYH2 also contained a relatively low number of high preference butchery cuts (n=5 or 11.6%), but a high number of medium preference butchery cuts (n=21 or 48.8%) and a high number of the low preference butchery cuts (n=17 or 39.5%) and as a result has the second highest preference index value for venison (4.39) but the lowest preference index values for beef (4.50), pork (2.12), poultry (5.00) and the lowest overall mean preference index value (4.08) for all taxa.

The butchery cut assemblage recovered from FYH3 is quite different and contained a high number of high preference butchery cuts (n=20 or 44.4%) and a high number of medium preference butchery cuts (n=18 or 40%) and only a small number of the low preference butchery cuts (n=7 or 15.5%) and as a result has the highest

Table 7.18 Butchery Cut Index Values For Beef, Pork, Venison, Poultry and Shellfish

Taxa	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
Beef	5.65	4.50	6.10	-	6.00	5.86
Pork	3.00	2.12	6.00	-	3.50	1.00
Venison	3.47	4.39	5.57	-	2.00	4.83
Poultry	8.66	5.00	8.00	8.00	5.00	8.00
Shellfish	-	-	-	7.89	8.00	5.45
Mean	4.81	4.08	5.97	7.89	6.20	5.76

preference index values for beef (6.10), pork (6.00) and venison (5.57) and the second highest index value for poultry (8.00) and the highest overall mean preference index value (5.97) for all taxa.

At Fort Hoskins the faunal assemblage recovered from FHH1 was unique and contained only chicken, oyster and clam remains (and no cow, pig or deer/elk remains), therefore no beef, pork or venison butchery cuts are represented in the assemblage. The butchery cut assemblage recovered from FHH1 contained a high number of high preference butchery cuts, all oysters and chickens (n=56 or 98.2%), and only a very small number of the low preference butchery cuts, one clam (n=1 or 1.8%), and as a result has the highest preference index value for poultry (8.00) and the second highest index value for shellfish (7.89) and the highest overall mean preference index value (7.89) for all taxa.

The butchery cut assemblage recovered from FHH2 contained a high proportion of high preference butchery cuts (n=16 or 64%), a low number of medium preference butchery cuts (n=3 or 12%) and a moderate number of the low preference butchery cuts (n=6 or 24%) and as a result has the highest butchery cut preference values for beef (6.00), pork (3.50) and shellfish (8.00) and the lowest butchery cut preference values for venison (2.00) and poultry (5.00) and the second highest overall mean preference index value (6.20) for all taxa.

The butchery cut assemblage recovered from FHH3 contained a high proportion of high preference butchery cuts (n=31 or 55.3%), a low number of medium preference butchery cuts (n=4 or 7.1%) and a moderate number of the low preference butchery cuts (n=21 or 37.5%) and as a result has the lowest butcher cut preference values for beef (5.86), pork (1.00), shellfish (5.45) and the lowest overall mean preference index value (5.76) for all taxa.

Botanical Food Remains. Two peaches (*Prunus persica*) were also identified in the food remains recovered from FYH1. Both peaches are represented by complete and fragmentary stones (seeds). No identifiable botanical food remains were recovered from any of the other officers' houses examined in this study (FYH2, FYH3, FHH1, FHH2 or FHH3).

Food Containers. The food container artifact assemblage contains the vessels that contained commercial available foodstuffs such as canned fruits, vegetables and meats; bottled foods such as pickles, olives, fruits and vegetables; and condiments such as relish, pepper, mustard, olive oil, flavoring extracts and various sauces. A total of 104 food containers will be used in this study including 41 recovered from FYH1, six recovered from FYH2, six recovered from FYH3, 22 recovered from FHH1, 18 recovered from FHH2 and 11 recovered from FHH3 (Table 7.19). For the purposes of this study the food container artifact type has been sorted into three typological categories: Food Canisters, Food Bottles and Condiment Bottles.

Table 7.19 Food Container Assemblages By Type

Type	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
Food Canisters						
33 oz (6.25" H x 3.50" D)	8	-	-	-	-	-
34 oz (3.50" H x 4.75" D)	-	-	-	-	-	1
36 oz (5.25" H x 4.00" D)	12	-	1	1	-	-
Cylindrical Indeterminate	3	-	2	6	6	3
Rectangular Indeterminate	1	-	-	-	-	1
<i>Total Canisters</i>	<i>24</i>	<i>0</i>	<i>3</i>	<i>7</i>	<i>6</i>	<i>5</i>
Food Bottles						
Pickle	-	-	1	-	1	-
Indeterminate	-	-	-	2	3	-
<i>Total Food Bottles</i>	<i>0</i>	<i>0</i>	<i>1</i>	<i>2</i>	<i>4</i>	<i>0</i>
Condiment Bottles						
Relish Jar	1	-	-	-	-	-
Spice/Pepper	12	5	2	5	2	1
London Club Sauce	-	-	-	1	-	-
Mustard	1	-	-	-	1	3
Pepper Sauce	-	-	-	2	1	1
Olive Oil	-	-	-	4	4	-
Flavoring Extract	1	-	-	-	-	-
Indeterminate	2	1	-	-	-	-
<i>Total Condiments</i>	<i>17</i>	<i>6</i>	<i>2</i>	<i>13</i>	<i>8</i>	<i>6</i>
Total Food Containers	41	6	6	22	18	11

Fifty-three food containers were recovered at Fort Yamhill (FYH1=41, FYH2=6 and FYH3=6) including 27 food canisters, one food bottle and 25 condiment bottles. The 41 food containers recovered from FYH1 include 24 food canisters (eight 33 fluid ounce canisters, twelve 36 fluid ounce canisters, three indeterminate cylindrical canisters and one indeterminate rectangular canister) and 17 condiment bottles (one relish jar, 12 spice/pepper bottles, one mustard jar, one flavoring extract bottle and two indeterminate condiment bottles). The six food containers recovered from FYH2 are all condiment bottles (five spice/pepper bottles and one indeterminate condiment bottle). The six food containers recovered from FYH3 including three food canisters (36 fluid ounce canister and two indeterminate cylindrical canisters), one food bottle (a cathedral-type pickle bottle) and two condiment bottles (spice/pepper bottle).

Fifty-one food containers were recovered from Fort Hoskins (FHH1=22, FHH2=18 and FHH3=11) including 18 food canisters, six food bottles and 27 condiment bottles. The 22 food containers recovered from FHH1 include seven food canisters (one 36 fluid ounce canister and six indeterminate cylindrical canisters), two food bottles (cathedral-type glass bottles) and 13 condiment bottles (five spice/pepper bottles, one *London Club Sauce* bottle, two pepper sauce bottles and four olive oil bottles). The 18 food containers recovered from FHH2 including six food canisters (all cylindrical and indeterminate in size), four food bottles (one cathedral pickle bottle and three cathedral-type glass bottles) and eight condiment bottles (two spice/pepper bottles, one mustard jar, one pepper sauce bottle and four olive oil bottles). The 11 food containers recovered from FHH3 include five food canisters (one 34 oz canister, three indeterminate cylindrical canisters and one indeterminate rectangular canister) and six condiment bottles (one spice/pepper bottle, three mustard jars and one pepper sauce bottle).

Household Maintenance and Repair. The Household Maintenance and Repair Artifact Class contains artifacts pertaining to the general maintenance and repair of the household and its members possessions and includes items such as needles, scissors, thimbles, pins, glue and cleaning produces (Table 7.20). A total of

Table 7.20 Household Maintenance and Repair Assemblages By Type and Category

Type/Category	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
Sewing						
Needlework Clamp	-	-	-	1	-	-
Scissors/Sheers	1	-	1	-	1	-
Thimble	1	1	-	2	-	-
Safety Pin	-	-	2	2	-	-
Straight Pin	-	-	-	-	9	-
<i>Total Sewing</i>	2	1	3	5	10	0
General Repair						
Cement Bottle	-	-	-	1	-	-
<i>Total General Repair</i>	0	0	0	1	0	0
Total	2	1	3	6	10	0

22 household maintenance and repair artifacts will be used in this study including two recovered from FYH1, one that the was recovered from FYH2, three that were recovered from FYH3, six that were recovered from FHH1 and 10 that were recovered from FHH2. For the purposes of this study the household maintenance and repair assemblage has been sorted into two functional artifact types: Sewing and General Repair.

Six household maintenance and repair artifacts were recovered from Fort Yamhill (FYH1=2, FYH2=1 and FYH3=3). The two household maintenance and repair artifacts recovered from FYH1 are both sewing items (one pair of tailor or dressing making sheers and an iron closed-type thimble). The single household maintenance and repair (sewing) artifact recovered from FYH2 is an open-type brass thimble. The three household maintenance and repair artifacts recovered from FYH3 are all sewing items (one pair of sewing scissors and two brass safety pins). Sixteen household maintenance and repair artifacts were recovered from Fort Hoskins (FHH1=6 and FHH2=10). The six household maintenance and repair artifacts recovered from FHH1 include five sewing items (one silver needlework clamp in the form of a bird, two thimbles [one made of silver and the other made of brass stamped with “THO ABSENT, EVER DEAR” around the base], and two brass safety pins) and one general repair item (Hodgson’s Diamond Cement bottle). The 10 household maintenance and repair artifacts recovered from FHH2 are all sewing items (one pair of sewing scissors and nine straight pins).

Military Artifact Group

The Military Artifact Group contains objects associated with the primary function of the U. S. Army to conduct war and includes the tools to do so such as clothing, weapons and associated objects. A total of 119 military artifacts will be used in this study including 11 that were recovered from FYH1, seven that were recovered from FYH2, six that were recovered from FYH3, 26 that were recovered from FHH1, 48 that were recovered from FHH2 and 21 that were recovered from FHH3. For the purposes of this study the military artifact group has been sorted into three functional artifact classes: Uniforms, Arms and Ammunition and Accoutrements (Table 7.21).

Military Uniforms. The Military Uniform Artifact Class contains artifacts pertaining to the military uniform prescribed for officers and soldiers in the *United States Army Regulations* (USWD 1851, 1857 and 1861). Due to the organic nature of most of the uniform (wool coats, trousers and hats, cotton undergarments and leather boots, belts, gloves) what was recovered from Fort Yamhill and Fort Hoskins, with the exception of a few leather fragments, are the metal parts of the uniform such as buttons, buckles and insignia. A total of 28 military uniform artifacts will be used in this study including three items recovered from FYH1, two items recovered from FYH2, two items recovered from FYH3, 13 items recovered from FHH1, three items recovered from FHH2 and five items recovered from FHH3. For the purposes of this study the military uniform assemblage has been sorted into three artifact types: Military Buttons, Headwear and Insignia (Table 7.22).

Table 7.21 Military Group Artifact Assemblages By Functional Class

Class	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
Uniform	3	2	2	13	3	5
Arms and Ammunition	8	5	3	11	44	15
Accouterment	-	-	1	2	1	1
Total	11	7	6	26	48	21

Table 7.22 Military Uniform Assemblages By Type and Category

Type	Category	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
Button	Military Academy (GS200)	2	-	-	-	-	-
	Infantry (GI215)	-	-	-	1	-	-
	Dragoon (DR215)	-	2	-	1	-	-
	Artillery (AY215)	-	-	-	1	-	5
	General Service (GEN207)	-	-	-	1	-	-
	General Service (GEN215)	-	-	1	3	3	-
	Indeterminate	-	-	-	3	-	-
	<i>Total Button</i>	2	2	1	10	3	5
Headwear	Shako Chin Strap Buckle	-	-	1	1	-	-
	<i>Total Headwear</i>	0	0	1	1	0	0
Insignia	Corps Insignia (Infantry Regimental Number “6 or 9”)	-	-	-	1	-	-
	Company Letter “G”	1	-	-	-	-	-
	<i>Total Insignia</i>	1	0	0	2	0	0
	Total	3	2	2	13	3	5

Military Buttons. The military button assemblage contains buttons that were used as clothing fasteners and as symbols of military rank and corps membership. The buttons are of two general sizes: large-sized (0.75 inches/20 mm in diameter) used to fasten the front of the jacket and frock coat and to adorn the butt of the frock coat, and small-sized (0.50 inches/15 mm) used to fasten the cuffs of the frock coat and jacket, the front of vests and the chinstraps on headwear. All but one of the buttons are made of brass and of the two-piece struck Sanders-type variety with an omega-type shank. The other button (General Service, GEN207) is a one-piece cast lead button with an alpha-type shank.

Five military buttons were recovered from Fort Yamhill (FYH1=2, FYH2=2 and FYH3=1). The two military buttons recovered from FYH1 are both large-sized United States Military Academy ball (bullet) buttons (Tice’s MA100) with plain high convex domes. The two military buttons recovered from FYH2 are both small-sized United States Army Dragoon buttons (Tice’s DR215) with a convex front struck with an “American” spread eagle with a union shield upon its chest with a capital “D” on the inside. And, the one military button was recovered from FYH3 is a large-sized United States Army General Service button (Tice’s GEN215) with a convex front struck with an “American” spread eagle with a lined union shield upon its chest.

Eighteen military buttons were recovered from Fort Hoskins (FHH1=10, FHH2=3 and FHH3=5). The 10 military buttons recovered from FHH1 includes one small-sized United States Army Infantry button (Tice's GI215) with a convex front struck with an "American" spread eagle with a union shield upon its chest with a capital "I" on the inside; one large-sized United States Army Dragoon button (Tice's DR215) with a convex front struck with an "American" spread eagle with a union shield upon its chest with a capital "D" on the inside; one small-sized United States Army Artillery button (Tice's AY215) with a convex front struck with an "American" spread eagle with a union shield upon its chest with a capital "A" on the inside; three (one large-sized and two small-sized) United States Army General Service buttons (Tice's GEN215) with a convex front struck with an "American" spread eagle with a lined union shield upon its chest; one small-sized pewter United States Army General Service button (Tice's GEN207) with a low convex cast with an "American" spread eagle with a blank union shield upon its chest; and three indeterminate small-sized brass military uniform buttons represented by back plates struck with maker's marks consistent with military button suppliers.

The three military buttons recovered from FHH2 are all large-sized United States Army General Service buttons (Tice's GEN215) with a convex front struck with an "American" spread eagle with a lined union shield upon its chest. And, the five military buttons recovered from FHH3 consist of two small-sized and three large-sized United States Army Artillery buttons (Tice's AY215) with convex fronts struck with an "American" spread eagle with a union shield upon its chest with a capital "A" on the inside.

Military Headwear. The military headwear assemblage is represented by the metal (usually brass) hardware used on hats and caps. Two military headwear artifacts were recovered and will be included in this study, one from Fort Yamhill (FYH3) and one from Fort Hoskins (FHH1). Both artifacts are United States Army M1851 shako chinstrap buckles made of stamped brass and missing their tongues. The buckles were originally designed as the chin strap buckle for the M1851 and M1854 military shako (Albert hat) but it has been suggested that when the tongues

are missing they were removed from the old style buckles so that they could be used on the new M1858 forage cap which did not have a tongue on its chinstrap buckle (Masich et al. 1979:34). Both the M1854 military shako and the M1858 forage cap would have been considered military regulation during the period both Fort Yamhill and Fort Hoskins were garrisoned.

Military Insignia. The military insignia assemblage contains metal devices that were worn to display membership in a military group such as an officer's grade, corps, regiment or company. Three military insignia artifacts were recovered from Fort Yamhill and Fort Hoskins and will be used in this study. One United States Army M1832 Infantry corps "hunting horn" insignia worn on the M1832/M1833 Infantry officer's shako (Albert hat) was recovered from FHH1; one United States Army M1832/M1851 brass regimental number "6" or "9" insignia worn on the M1832 shako (Albert hat) until 1851, the enlisted man's collar between 1851 and 1858, on the Cavalry officer's M1855 hats, on the Infantry and Artillery officer's epaulettes beginning in 1832 and as non-regulation insignia on the forage cap during the American Civil War was recovered from FHH1; and one United States Army M1851 brass company letter "G" insignia worn on the front of the M1832 shako (Albert hat) until 1851 and worn as regulation (enlisted soldiers) and non-regulation (commissioned officers) insignia throughout the American Civil war until 1872 was recovered from FYH1.

Military Arms and Ammunition. The Military Arms and Ammunition Artifact Class contains artifacts pertaining to the military weaponry prescribed for commissioned officers in the *United States Army Regulations* (USWD 1851, 1857 and 1861). Regulation arms for commissioned officers consisted of a sidearm (revolver) and edged weapon (sword or saber) but no long arms (muskets or rifles). Because long arms (rifles) were not regulation firearms for officers all artifacts related to long arms (parts of rifles and muskets, "top-hat-type" percussion caps and projectiles larger than .44 caliber) are classified as recreational items within the Personal Artifact Group with one exception, bayonets, because of their almost

exclusive use as military weapons. A total of 86 military arms and ammunition artifacts were recovered from Fort Yamhill and Fort Hoskins including eight artifacts recovered from FYH1, five artifacts recovered from FYH2, three artifacts recovered from FYH3, 11 artifacts recovered from FHH1, 44 artifacts recovered from FHH2 and 15 artifacts recovered from FHH3. For the purposes of this study the military arms and ammunition artifact class contains three artifact types: Military Arms, Military Projectiles and Military Ignition Systems (Table 7.23).

Military Arms. The military arms assemblage contains the remains of the firearms and edge weapons prescribed for commissioned officers by the *U.S. Army Regulations*. Two military arms were recovered from Fort Hoskins (FHH1=1 and FHH2=1) and will be used in this study (Table 7.23). One Colt revolver was recovered from FHH1. The revolver is represented by part of a back strap stamped with the serial number “27226”. The serial number corresponds to at least six possible Colt revolvers of three calibers (0.28, 0.36 and 0.44) manufactured between 1852 and 1865. These include a M1849 .36 Caliber Pocket Revolver manufactured in 1852, a M1851 .36 Caliber Navy Revolver manufactured in 1853, a M1855 .28

Table 7.23 Military Arms and Ammunition Assemblages By Type and Category

Type	Category	FYH	FYH	FYH	FHH	FHH	FHH
		1	2	3	1	2	3
Arms	Side Arm (Revolver)	-	-	-	1	-	-
	Edge Weapon (Bayonet)	-	-	-	-	1	-
	<i>Total Firearms</i>	0	0	0	1	1	0
Projectiles	.28 Caliber Conical	-	-	-	1	-	-
	.28 Caliber Ball	-	-	-	3	-	2
	.31 Caliber Ball	-	2	-	-	7	1
	.36 Caliber Conical	1	-	-	-	-	-
	.36 Caliber Ball	2	2	-	4	11	4
	.36 Caliber Ball (Resized .38)	3	1	2	1	2	-
	.44 Caliber Ball	-	-	-	-	1	-
	Indeterminate	-	-	-	-	6	-
	<i>Total Projectiles</i>	6	5	2	9	27	7
Ignition Systems	Percussion Cap	1	-	1	-	15	7
	Percussion Cap Box	1	-	-	1	1	1
	<i>Total Ignition Artifacts</i>	2	0	1	1	16	8
Total		8	5	3	11	44	15

Caliber Sidehammer Revolver manufactured in 1861, a M1860 .44 Caliber Army Revolver manufactured in 1862, a M1862 .36 Caliber Police and Pocket Revolver manufactured in 1864, and a M1861 Navy Revolver manufactured in 1865. One brass bayonet scabbard tip was recovered from FHH2. The scabbard tip has a triangular horizontal cross-section attributed to the .58 caliber M1855 Springfield Musket. Although not regulation for officers the scabbard tip was included with the military arms assemblage because bayonets were designed as military weapons and really had no other purpose other to inflict injury during battle.

Projectiles. The military projectiles artifact type contains firearm projectiles (conical bullets and round balls) that were designed to be used in the types of firearms (side arms) prescribed for use by commissioned officers in the *U.S. Army Regulations*. As side arms (revolvers) were the only firearm official prescribed for commissioned officers only those firearm projectiles with calibers (.28-.44 caliber) used in revolvers are included here. All other projectiles with calibers larger than .44 and all shot/pellet projectiles are included as recreational items under the Personal Artifact Group. A total of 56 military projectiles were recovered from Fort Yamhill and Fort Hoskins and for the purposes of this study have been sorted into eight size/form categories: .28 caliber conical bullets, .28 caliber round balls, .31 caliber round balls, .36 caliber conical bullets, .36 caliber round balls, .38 caliber round balls resized to .36 caliber and .44 caliber round balls (Table 7.23).

Thirteen military projectiles were recovered from Fort Yamhill including six projectiles from FYH1 (one .36 caliber conical bullet, two .36 caliber round balls and three .36 caliber round balls re-sized from .38 caliber round balls), five projectiles from FYH2 (two .31 caliber round balls, two .36 caliber round balls and one .36 caliber round ball re-sized from a .38 caliber round ball) and two projectiles from FYH3 (.36 caliber round balls re-sized from .38 caliber round balls).

Forty-three military projectiles were recovered from Fort Hoskins including 9 projectiles from FHH1, 27 projectiles from FHH2 and 7 projectiles from FHH3. The 9 projectiles recovered from FHH1 include one .28 caliber conical bullet, three .28 caliber round balls, four .36 caliber round balls and one .36 caliber round ball re-sized

from a .38 caliber round ball. The 27 projectiles recovered from FHH2 include seven .31 caliber round balls, 11 .36 caliber round balls, two .36 caliber round balls re-sized from .38 caliber round balls, one .44 caliber round ball and six deformed lead projectiles with weights (grains) that suggest that they are all less than .44 caliber. The seven projectiles recovered from FHH3 include two .28 caliber round balls, one .31 caliber round ball and four .36 caliber round balls.

Firearm Ignitions Systems. The military firearm ignition system artifact type contains items that were used to prime and fire the prescribed firearms for use by commissioned officers in the *U.S. Army Regulations*. As side arms (revolvers) were the only firearm officially prescribed for commissioned officers the only military firearm ignition systems included here are the smaller “corrugated” percussion caps used on revolvers and tinned iron “boxes” used to hold the percussion caps. All other firearm ignition artifacts are considered recreational items and included within the Personal Artifact Group. A total of 28 military firearm ignition system artifacts were recovered from Fort Yamhill and Fort Hoskins and for the purposes of this study have been sorted into two categories: Percussion Caps and Percussion Cap Boxes.

Three firearm ignition system artifacts were recovered from Fort Yamhill including two from FYH1 (one unfired percussion cap and one round iron percussion cap box with a friction closure lid) and one from FYH3 (one unfired percussion cap). Twenty-five firearm ignition system artifacts were recovered from Fort Hoskins including one from FHH1 (one round tinned iron percussion cap box with a friction lid), sixteen from FHH2 (one round tinned iron percussion cap box with a friction lid and 15 fired [splayed] percussion caps) and eight from FHH3 (one round tinned iron percussion cap box with a friction lid and seven percussion caps [two unfired and five fired (splayed)]).

Military Accoutrements. The Military Accoutrement Artifact Class contains artifacts pertaining to miscellaneous equipment of the soldier’s outfit not pertaining to clothing or weapons prescribed for soldiers in the *United States Army Regulations* (USWD 1851, 1857 and 1861) (Table 7.24). As with the military uniforms most of

Table 7.24 Military Accoutrement Assemblages By Type and Category

Type	Category	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
Canteen	Stopper/Spout	-	-	1	1	1	-
Cartridge Box	Buckle	-	-	-	1	-	-
Knap Sack	Triangle Loop	-	-	-	-	-	1
Total		0	0	1	2	1	1

the military accoutrement prescribed were made of organic materials such as cloth, leather and wood and therefore do not preserve well in the archaeological record. What does sometimes remain are the non-organic (usually metal) parts of these items such as canteen spouts, buckles, hooks and loops. Only five military accoutrements were recovered from Fort Yamhill and Fort Hoskins and for the purposes of this study have been sorted into three artifact types: Canteens, Cartridge Boxes and Knap Sacks.

One military accoutrement was recovered from Fort Yamhill (FYH3), a canteen (represented by the iron core and eye of the stopper). Four military accoutrements were recovered at Fort Hoskins (FHH1=2, FHH2=1 and FHH3=1). Two military accoutrements were recovered from FHH1 including one canteen (represented by a fragment of the stopper chain) and one M1860 Universal or M1864 cartridge box (represented by a cartridge box buckle). One military accoutrement was recovered from FHH2, a canteen (represented by a fragment of the stopper chain). And, one military accoutrement was recovered from FHH3, a M1853 double bag knap sack (represented by a triangle loop).

Personal Artifact Group

The Personal Artifact Group contains items that would have been owned and primarily used by an individual person such as the officer who lived in the house or one of his family members (Table 7.25). The personal artifact assemblage is very broad and includes items such as alcohol bottles, tobacco pipes, grooming artifacts and medicine bottles, non-military clothing items such as buttons and buckles, jewelry and adornment items, non-military footwear, office supplies, toys, musical instruments, hunting and fishing equipment, personal tools and personal transportation items. A total of 752 personal artifacts will be used in this study including 142 that were recovered from FYH1, 101 that were recovered from FYH2,

Table 7.25 Personal Group Artifact Assemblage By Class

Class	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
Indulgence	20	19	12	33	13	16
Health	29	17	14	31	27	8
Adornment	60	50	29	99	43	5
Administration	10	8	5	10	4	5
Recreation	18	5	4	29	93	19
Pocket Item	2	1	1	1	3	1
Transportation	3	1	1	2	0	1
Total	142	101	66	205	183	55

66 that were recovered from FYH3, 205 that were recovered from FHH1, 183 that were recovered from FHH2 and 55 that were recovered from FHH3. For the purposes of this study the personal artifact group contains seven artifact classes: Indulgences, Health, Adornment, Administration, Recreation, Pocket Tools and Transportation.

Indulgence Artifacts. The Indulgences Class contains artifacts that are used in the act of doing something that is enjoyed but that is also generally believed to be morally or ethically wrong, against *U.S. Army Regulations* or is considered unhealthy (primarily alcoholic beverages). This artifact class also contains artifacts that were encouraged by the United States Army in order combat the consumption of alcohol on post (non-alcoholic beverage and tobacco products). A total of 113 indulgence artifacts were recovered from Fort Yamhill and Fort Hoskins and for the purposes of this study have been sorted into three artifact types: Alcoholic Beverages, Non-Alcoholic Beverages and Tobacco (Table 7.26).

Alcoholic Beverage Bottles. The alcoholic beverage bottle assemblage is comprised of glass vessels that were used to contain alcoholic beverages. All of the alcoholic beverage bottles are made of olive glass and were identified as containing alcoholic liquids by the presence of embossed product names, overall bottle shape and/or finish-type. A total of 45 alcoholic beverage bottles will be used in this study including nine recovered from FYH1, nine recovered from FYH2, six recovered from FYH3, 10 recovered from FHH1, seven recovered from FHH2 and four recovered

Table 7.26 Indulgence Assemblages By Type and Category

Type/Category	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
Alcoholic Beverages						
Champagne	4	2	2	4	2	1
Wine	1	-	1	-	-	-
Brandy	-	1	-	-	-	-
Whiskey	-	-	-	1	-	1
Ale/Porter	1	-	3	1	3	1
Indeterminate Alcohol	3	6	-	4	2	1
<i>Total Alcohol</i>	<i>9</i>	<i>9</i>	<i>6</i>	<i>10</i>	<i>7</i>	<i>4</i>
Non-Alcoholic Beverage						
Gasogene/Siphon Bottle	-	-	-	1	-	-
Carbonated Beverage Bottle	-	1	-	2	-	1
<i>Total Non-Alcohol Beverage</i>	<i>0</i>	<i>1</i>	<i>0</i>	<i>3</i>	<i>0</i>	<i>1</i>
Tobacco						
Hard Rubber 2-Piece Pipe	-	-	-	1	-	-
Porcelain 2-Piece Pipe	1	-	-	-	-	-
Earthenware 2-Piece Pipe	3	5	3	5	6	2
Earthenware 1-Piece Pipe	7	1	3	13	1	8
Earthenware Ind. Pipe	-	2	-	1	-	-
Rockinghamware Spittoon	-	1	-	-	-	-
<i>Total Tobacco</i>	<i>11</i>	<i>9</i>	<i>6</i>	<i>20</i>	<i>7</i>	<i>10</i>
Total	20	19	12	33	14	15

from FHH3. At least five types of alcohol were identified in the assemblage and for the purposes of this study the assemblage has been sorted into six categories: Champagne, Wine, Brandy, Whiskey, Ale/Porter and Indeterminate Alcohol (Table 7.26).

Twenty-four alcoholic beverage bottles were recovered from Fort Yamhill (FYH1=9, FYH2=9 and FYH3=6). The nine alcoholic beverage bottles recovered from FYH1 include four champagne bottles, one wine bottle, one ale/porter bottle and three indeterminate alcohol bottles. The nine alcoholic beverage bottles recovered from FYH2 include two champagne bottles, one brandy bottle and six indeterminate alcohol bottles. And, the six alcoholic beverage bottles recovered from FYH3 include two champagne bottles, one wine bottle and three ale/porter bottles.

Twenty-one alcoholic beverage bottles were recovered from Fort Hoskins (FHH1=10, FHH2=7 and FHH3=4). The 10 alcoholic beverage bottles recovered

from FHH1 include four champagne bottles, one whiskey bottle, one ale/porter bottle and four indeterminate alcohol bottles. The seven alcoholic beverage bottles recovered from FHH2 include two champagne bottles, three ale/porter bottles and two indeterminate alcohol bottles. And, the four alcoholic beverage bottles recovered from FHH3 include one champagne bottle, one whiskey bottle, one ale/porter bottle and one indeterminate alcohol bottle.

Non-Alcoholic Beverage Bottles. The non-alcoholic beverage bottle assemblage is comprised of glass vessels that were used to store and dispense non-alcoholic, and likely carbonated, beverages. All of the non-alcoholic beverage bottles are made of very thick aqua glass and were identified as containing carbonated liquids by the very thick nature of the glass, the overall bottle shape and finish-types commonly found on gasogene/siphon, soda and mineral bottles. Only five non-alcoholic beverage bottles will be used in this study including one recovered from FYH2, three recovered from FHH1 and one recovered from FHH3. For the purposes of this study the non-alcoholic beverage bottle assemblage has been sorted into two categories: gasogene/siphon bottles and carbonated beverage bottles (Table 7.26).

One non-alcoholic beverage bottle was recovered from Fort Yamhill (FYH2), an indeterminate carbonated beverage made of very thick aqua glass with a free-blown base and a very deep iron empontiled kick-up. Four non-alcoholic beverage bottles were recovered from Fort Hoskins (FHH1=3 and FHH3=1). Three beverage bottles were recovered from FHH1 including one gasogene/siphon bottle (represented by a colorless glass finish with a string rim and ground exterior lip) and two indeterminate carbonated beverage bottles (represented by very thick aqua glass bottles with one-part taped finishes). The single non-alcoholic beverage bottle recovered from FHH3 is also an indeterminate carbonated beverage bottle (represented by very thick aqua glass bottles with one-part taped finishes).

Tobacco Items. The tobacco artifact assemblage is comprised of items used in the consumption of tobacco, namely smoking pipes and chewing tobacco spittoons. A total of 63 tobacco consumption items will be used in this study including 11

recovered from FYH1, nine recovered from FYH2, six recovered from FYH3, 20 recovered from FHH1, seven recovered from FHH2 and 10 recovered from FHH3. For the purposes of this study the tobacco pipes have been sorted into five categories based on fabric (hard rubber, porcelain and earthenware) and by form (one-piece or two-piece) (Table 7.26).

Twenty six tobacco items were recovered from Fort Yamhill (FYH1=11, FYH2=9 and FYH3=6). The 11 tobacco items recovered from FYH1 are all smoking pipes including one two-piece porcelain pipe (decorated with a brown slip covering the bottom half of the bowl), three two-piece earthenware pipes (one Queen Victoria effigy pipe, one redware pipe with a brown slip and colorless glaze and one beige pipe with a gray slip), seven one-piece earthenware pipes (one pipe molded with a naturalist floral motif, three pipes molded with "T.D.", two plain pipes with a raised keel along the distal side of the bowl, one completely undecorated pipe).

The nine tobacco items recovered from FYH2 include eight smoking pipes and one spittoon. The eight smoking pipes include five two-piece earthenware pipes (one Zachary Taylor Presidential campaign pipe, two geometric "knobby" pipes, one geometric vertically ribbed pipe and one plain or undecorated pipe), one one-piece effigy pipe (a bearded man, wearing a keffiyeh with his eyes, mustache and edge of the keffiyeh highlighted with white paint, the eyebrows with brown and the pupils with black) and two indeterminate smoking pipes (represented by beige pipe bowls). The spittoon measures is octagonal in shape and measures 8 inches wide, is made of beige stoneware and decorated with the Rockingham pattern (mottled brown with green and yellow splashes intended to imitate tortoise shell).

The six tobacco items recovered from FYH3 are all smoking pipes including three two-piece pipes (one geometric "knobby" pipe, one beige pipe decorated with an incised line around the exterior of the bowl near the rim and one red pipe with indeterminate raised decoration) and three one-piece pipes (two plain pipes with a raised keel along the distal side of the bowl and one unglazed white pipe with indeterminate decoration).

Sixty-two tobacco items, all smoking pipes, were recovered from Fort Hoskins (FHH1=20, FHH2=7 and FHH3=10). The 20 smoking pipes recovered from

FHH1 include one two-piece hard rubber pipe (carved with a geometric pattern of raised vertical ribs), five two-piece earthenware pipes (one Henry Clay Presidential Campaign effigy pipe, one turbaned male effigy pipe, one geometric “knobby” pipe, one red pipe decorated with band in raised relief around the circumference of the bowl near the rim and one red pipe plain and unglazed), thirteen one-piece earthenware pipes (one white pipe molded with an American frigate and Union shield, four plain pipes with a raised keel along the distal side of the bowl, three white pipes decorated with a simple geometric pattern of a line of incised dashes around the exterior circumference of the bowl just below the rim, one white pipe with the bottom half of the bowl textured by raised dots, one white pipe decorated with a series of convex ribs around the exterior of the bowl and three pipes [one beige and two white] decorated with indeterminate patterns). One brass tobacco pipe spark cap was also recovered from FHH1 but is not included in the artifact count.

The seven smoking pipes recovered from FHH2 include six two-piece earthenware pipes (one turbaned male effigy pipe, two pipes molded with a naturalistic floral pattern, one geometric “knobby” pipe and two red pipes unglazed and plain in decoration) and one one-piece pipe (a simple geometric pattern of a line of incised dashes around the exterior circumference of the bowl just below the rim).

The 10 smoking pipes recovered from FHH3 include two two-piece pipes (one red pipe with a raised filigree-like pattern and one brown pipe decorated with a raised band around the exterior circumference of the bowl near the rim) and eight one-piece pipes (one plain white pipe with a raised keel along the distal side of the bowl, one white pipe of a line of incised dashes around the exterior circumference of the bowl just below the rim, two undecorated white pipes, one plain white pipe molded with several rows of 5-pointed stars around the stem, one plain white pipe molded with a pattern of repeating fish scales and rings on the stem, one plain white pipe molded with a raised ladder pattern around the stem, one plain white and completely undecorated pipe). One brass tobacco pipe spark cap, stamped with an acorn and oak leaf was also recovered from FHH1 but not included in the artifact count.

Health Artifacts. The Health Artifact Class contains items that were used to treat illness and keep the body clean and well maintained such as medicine, cologne/perfume, cosmetic jars, combs, mirrors, toothbrushes, soap boxes, wash basins and chamber pots. A total of 126 health related artifacts were recovered from Fort Yamhill and Fort Hoskins including 29 artifacts recovered from FYH1, 17 artifacts recovered from FYH2, 14 artifacts recovered from FYH3, 31 artifacts recovered from FHH1, 27 artifacts recovered from FHH2 and eight artifacts recovered from FHH3. For the purposes of this study the health artifacts have been sorted into two functional artifact types: Medical Items and Grooming Items (Tables 7.27 and 7.28).

Medical Items. The medical item assemblage is comprised of artifacts that were used in the treatment of illness and injuries. A total of 63 medical artifacts were recovered from Fort Yamhill and Fort Hoskins and will be used in this study including 18 medical items recovered from FYH1, 11 items recovered from FYH2, six items recovered from FYH3, 14 items recovered from FHH1, 10 items recovered from FHH2 and four items recovered from FHH3. For the purposes of this study the medical item assemblage has been sorted into two categories: Medical Products and Medical Implements (Table 7.27).

Table 7.27 Medical Item Assemblages By Type and Category

Type/Category	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
Medical Product						
Digestive Medicine	5	-	-	2	-	1
Respiratory Medicine	-	2	-	-	-	-
Circulatory Medicine	-	1	-	1	1	1
Pain Killer	3	1	-	-	-	-
General/Cure-All	3	2	1	-	3	1
Indeterminate Medicine	6	5	5	9	6	1
<i>Total Medical Product</i>	<i>17</i>	<i>11</i>	<i>6</i>	<i>12</i>	<i>10</i>	<i>4</i>
Medical Implement						
Irrigating Syringe	1	-	-	2	-	-
<i>Total Medical Implement</i>	<i>1</i>	<i>0</i>	<i>0</i>	<i>2</i>	<i>0</i>	<i>0</i>
Total Medical	18	11	6	14	10	4

Thirty-five medical items were recovered from Fort Yamhill (FYH1=18, FYH2=11, FYH3=6). The 18 medical items recovered from FYH1 include five digestive medicine bottles (one Ayer's Cathartic Pills bottle, two Dr. Jayne's Tonic Vermifuge bottles, one Voldner's Aromatic Schnapps bottle and one Henry's Calcined Magnesia bottle), three general pain killer bottles (two Dr. Davis Vegetable Pain Killer bottles and one Mrs. Winslow's Soothing Syrup bottle), three general cure-all medicine bottles (one Lyons Jamaica Ginger bottle, one sarsaparilla bottle and one bitters bottle), six indeterminate medicine bottles (two aqua ovoid-shaped vials, one aqua decagon-shaped vial and three small rectangular aqua medicine bottles/vials with two flat/patent finishes and one rolled/folded-in finish) and one medical implement (an irrigating syringe represented by a cranberry glass plunger rod).

The 11 medical items recovered from FYH2 include two respiratory medicine bottles (one Hall's Balsam for the Lungs bottle and one Ayer's Cherry Pectoral bottle), one circulatory medicine bottle (Dr. Jayne's Alterative), one pain killer (Dr. Davis Vegetable Pain Killer), two general/cure-all medicine bottles (one Bristol's Genuine Sarsaparilla bottle and one Dr. J. Hostetter's Stomach Bitters bottle) and five indeterminate medicine bottles (one E. R. Squibb pharmaceutical bottle and four small rectangular aqua medicine bottle/vial bases).

The six medical items recovered from FYH3 include one general cure-all medicine bottle (H. T. Hembold Genuine Fluid Extract bottle) and five indeterminate medicine bottles (one aqua ovoid-shaped vial, one small colorless rectangular bottle with a rolled/folded-in finish, one aqua decagon-shaped vial, one small colorless rectangular bottle with a rolled/folded-out finish and one colorless bottle with a wide prescription/flared finish).

Twenty-eight medical items were recovered from Fort Hoskins (FHH1=14, FHH2=10 and FHH3=4). The 14 medical items recovered from FHH1 include two digestive medicine bottles (one Drake's Plantation Bitters bottle and one aromatic schnapps bottle), one circulatory medicine bottle (constitutional life syrup bottle), nine indeterminate medicine bottles (three aqua ovoid-shaped vials, two aqua dodecagon-shaped vials, two aqua bottles with patent/extract finishes and two

colorless bottles with wide prescription/flared finishes) and two medical implements (two irrigating syringes).

The ten medical items recovered from FHH2 include one circulatory medicine bottle (one constitutional life syrup bottle), three general/cure-all medicine bottles (H. T. Hembold Genuine Fluid Extract bottle) and six indeterminate medicine bottles (one aqua ovoid-shaped vial, one aqua dodecagon-shaped vial, three small colorless bottles with flat/patent/extract finishes, one small aqua bottle with a double ring finish).

The four medical items recovered from FHH3 include one digestive medicine bottle (Dr. Jayne's Tonic Vermifuge bottle), one circulatory medicine bottle (Dr. Jayne's Alterative bottle), one general/cure-all medicine bottle (H. T. Hembold Genuine Fluid Extract bottle) and one indeterminate medicine bottle (one colorless bottle with a wide prescription/flared finish).

Grooming Items. The grooming item assemblage is comprised of artifact that were used in the cleaning and beautification of the body such as cologne/perfume, hair dye, cosmetics, combs, mirrors, toothbrushes, soap boxes and wash basins. A total of 63 grooming artifacts were recovered from Fort Yamhill and Fort Hoskins and will be used in this study including 11 grooming artifacts from FYH1, six grooming artifacts from FYH2, eight grooming artifacts from FYH3, 17 grooming artifacts from FHH1, 17 grooming artifacts from FHH2 and four grooming artifacts from FHH3. For the purposes of this study the grooming item assemblage has been sorted into two functional categories: Grooming Products and Grooming Implements (Table 7.28).

Twenty-five grooming items were recovered from Fort Yamhill (FYH1=11, FYH2=6 and FYH3=8). The 11 grooming items recovered from FYH1 include three grooming products (two cologne/perfume bottles [one molded in the *Rococo Corset-Waisted Scroll* pattern and one colorless bottle with flat/patent-type finish and stopper with a disc finial] and one Burnett's Cocaine for the Hair, Oriental Tooth Wash and Kalliston for the Skin bottle) and eight grooming implements (four hard rubber dressing combs, three mirrors and one ironstone soap box molded in the *Fig Cousin*

Table 7.28 Grooming Item Assemblages By Type and Category

Type/Category	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
Grooming Product						
Cologne/Perfume	2	-	-	-	-	-
Hair Tonic/Dye	-	2	-	-	1	1
Hair, Tooth and Skin	1	1	-	2	-	-
Cosmetic Jar	-	1	-	-	1	-
<i>Total Grooming Product</i>	<i>3</i>	<i>4</i>	<i>0</i>	<i>2</i>	<i>2</i>	<i>1</i>
Grooming Implement						
Dressing Comb	4	1	3	4	1	1
Mirror	3	1	2	2	1	1
Toothbrush	-	-	1	3	-	-
Toothpick	-	-	-	-	13	1
Soap Box	1	-	-	1	-	-
Wash Basin	-	-	1	2	-	-
Chamber Pot	-	-	1	3	-	-
<i>Total Grooming Implement</i>	<i>8</i>	<i>2</i>	<i>8</i>	<i>15</i>	<i>15</i>	<i>3</i>
Total Grooming	11	6	8	17	17	4

pattern). The six grooming items recovered from FYH2 include three grooming products (one J. Huel Vegetable Hair Dye bottle, one J. Cristadoro Liquid Hair Dye bottle and whiteware cosmetic jar lid) and two grooming implements (one hard rubber dressing comb and one mirror). The eight grooming items recovered from FYH3 are all grooming implements (three hard rubber dressing combs, two mirrors, one bone handled toothbrush, one ironstone wash basin molded in the *Gothic* pattern and one ironstone chamber pot molded in the *Fig Cousin* pattern).

Thirty-eight grooming items were recovered from Fort Hoskins (FHH1=17, FHH2=17 and FHH3=4). The 17 grooming items recovered from FHH1 include two grooming products (two Burnett's Cocaine for the Hair, Oriental Tooth Wash and Kalliston for the Skin bottles) and 15 grooming implements (four hard rubber dressing combs, two mirrors, three bone handled tooth brushes, one whiteware soap box transfer-printed with the Spode/Copeland pattern known as *B772*, two ironstone wash basins [one molded in the *Gothic* pattern and one molded in an indeterminate acanthus leaf pattern similar to *Scroll Boarder*] and three ironstone chamber pots [one molded in the *Boote 1851 Octagon* pattern, one molded in the *Gothic* pattern and one

molded in the *Fig Cousin* pattern]). The 17 grooming items recovered from FHH2 include two grooming products (one Professor Woods Hair Restorative Depots bottle and one whiteware cosmetic jar lid) and 15 grooming implements (one hard rubber dressing comb, one mirror and 13 bone [bovine] toothpicks). The four grooming items recovered from FHH3 include one grooming product (Burnett's Cocaine bottle) and three grooming implements (one hard rubber dressing comb, one mirror and one bone [bovine] toothpick).

Personal Adornment. The Personal Adornment Artifact Class contains artifacts that were worn to distinguish, embellish the beauty or enhance the status of the wearer. A total of 286 personal adornment artifacts were recovered from Fort Yamhill and Fort Hoskins including 60 items recovered from FYH1, 50 items recovered from FYH2, 29 items recovered from FYH3, 99 items recovered from FHH1, 43 items recovered from FHH2 and five items recovered from FHH3. For the purposes of this study the personal adornment assemblage has been sorted into five functional artifact types: Hair Accessory, Civilian Button, Civilian Buckle and Non-Button Clothing Fastener, Jewelry and Accessories and Footwear (Table 7.29).

Hair Accessory. The hair accessory assemblage is comprised of artifacts that were worn to style and adorn the hair of the wearer and for the purposes of this study include headbands and hair pins. Seven hair accessories were recovered from Fort Yamhill and Fort Hoskins (FYH1=3, FYH2=2, FYH3=1 and FHH2=1). The three hair accessories recovered from FYH1 are all hair pins (U-shaped, molded of hard rubber with carved tines). The two hair accessories recovered from FYH2 include

Table 7.29 Personal Adornment Assemblages By Type

Type	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
Hair Accessory	3	2	1	-	1	-
Civilian Button	37	35	20	52	33	4
Civilian Buckle and Fastener	4	3	1	6	6	-
Jewelry and Accessories	13	10	1	40	3	1
Footwear	3	1	5	1	-	-
Total	60	50	29	99	43	5

one head band (made of molded hard rubber with a carved wave pattern along the bridge) and one hair pin (U-shaped, molded of hard rubber with carved tines). The one hair accessory recovered from FYH3 is a head band (made of hard rubber with an incised line parallel to the bridge). The one hair accessory recovered from FHH2 is a hair pin (made of hard rubber with carved tines).

Civilian Buttons. The civilian button assemblage is comprised of all buttons that would have been used to fasten non-military clothing. A total of 181 civilian buttons were recovered from Fort Yamhill and Fort Hoskins and will be used in this study including 37 buttons recovered from FYH1, 35 buttons recovered from FYH2, 20 buttons recovered from FYH3, 52 buttons recovered from FHH1, 33 buttons recovered from FHH2 and four buttons recovered from FHH3. For the purposes of this study the civilian button assemblage has been sorted into two categories: Shanked Buttons and Sew-Through Buttons (Table 7.30).

Ninety-two civilian buttons were recovered from Fort Yamhill (FYH1=37, FYH2=35 and FYH3=20). The 37 buttons recovered from FYH1 include 13 shanked buttons (seven gilded brass buttons [one five petal flower, one buckle, one fleur de lis, and four buttons with a geometric star and plant motif], two inlaid brass buttons [one inlaid with amber glass and one inlaid with a white quartz stone], one leather covered iron button and three plain iron buttons) and 24 sew-through buttons (one 4-hole pewter button, one stamped brass 4-hole button, two transfer-printed calico prosser buttons [pink dots and squiggles] and , one colored [black] prosser button and 19 plain white prosser buttons).

The 35 buttons recovered from FYH2 include 12 shanked buttons (one inlaid brass button [white quartz stone], five stamped brass buttons, four black glass faceted buttons [two flat squares, one sphere and one flat disk-shape button], one white porcelain domed button and one bone button carved with an asterisk and scalloped motif) and 23 sew-through buttons (one geometric black hard rubber button [Novelty Rubber Company/Goodyear's Patent 1851], one abalone shell button, one turned bovine bone button, three colored prosser buttons [two green and one brown], two painted prosser buttons [violet] and 15 plain white prosser buttons).

Table 7.30 Civilian Button Assemblages By Category

Category	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
<u>Shanked Button</u>						
Brass, Gilded	7	-	1	1	-	1
Brass, Inlaid	2	1	-	-	1	-
Brass, Stamped	-	5	-	-	1	-
Glass, Black Faceted	-	4	-	-	-	-
Glass, Thread Bound	-	-	-	-	1	-
Glass, Blue Dome	-	-	-	-	-	1
Glass, Sphere/Other	-	-	2	-	-	-
Porcelain, Dome	-	1	5	-	-	-
Iron, Fabric Covered	-	-	-	-	-	1
Iron, Leather Covered	1	-	-	-	-	-
Iron, plain	3	-	2	1	-	-
Mineral, Ball	-	-	-	-	9	-
Bone, Carved	-	1	-	-	-	-
<i>Total Shanked</i>	<i>13</i>	<i>12</i>	<i>10</i>	<i>2</i>	<i>12</i>	<i>3</i>
<u>Sew-Through Button</u>						
Hard Rubber, Goodyear	-	1	1	-	-	-
Shell, Abalone	-	1	-	3	-	-
Pewter, 4-Hole	1	-	1	8	2	1
Iron, 4-Hole	-	-	-	4	2	-
Bone, Turned	-	1	-	2	2	-
Brass, 4-Hole	1	-	1	-	-	-
Prosser, Calico	2	-	-	2	1	-
Prosser, Colored	1	3	1	1	-	-
Prosser, Painted	-	2	-	-	2	-
Prosser, Plain White	19	15	6	30	12	-
<i>Total Sew-Through</i>	<i>24</i>	<i>23</i>	<i>10</i>	<i>50</i>	<i>21</i>	<i>1</i>
Total Buttons	37	35	20	52	33	4

The 20 buttons recovered from FYH3 include 10 shanked buttons (one gilded brass button [geometric star and plant motif], two glass buttons [sphere], five porcelain dome buttons and two plain iron buttons) and 10 sew-through buttons (one plain black hard rubber button [Novelty Rubber Company/Goodyear's Patent 1851], one cast pewter 4-hole button, one struck brass 4-hole button, one colored prosser button [green] and six plain white prosser buttons).

Eighty-nine civilian buttons were recovered from Fort Hoskins (FHH1=52, FHH2=33 and FHH3=4). The 52 buttons recovered from FHH1 include two shanked

buttons (one gilded brass button [flower with a “* • TREBLE GILT •” backmark] and one plain iron button) and 50 sew-through buttons (three abalone shell buttons, eight pewter 4-hole buttons, four iron 4-hole buttons, two turned bovine bone buttons, two calico prosser buttons [one brown checkerboard and one indeterminate pink pattern], one colored prosser button [black], and 30 plain white prosser buttons).

The 33 buttons recovered from FHH2 include 12 shanked buttons (one inlaid brass button [blue glass with white and black stripes], one stamped brass button, one thread-bound green glass button and nine white mineral buttons) and 21 sew-through buttons (two pewter 4-hole buttons, two iron 4-hole buttons, two turned bovine bone buttons, one calico prosser button [black dots and lines], one painted prosser button [fuchsia] and 12 plain white prosser buttons).

The four buttons recovered from FHH3 include three shanked buttons (one gilded brass button [stylistic flower with an “★ IVES SCOTT & CO. ★” backmark], one blue glass domed button and one fabric covered iron button) and one sew-through button (4-hole pewter button).

Civilian Buckles and Non-Button Clothing Fasteners. The civilian buckle and non-button clothing fastener assemblage contains that were largely functional as either closures for garments (corset busk, hook-and-eye, aglet and rivet) or to provide support for garments (waist belt, suspender/braces and slide buckles). A total of 20 civilian buckles and non-button clothing fasteners were recovered from Fort Yamhill and Fort Hoskins and will be used in this study including four items recovered from FYH1, three items recovered from FYH2, one item recovered from FYH3, six items recovered from FHH1 and six items recovered from FHH2. For the purposes of this study these items have been sorted into two categories: Civilian Buckles (belt, suspender and slide) and Non-Button Clothing Fasteners (corset busk, hook-and-eye, aglet and rivet) (Table 7.31).

Table 7.31 Civilian Buckles and Non-Button Clothing Fasteners Assemblages By Category

Category	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
<u>Civilian Buckle</u>						
Waist Belt	-	-	-	1	-	-
Suspender (Braces)	2	1	-	1	-	-
Slide	1	-	-	2	2	-
<i>Total Civilian Buckle</i>	<i>3</i>	<i>1</i>	<i>0</i>	<i>4</i>	<i>2</i>	<i>0</i>
<u>Clothing Fastener</u>						
Corset Busk	-	1	-	1	1	-
Hook-and-Eye	-	1	-	-	3	-
Aglet	1	-	1	-	-	-
Trouser Rivet	-	-	-	1	-	-
<i>Total Clothing Fastener</i>	<i>1</i>	<i>2</i>	<i>1</i>	<i>2</i>	<i>4</i>	<i>0</i>
Total	4	3	1	6	6	0

Eight buckles and non-button clothing fasteners were recovered from Fort Yamhill (FYH1=4, FYH2=3 and FYH3=1). The four buckles/fasteners recovered from FYH1 include two suspender/brace buckles (plain/undecorated and made of stamped brass), one slide buckle (plain/undecorated and made of iron) and one aglet (made of brass and stamped with vertical ribs). The three buckles/fasteners recovered from FYH2 include one suspender/brace buckle (made of gilded brass and stamped with a British-style crown), one corset busk (iron with brass eyelet) and one hook-and-eye closure (brass wire “eye”). The one buckle/fastener recovered from FYH3 is an aglet (made of brass and stamped with vertical ribs).

Twelve buckles and non-button clothing fasteners were recovered from Fort Hoskins (FHH1=6 and FHH2=6). The six buckles/fasteners recovered from FHH1 include one waist buckle (two piece tongue-and-frame type, made of brass and stamped with “[a British crown in the center surrounded by] / * F. C. BENNETT * / 60 Gt. BOURKE ST. EAST MELBOURNE”), one suspender/braces buckle (plain/undecorated and made of iron) and two slide buckles (one made of brass, the other brass and both plain/undecorated), one corset busk (iron with brass eyelet) and one trouser rivet (made of brass). The six buckles/fasteners recovered from FHH2 include two slide buckles (made of brass and plain/undecorated), one corset busk (iron with brass eyelet) and three hook-and-eye closures (brass wire “hooks”).

Jewelry and Accessories. The jewelry and accessory assemblage contains items that were worn to distinguish, embellish and enhance the status of the individual and includes such as pocket watches, pendants (necklaces), bracelets, rings other accessories adorned with beadwork. A total of 69 jewelry and accessory items were recovered from Fort Yamhill and Fort Hoskins including 13 recovered from FYH1, 10 recovered from FYH2, two recovered from FYH3, 40 recovered from FHH1, three recovered from FHH2 and one recovered from FHH3. For the purposes of this study these items have been sorted into five categories: Pocket Watches, Pendants, Bracelets, Finger Rings and Beads (Table 7.32).

Twenty-five jewelry and accessory items were recovered from Fort Yamhill (FYH1=13, FYH2=10 and FYH3=2). The thirteen jewelry and accessory items recovered from FYH1 include one pocket watch (brass and represented by a watch key and six colorless “crystal” fragments), four glass pendants (one cranberry Greek Cross and three opaque tear drops), one finger ring (United States Size 8.5 and made of silver) and seven glass beads (two standard-sized beads [one opaque blue with ground facets and one translucent blue with ground facets] and six seed-sized beads [four white cylindrical beads, one white tube bead, one black tube bead]). The ten jewelry and accessory items recovered from FYH2 include one pocket watch (two colorless “crystal” fragments), one pendant (silver 1836 United States Dime with a pierced hole), one bracelet (porcelain hand charm) and seven beads (six standard-sized beads [one made of black glass with ground facets and five made of amber glass with ground facets] and one seed-size bead [black tube bead]). The two jewelry and accessory items recovered from FYH3 include one bracelet (black hard rubber “link”) and one bead (standard-sized white sphere).

Forty-four jewelry and accessory items were recovered from Fort Hoskins (FHH1=40, FHH2=3, FHH3=1). The forty jewelry and accessory items recovered from FHH1 are all beads including three standard-sized beads and 37 seed-sized beads. The three standard-sized beads include one amber cylindrical glass bead with ground facets, one black ellipsoidal glass bead and one light blue spherical glass bead. The 37 seed-sized beads include seven white cylindrical beads, three red

Table 7.32 Jewelry and Accessory Assemblages By Artifact

Artifact	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
Pocket Watch	1	1	-	-	-	-
Pendant	4	1	-	-	-	1
Bracelet Link/Charm	-	1	1	-	-	-
Finger Ring	1	-	-	-	2	-
Bead	7	7	1	40	1	-
Total	13	10	2	40	3	1

cylindrical beads, ten red cylindrical beads with white glass hearts and 17 blue cylindrical beads. The three jewelry and accessory items recovered from FHH2 include two finger rings (one made of brass [stamped with raise bumps and United States Size 5.5] and one made of hard rubber [plain and United States Size 10.5] and one glass bead (standard-sized brown and white agate). The single jewelry and accessory item recovered from FHH3 is a pendent (gold locket containing a lock of hair).

Footwear. The footwear assemblage contains the miscellaneous parts of boots and shoes. Most of the items recovered are made of leather (sides, soles and heels) or only represent a small part of the footwear item (brass toe/heel plates and grommets) and therefore were difficult to analyze beyond the minimum number of objects (MNO). Several complete/nearly complete leather soles and heels were recovered for which a general size (large or small) could be determined (Table 7.33).

Nine footwear items were recovered from Fort Yamhill (FYH1=3, FYH2=1 and FYH3=5). The three footwear items recovered from FYH1 include two small-sized shoes/boots (possibly women's or children's) represented by nearly complete leather heels and one indeterminate sized footwear item represented by a fragmented heel. The single footwear item recovered from FYH2 is represented by a brass toe tap and several brass grommets (eyelets) for which a size determinate could not be made. The five footwear items recovered from FYH3 are all represented leather shoe/boot heels of two sizes, one large-sized boot heel and four small-sized shoe/boot heels. One of the small-sized footwear items is represented by represented by a nearly complete sole including the toe/toe tap, heel and several grommets attached to

Table 7.33 Footwear Assemblages by Size

Artifact	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
Large (Men)	-	1	1	-	-	-
Small (Woman/Child)	2	-	4	-	-	-
Indeterminate Size	1	-	-	1	-	-
Total	3	1	5	1	0	0

large sections of the quarter. The single footwear item recovered from Fort Hoskins (FHH1) is represented by single brass grommet (eyelet).

Office Administration. The Office Administration Artifact Class contains artifacts that were used in the day-to-day activities such as bookkeeping, report writing and correspondence. Because these activities were conducted by an officer as part of his official duties for the Army but also as part of his personal duties for running a household, and the fact that several of the artifact types were not military issue, the office administration class was placed in the Personal Artifact Group opposed to the Military Artifact Group. Forty-two officer administration artifacts were recovered from Fort Yamhill and Fort Hoskins and will be used in this study including 10 recovered from FYH1, eight recovered from FYH2, five recovered from FYH3, 10 recovered from FHH1, four recovered from FHH2 and five recovered from FHH3. Only one artifact class (Office Supplies) is represented in the assemblage and for the purposes of this study includes eight artifact types: Pen Nibs, Ink Pots, Individual Ink Bottles, Bulk Ink Bottles, Slate Pencils, Slate Tablets, Graphite Pencils and Sealing Wax (Table 7.34).

Twenty-three office supplies items were recovered from Fort Yamhill (FYH1=10, FYH2=8 and FYH3=5). The 10 office supply items recovered from FYH1 include one ink pot (Parisian-style porcelain pump-type ink pot with a brass lid stamped “ENCRIER BOQUET / INVENTEUR RGT PARIS / MEDALLIE D’ARGENT / 1839”). An attempt at translating this from French to English the embossing reads “inkwell fragrant / inventor patent Paris / silver medal / 1839”), four individual ink bottles (two aqua glass eight-sided conical paneled/umbrella-type, one colorless glass cylindrical-type with horizontal ribs and one gray/beige stoneware cylindrical-type with a light brown/tan slip), one bulk ink bottle (olive glass with a

Table 7.34 Office Administration Assemblages By Type

Type	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
Pen Nib	-	-	-	1	-	2
Ink Pot	1	-	-	-	-	-
Individual Ink Bottle	4	1	1	3	1	2
Bulk Ink Bottle	1	-	1	-	-	1
Slate Pencil	1	4	1	4	3	-
Slate Tablet	2	-	2	-	-	-
Graphite Pencil	-	3	-	1	-	-
Sealing Wax	1	-	-	1	-	-
Total	10	8	5	10	4	5

two-part double oil/mineral finish with a pouring lip), one complete slate pencil (undecorated/plain and round in cross-section), two slate writing tablet (one made of reddish slate and the other made of gray slate) and one fragment of sealing wax (red in color).

The eight office supply items recovered from FYH2 include one individual ink bottle (aqua glass eight-sided conical paneled/umbrella-type), four slate pencils (round in cross-section with two incised simple geometric design and two undecorated/plain) and three graphite pencils (represented by rectangular graphite cores of varying dimensions).

The five office supply items recovered from FYH3 include one individual ink bottle (aqua glass eight-sided conical paneled/umbrella-type), one bulk ink bottle (beige stoneware with a tan/light brown slip), one slate pencil (undecorated/plain and rectangular in cross-section) and two slate tablets (one made of reddish slate and the other made of gray slate).

Nineteen office supply items were recovered from Fort Hoskins (FHH1=10, FHH2=4 and FHH3=5). The 10 office supply items recovered from FHH1 include one pen nib (iridium-tipped and gold plated stamped "RENDELL <<< & >>> FAIRCHILD"), three individual ink bottles (aqua glass eight-sided conical paneled/umbrella-type), four slate pencils (undecorated/plain and represented by tip fragments), one graphite pencil (rectangular core) and one sealing wax fragment (red).

The four office supply items recovered from FHH2 include one individual ink bottle (aqua glass eight-sided conical paneled/umbrella-type) and three round slate pencils (one incised with lines and two undecorated/plain).

The five office supply items recovered from FHH3 include two pen nibs (made of iron), two individual ink bottles (one aqua glass eight-sided conical paneled/umbrella-type and one colorless glass cylindrical-type with horizontal ribs) and one bulk ink bottle (olive glass with two-part double oil/mineral finish with a pouring lip).

Recreation. The Recreation Artifact Class contains artifacts that were associated with activities that were done for enjoyment and/or relaxation by all members of the household including the officers, their wives and children such as playing games, play and listening to music, hunting and fishing. A total of 168 recreation artifacts were recovered from Fort Yamhill and Fort Hoskins including 18 recovered from FYH1, five recovered from FYH2, four recovered from FYH3, 29 recovered from FHH1, 93 recovered from FHH2 and 19 recovered from FHH3. For the purposes of this study the recreation artifact assemblage has been sorted into three artifact types: Toys and Games, Musical Instruments and Hunting and Fishing (Table 7.35).

Toys and Games. The toys and games artifact assemblage is comprised of items that would have been used for entertainment by all members, but especially the children, of the household including ceramic toy tea sets, dolls and gaming pieces. Twenty-three toys and games artifacts were recovered from Fort Yamhill and Fort Hoskins and will be used in this study including five recovered from FYH1, two recovered from FYH2, two recovered from FYH3, nine recovered from FHH1 and five recovered from FHH2. For the purposes of this study the toys and games assemblage has been sorted into five categories: Tea Cups/Saucers, Dolls, Marbles and Dominos (Table 7.36).

Table 7.35 Recreation Assemblages By Type

Type	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
Toys and Games	5	2	2	9	5	-
Musical Instrument	3	-	1	1	1	-
Hunting and Fishing	10	3	1	19	87	19
Total	18	5	4	29	93	19

Table 7.36 Toy and Gaming Piece Assemblages by Category

Category	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
Tea Vessels	1	1	1	2	1	-
Doll	1	-	1	1	3	-
Marble	3	1	-	5	1	-
Domino	-	-	-	1	-	-
Total	5	2	2	9	5	0

Nine toys and games items were recovered from Fort Yamhill (FYH1=5, FYH2=2 and FYH3=2). The five toys and games items recovered from FYH1 include one toy tea vessel (plain/undecorated porcelain saucer), one doll (unglazed porcelain leg) and three marbles (two colorless glass marbles [one with red and blue onionskin swirls and one with red and yellow onionskin swirls] and one porcelain marble [glazed and hand-painted with a floral design]). The two toys and games items recovered from FYH2 include one toy tea vessel (molded ironstone tea cup) and one marble (porcelain, glazed and hand-painted with a floral design). The two toys and games items recovered from FYH3 include one toy vessel (plain porcelain tea saucer) and one doll (glazed porcelain shoulder plate).

Fourteen toys and games were recovered from Fort Hoskins (FHH1=9 and FHH2=5). The nine toys and games items recovered from FHH1 include two toy tea vessels (one plain/undecorated porcelain tea pot lid and one molded porcelain saucer), one doll (glazed porcelain arm), five marbles (three glass marbles [two colorless with red, white and blue onionskin swirls and one solid blue] and two porcelain marbles [unglazed with red, green and black lines]) and one domino (ebony with a bone veneer). The five toys and games items recovered from FHH2 include one tea vessel (molded porcelain saucer), three dolls (one glazed porcelain head, one painted

wooded arm and one buff leather torso) and one marble (crochery, Bennington-type with a mottled brown glaze).

Musical Instruments. The musical instrument artifact assemblage is comprised of items that were designed to make musical sound, or sound that was organized in time. Six musical instruments were recovered from Fort Yamhill and Fort Hoskins and will be used in this study including three recovered from FYH1, one recovered from FYH3, one recovered from FHH1 and one recovered from FHH2. For the purposes of this study the musical instrument assemblage has been sorted into four categories: Harmonicas, Mouth Harps, Indeterminate Chordophones (stringed instruments) and Indeterminate Aerophones (wind instruments) (Table 7.37).

Four musical instruments were identified in the artifact assemblage recovered from Fort Yamhill including three recovered from FYH1 (two mouth harps and one indeterminate areophone) and one recovered from FYH3 (mouth harp). Two musical instruments were identified in the artifact assemblage recovered from Fort Hoskins including one recovered from FHH1 (a harmonica) and one recovered from FHH2 (an indeterminate chordophone).

Hunting and Fishing. The hunting and fishing artifact assemblage contains items that were used in the practice of pursuing, tracking, trapping or killing wild game and fish (Table 7.38). One hundred and thirty-nine hunting and fishing artifacts were recovered from Fort Yamhill and Fort Hoskins and will be used in this study including 10 recovered from FYH1, three recovered from FYH2, one recovered from FYH3, 19 recovered from FHH1, 87 recovered from FHH2 and 19 recovered from

Table 7.37 Musical Instrument Assemblages By Category

Category	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
Harmonica	-	-	-	1	-	-
Mouth Harps	2	-	1	-	-	-
Ind. Chordophone	-	-	-	-	1	-
Ind. Aerophone	1	-	-	-	-	-
Total	3	0	1	1	1	0

Table 7.38 Hunting and Fishing Assemblages by Category

Category	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
Hunting Firearms	-	-	-	2	4	-
Firearm Ignition Systems	6	1	1	6	38	11
Large Caliber Projectile	-	-	-	6	6	3
Shot/Pellet Projectile	4	2	-	4	39	5
Fish Hook	-	-	-	1	-	-
Total	10	3	1	19	87	19

FHH3. For the purposes of this study the hunting and fishing assemblage has been sorted into five categories: Hunting Firearms, Firearm Ignition Systems, Large Caliber Projectiles, Shot/Pellet Projectiles and Fish Hooks.

Fourteen hunting and fishing items were recovered from Fort Yamhill (FYH1=10, FYH2=3 and FYH3=1). The 10 hunting and fishing items recovered from FYH1 include six firearm ignition system artifacts (one powder flask and five “top-hat” type rifle percussion caps) and four shot/pellet projectiles (all birdshot [two No. 9 pellets, one No. 1 pellet and one No. BBB pellet]). The three hunting and fishing items recovered from FYH2 include one firearm ignition system artifact (“top-hat” type rifle percussion cap) and two shot/pellet projectiles (all birdshot [all No. 1 pellets]). The single hunting and fishing item recovered from FYH3 is a fire ignition system artifact (“top-hat” type rifle percussion cap).

One hundred and twenty-five hunting and fishing items were recovered from Fort Hoskins (FHH1=19, FHH2=87 and FHH3=19). The 19 hunting and fishing items recovered from FHH1 include two hunting firearms (one U.S. Model 1816 .69 caliber flintlock musket [represented by top jaw and screw] and one .58/.577 caliber rifle/rifled musket [represented by tompion]), six firearm ignition system artifacts (two powder flasks [two lead alloy caps, one cast “DUPONT”] and four “top-hat” type rifle percussion caps), six large caliber projectiles (one .54 caliber round ball, two .58 caliber Minie balls and three .69 caliber round balls), four shot/pellet projectiles (all birdshot [one No. 1 pellet and three No. BB pellets]) and one fish hook (made of brass).

The 87 hunting and fishing items recovered from FHH2 include four hunting firearms (one U.S. Model 1842 musket or Model 1855 rifled musket conversion

[represented by ramrod thimble], one Model 1853 British Enfield rifle musket [represented by a long range rear sight], one Model 1816 Pennsylvania rifle [represented by a patch box hinge support] and one indeterminate sporting rifle [represented by a brass trigger guard]), 38 firearm ignition system artifacts (“top-hat” type rifle percussion caps), six large caliber projectiles (one .50 caliber round ball, two .54 caliber Minie balls and three .58 caliber Minie balls), and 38 shot/pellet projectiles (one No. 9 pellet, one No. 8 pellet, four No. 7 pellets, nine No. 6 pellets, 13 No. 5 pellets, one No. 4 pellet, six No. 1 pellets, four No. BB pellets).

The 19 hunting and fishing items recovered from FHH3 include 11 firearm ignition system artifacts (one black powder flask), three large caliber projectiles (.58 caliber Minie balls) and five shot/pellet projectiles (three No. 5 pellets, one No. BB pellet and one No. T pellets).

Pocket Items. The Pocket Item Artifact Class contains artifacts that were typically owned and used by single individual or household member and were small enough to fit in one’s pocket. Nine pocket items were recovered from Fort Yamhill and Fort Hoskins (FYH1=2, FYH2=1, FYH3=1, FHH1=1, FHH2=3 and FHH3=1). For the purposed of this study the pocket item assemblage has been sorted into two artifact types: Tools and Currency (Table 7.39).

Four pocket items were recovered from Fort Yamhill (FYH1=2, FYH2=1 and FYH3=1). The two pocket items recovered from FYH1 are both tools (one pocket knife and one pen knife). The one pocket item recovered from FYH2 is also a tool (pocket knife). And, the one pocket item recovered from FYH3 is a currency item (silver 1833 Columbian Real).

Table 7.39 Personal Pocket Item Assemblages By Type and Artifact

Type	Artifact	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
Tools	Spectacles	-	-	-	-	2	-
	Pocket/Pen Knife	2	1	-	1	-	1
Currency	Coin	-	-	1	-	1	-
Total		2	1	1	1	3	1

Five pocket items were recovered from Fort Hoskins (FHH1=1, FHH2=3 and FHH3=1). The single pocket item recovered from FHH1 is a tool (pen knife). The three pocket items recovered from FHH2 include two tools (two spectacles, one made of brass and the other made of iron) and one currency item (silver 1864 United States Dime). And, the single pocket item recovered from FHH3 is a tool (pocket knife).

Transportation and Travel. The Transportation and Travel Artifact Class contains artifacts that were used during the process of moving people and goods from one place to another. Eight transportation and travel items were recovered from Fort Yamhill and Fort Hoskins (FYH1=3, FYH2=1, FYH3=1, FHH1=2 and FHH3=1). For the purposes of this study the transportation and travel assemblage has been sorted into two artifact types: Luggage and Horse Furniture (Table 7.40).

Five transportation and travel items were recovered from Fort Yamhill (FYH1=3, FYH2=1 and FYH3=1). The three transportation and travel items recovered from FYH1 include one luggage item (carpet bag) and two pieces of horse furniture (a snaffle bit and a horseshoe). The single transportation and travel item recovered from FYH2 is a piece of horse furniture (a horseshoe). And, the single transportation and travel item recovered from FYH3 is also a piece of horse furniture (a horseshoe).

Three transportation and travel items were recovered from Fort Hoskins (FHH1=2 and FHH3=1). The two transportation and travel items recovered from FHH1 include two horse furniture items (a saddle girth buckle and a crotal/sleigh bell). The single transportation and travel item recovered from FHH3 is a piece of horse furniture (a stirrup).

Table 7.40 Transportation and Travel Assemblages By Type and Artifact

Type	Artifact	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
Luggage	Carpet Bag	1	-	-	-	-	-
Horse Furniture	Bit	1	-	-	-	-	-
	Stirrup	-	-	-	-	-	1
	Saddle Girth Buckle	-	-	-	1	-	-
	Crotal/Sleigh Bell	-	-	-	1	-	-
	Horseshoe	1	1	1	-	-	-
Total		3	1	1	2	0	1

CHAPTER 8: DISCUSSION

The primary goal of this thesis was to examine the material expression of the social, economic and authority statuses of commissioned officers of varying military grades (i.e, captain, first lieutenant and second lieutenant). Assuming that variation in these statuses, would be reflected in the material culture and purchasing behavior of commissioned officers this project examined several lines of converging evidence: 1) commissioned officer demographics, 2) commissioned officer subsistence purchasing behavior, 3) the reflection of status in the built environment of officers' row, and 3) the material expression of status in artifact assemblages recovered from six of the commissioned officers quarters which are each discussed below.

Commissioned Officer Demographics

As discussed in Chapter 2 a commissioned officer's social, economic and military status and authority were all influenced by several intersecting variables including his: 1) military corps, 2) military grade, 3) military rank, 4) military role, 5) length of military experience, 6) military salary, 7) previous profession, 8) attendance of the United State Military Academy, 9) age, 10) worth of his real and personal estates, 11) marital status and 12) number of dependents. Each of these variables had an impact on a commissioned officers' military status and authority as well as his social and economic position within the subculture of the United States Army. Each of these variables are discussed below in relation to how they influenced the socio-cultural and economic status of the commissioned officers who served at Fort Yamhill and Fort Hoskins. These socio-cultural and economic statuses are then used as context for exploring how these statuses are expressed in the material cultural recovered from three commissioned officers quarters at each post.

Military Grade, Role, Length of Military Service and Compensation

A commissioned officer's military grade, military roles and the length of his military service are the most important factors in determining an officer's military rank, authority and compensation. Military grade refers to the particular level or step in the military hierarchy an officer was placed and defined his level of military authority in relation to the grades above and below him. Each military grade was also compensated with a military salary and emoluments depending according to his grade. In general, the higher the military grade of an officer the higher his military salary and the greater his emoluments. Military role refers to the actual positions or duties a commissioned officer executed as a member of a particular military unit or department. For example, in addition to serving as a leader for his company a commissioned officer could also serve as the commander, adjutant, commissary or quartermaster for his post or regiment. Each military role was also compensated with additional pay and/or emoluments according to the prestige of the role. In general, the more prestigious or desirable the role the higher the military pay and the greater the emoluments. Length of military service refers to the length of time since an officer was first commissioned into the United States Army or the length of time since his promotion into his current grade. An officer's length of military service was compensated not only with additional pay but also was the primary method for determining a commissioned officers rank and authority within his grade. Again, in general the longer a commissioned officer's length of military service the higher his additional pay and the greater his rank and authority within his grade.

Military Grade and Compensation at Fort Yamhill and Fort Hoskins.

The prime variable in determining a commissioned officer's military authority and socio-economic status within the United States Army was his military grade. All of the commissioned officers who served at either Fort Yamhill or Fort Hoskins were one of three military grades and were either a captain, first lieutenant or second lieutenant. At both posts commissioned officers of a higher grade earned higher military salaries, greater emoluments and were invested with more military authority than commissioned officers with a lower grade. Captains at both posts earned

between \$146.50 and \$128.50 per month in commutation base pay which was higher than both first lieutenants who earned between \$129.83 and \$118.50 and second lieutenants who earned \$129.83 and \$113.50 per month in commutation base pay. Captains were also compensated with a greater amount of emoluments than their subaltern officers including twice as many rooms as quarters, 33% more wood, 16.6% more in baggage allowances and twice as much camp equipage (tents, axes and hatchets) than both first and second lieutenants. In addition to greater pay and more emoluments captains were also vested with military authority over the lower grades of first lieutenant and second lieutenant and first lieutenants were vested with military authority over the lower grade of second lieutenant.

Military Roles and Compensation at Fort Yamhill and Fort Hoskins. The second most influential variable in determining a commissioned officer's military and socio-economic status within the United States Army was his military roles. Commissioned officers at Fort Yamhill and Fort Hoskins held a variety of military roles such as post commander (PC), company commander (CC), post adjutant (PA), assistant commissary of subsistence (ACS), acting assistant commissary of subsistence (AACS), acting assistant quartermaster (AAQM) and regimental quartermaster (RQM). Each military role was accompanied with additional pay, emoluments and depending on the role additional authority. Captains at both posts most often held those military roles with the highest additional pay, greater emoluments and the most authority such as post commander (PC), company commander (CC) and post adjutant (PA) while first and second lieutenants most often held those military roles with lower additional pay, less emoluments and the least authority such as assistance commissary of subsistence (ACS), acting assistant commissary of subsistence (AACS), acting assistant quartermaster (AAQM) and regimental quartermaster (RQM) (Figures 8.1 and 8.2).

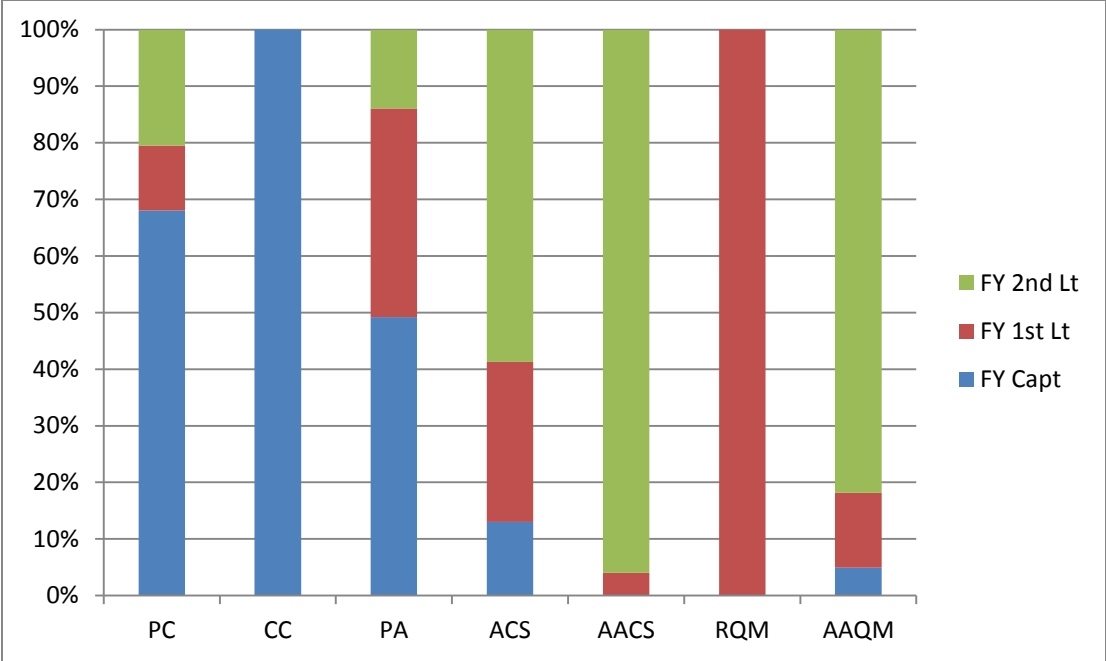


Figure 8.1 Distribution of Military Roles By Commissioned Officer Grade at Fort Yamhill

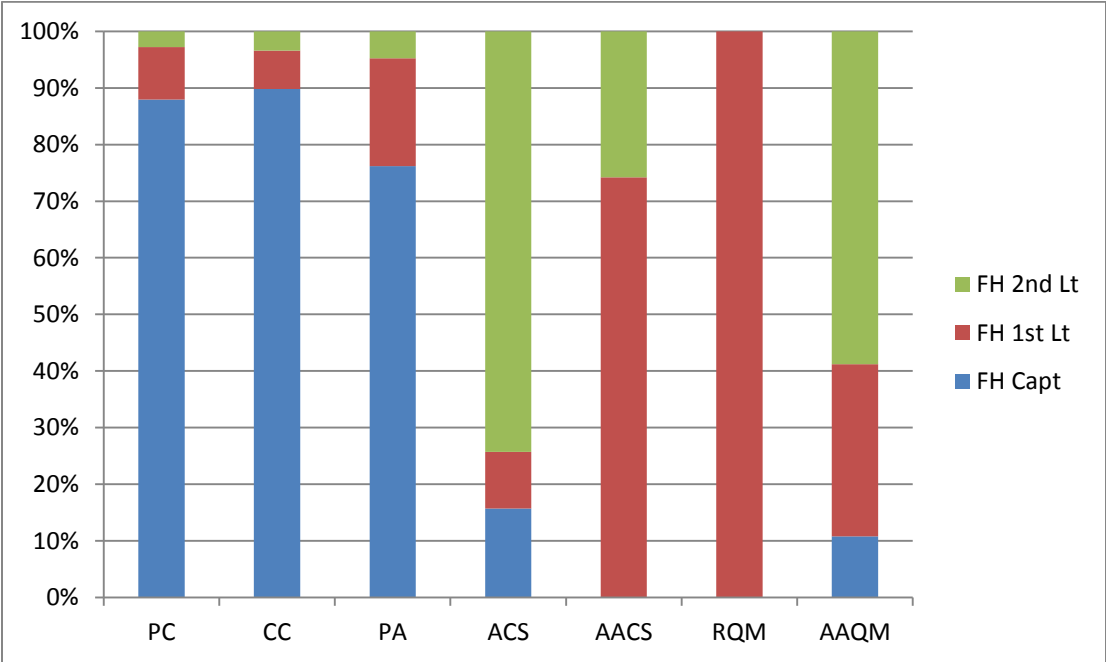


Figure 8.2 Distribution of Military Roles By Commissioned Officer Grade at Fort Hoskins

At both Fort Yamhill and Fort Hoskins captains held the role of post commander (PC) the majority of the time the post was garrisoned, 68.2% of the time

at Fort Yamhill and 87.9% of the time at Fort Hoskins. Subaltern officers at both posts held the position of post commander (PC) far less frequently. First lieutenants held the position of post commander only 11.4% of the time at Fort Yamhill and 9.2% of the time at Fort Hoskins and second lieutenants held the position 20.4% of the time at Fort Yamhill and just 3.7% of the time at Fort Hoskins. While the position of post commander (PC) did not earn an officer any additional pay it did compensate the officer with several emoluments such as an additional room as an office, an additional cord of wood from October through April, additional office furniture (two desks/tables, six chairs, one pair of andirons, one shovel and one set of tongs) and additional stationary (i.e., paper, envelopes, ink stand, quills/pens, pencils, sand box, wafer box, wafers, sealing wax, ink powder, tape). He was also invested with ultimate authority over the entire post including all officers and men who were in or under the command of another officer.

The role of company commander (CC) was held by captains exclusively at Fort Yamhill and 89.8% of the time by captains at Fort Hoskins. Subaltern officers never held the position of company commander (CC) at Fort Yamhill and far less frequently than captains at Fort Hoskins. First lieutenants held the position of company commander (CC) only 6.8% of the time and second lieutenants held the post for just 3.4% of the time. The position of company commander was compensated with an additional \$10.00 per month in pay and the military authority over all of the soldiers and officers, of lower grade and rank, within the company.

At both posts the role of post adjutant (PA) was also most often held by captains. At Fort Yamhill captains held the role of post adjutant (PA) 49.1% of the time while at Fort Hoskins captains held the role 76.2% of the time and the subaltern officers at both posts held the role much less frequently. First lieutenants held the position of post adjutant (PA) 36.8% of the time at Fort Yamhill and just 19.0% of the time at Fort Hoskins and second lieutenants held the position just 13.9% of the time at Fort Yamhill and only 4.7% of the time at Fort Hoskins. Although the position of post adjutant (PA) did not invest the serving officer with any additional authority it was one of the highest financially compensated roles earning an officer an additional \$10.00 in salary and one horse (with a computation value of \$8.00) per month.

The role of assistant commissary of subsistence (ACS) was more commonly held by subaltern officers than by captains at both posts. At Fort Yamhill second lieutenants held the role of assistant commissary of subsistence (ACS) 58.7% of the time, first lieutenants 28.3% of the time and captains just 13.0% of the time. A similar pattern was observed at Fort Hoskins where second lieutenants held the role of assistant commissary of subsistence (ACS) 74.3% of the time, captains 15.7% of the time and first lieutenants just 10.0% of the time. The position of assistance commissary of subsistence (ACS) was one of the highest compensated positions at a military post earning an officer an additional \$10.00 per month in pay and several emoluments including an additional room as an office, an additional cord of wood per month from October through April and additional stationary (i.e., paper, envelopes, ink stand, quills/pens, pencils, sand box, wafer box, wafers, sealing wax, ink powder, tape). Although the position was financially well compensated it did not invest any additional authority to the officer.

The role of acting assistant commissary of subsistence (AACS) was exclusively held by subaltern officers at both posts with no captains holding the role. At Fort Yamhill second lieutenants held the role of acting assistant commissary of subsistence (AACS) 96.0% of the time and first lieutenants held the position only 4.0% of the time. The opposite was true at Fort Hoskins where first lieutenants held the role of acting assistant commissary of subsistence (AACS) 74.2% of the time while second lieutenants held the position just 25.8% of the time. The position of acting assistant commissary of subsistence (AACS) was one of the least compensated position at a military post earning an officer an additional \$3.33 per month in pay and just a few emoluments including an additional room as an office, an additional cord of wood per month from October through April and additional stationary (i.e., paper, envelopes, ink stand, quills/pens, pencils, sand box, wafer box, wafers, sealing wax, ink powder, tape), and the position did not invest any additional authority to the officer.

The role of regimental quartermaster (RQM) was exclusively held by a single subaltern officer at each post, a first lieutenant. In addition, the same first lieutenant, First Lieutenant Catley of the 1st Oregon Volunteer Infantry, served as the regimental

quartermaster and was stationed at both Fort Yamhill and Fort Hoskins. Because the position was held at the regimental level it was one of the highest compensated positions earning an officer an additional \$10.00 per month in pay, two horses (with a computation value of \$16.00) per month and several emoluments including an additional room as an office, an additional cord of wood per month from October through April and additional stationary (i.e., paper, envelopes, ink stand, quills/pens, pencils, sand box, wafer box, wafers, sealing wax, ink powder, tape). The position also invested the officer with authority over all soldiers and lower ranked commissioned officers within serving as acting assistant quartermasters (AAQM) within the regiment.

The role of acting assistant quartermaster (AAQM) was held far more often by subaltern officers at both posts than by captains. At Fort Yamhill captains held the role of AAQM just 4.9% of the time while first lieutenants held the position 13.2% of the time and second lieutenants held the position the most out of all of the commissioned officers, 81.8% of the time. A similar pattern was observed at Fort Hoskins where captains held the role of AAQM just 10.7%, first lieutenants 30.3% of the time and second lieutenants 58.8% of the time. The position of acting assistant quartermaster (AAQM) was also one of the least compensated position at a military post earning an officer just an additional \$3.33 per month in pay and a few emoluments including an additional room as an office, an additional cord of wood per month from October through April and additional stationary (i.e., paper, envelopes, ink stand, quills/pens, pencils, sand box, wafer box, wafers, sealing wax, ink powder, tape), and the position did not invest any additional authority to the officer.

In summary, captains at Fort Yamhill and Fort Hoskins tended to hold those position that held the highest authority (i.e., post commander and company commander) as well as those that received the highest compensation in both additional salaries and emoluments (i.e., company commander and post adjutant) while the lower graded and ranked subaltern officers tended to hold those positions with lower authority and least compensation in term of additional salaries and emoluments (i.e., assistant commissary of subsistence, acting assistant commissary of subsistence, regimental quartermaster and acting assistant quartermaster).

Length of Military Service, Rank and Compensation at Fort Yamhill and Fort Hoskins. Another influential variable in the determination of the military and socio-economic status of a commissioned officer was his length of military service. An officer's length of military service had two major impacts to his status, the first was an impact to his rank or his military status and authority and the second was an impact to his economic status or his military salary. Military rank describes an officer's relative position of authority in relation to another officer (i.e., a captain outranked a first lieutenant or Officer A outranked Officer B) and his rank was based on his length of service or his seniority so that, especially within the same grade, commissioned officers with longer lengths of military service outranked and held military authority over officers with shorter lengths of service. An officer's rank also had a major impact on his promotion. During the 19th century the system of promotion within the United States Army was primarily based on seniority where the longest serving officer within a particular grade, regiment, corps or the army at large was promoted before an officer with a shorter length of military service. Lastly, the length of an officer's military service also had a major impact on his socio-economic status by awarding a commissioned officer an additional ration per day, with a total commutation value of \$9.00, for every 5 years of military service. This had the potential to have a major impact to a commissioned officer's salary so the longer a commissioned officer served in the army the higher the military salary increase despite any lack of promotion.

Officers with the grade of captain at both Fort Yamhill and Fort Hoskins tended to have the longer lengths of military service than either first lieutenants or second lieutenants (Figure 8.3). On average captains had been serving 6.8 years in the United States Army prior to their assignment to Fort Yamhill and 3.7 years prior to their assignment at Fort Hoskins. This is considerably more than the 4.4 years for the first lieutenants and the 0.9 years for the second lieutenants at Fort Yamhill and the 1.7 years for the first lieutenants and the 0.9 years for the second lieutenants at Fort Hoskins. Because of these much longer terms military service captains were much more likely to earn the length of service bonus than either first lieutenants or

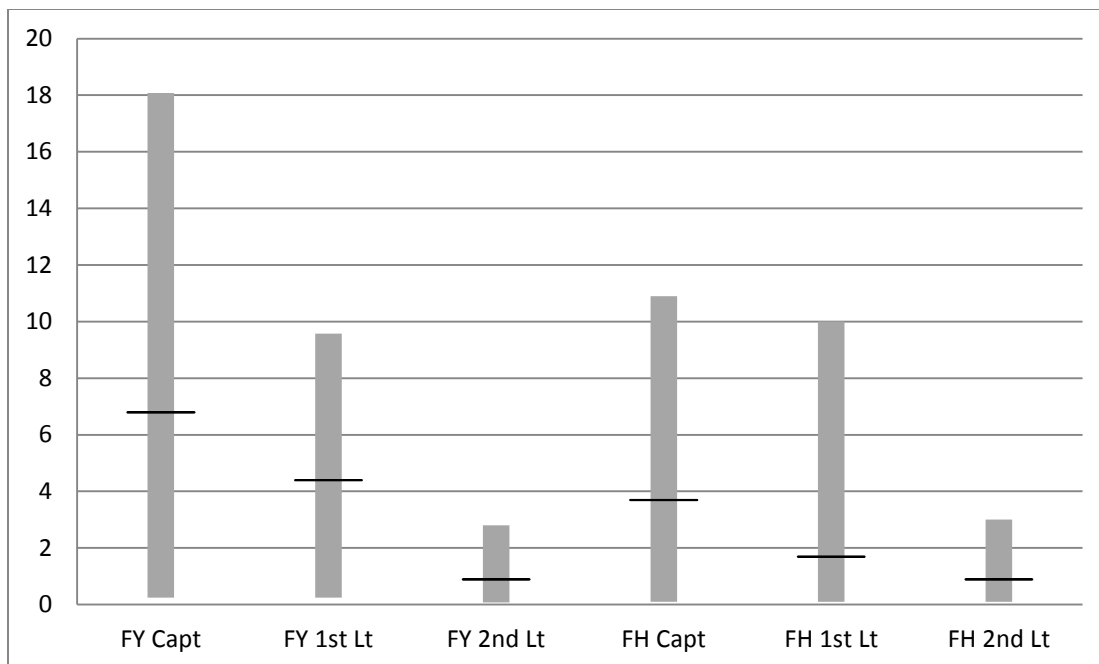


Figure 8.3 Length of Military Service (In Years) For Commissioned Officers By Grade. Ranges Represented By Gray Bars and Means Represented By Black Lines.

second lieutenants and first lieutenants were much more likely to earn these bonuses than second lieutenants.

In fact, at Fort Yamhill and Fort Hoskins six captains were eligible for the length of service bonus pay while only four first lieutenants and no second lieutenant were eligible. At Fort Yamhill the three captains who were eligible received an additional \$5.00, \$10.00 and \$15.00 per month in pay while the two first lieutenants were only eligible for an additional \$5.00 per month each. At Fort Hoskins the pattern is similar where the three captains were eligible for an additional \$5.00, \$10.00 and \$10.00 in pay while only one first lieutenant was eligible for the bonus and received an additional \$10.00 per month. This tenure bonus made a major impact to a commissioned officer's salary by raising on average the monthly base salary for the captains between 3.9% and 11.7% and for first lieutenants 4.2% to 8.4%. Since no second lieutenants were eligible for the tenure bonus pay, none of them received an increase in their base salary.

Although a commissioned officer's rank and military authority was impacted by his relative length of military service in general it was unlikely that it had a major impact at either Fort Yamhill or Fort Hoskins. Both Fort Yamhill and Fort Hoskins

were, except for an 11 month period between August 1856 and June 1857 when Fort Yamhill was garrisoned by two companies, garrisoned by a single company of men with a single set of “company” officers (i.e., one captain, one first lieutenant and one second lieutenant) per company. Therefore, the interaction and ranking between commissioned officers was most often between officers of different military grades (not between officers of different military ranks within the same grade) and therefore the military hierarchy and level of authority was determined by the hierarchy of their grades not their ranks.

Estimated Mean Monthly Salary (EMMS). As described in Chapter 3 a commissioned officer’s Estimated Mean Monthly Salary (EMMS) figures were calculated as a function of the variables discussed above including the officer’s grade, corps, role and length of military service. These EMMS values are used here to compare the relative economic status of the commissioned officers who served at both Fort Yamhill and Fort Hoskins. At both posts captains had by far the highest EMMS values followed by first lieutenants and lastly by second lieutenants (Figure 8.4).

Based on this analysis captains at both posts were paid more than their subaltern officers. At Fort Yamhill captains had an average EMMS of \$155.69 per month, 13% more than their first lieutenants (\$137.06) and 29% more than their second lieutenants (\$120.58). The figures are even more dramatic at Fort Hoskins where captains had an average EMMS value of \$159.99 per month which was 22% higher than the first lieutenants (\$130.08) and 38% higher than the second lieutenants (\$116.01). The impacts of this disparity are obvious, captains with their much higher salaries had more purchasing power than their subaltern officers and first lieutenants had more purchasing power than the second lieutenants.

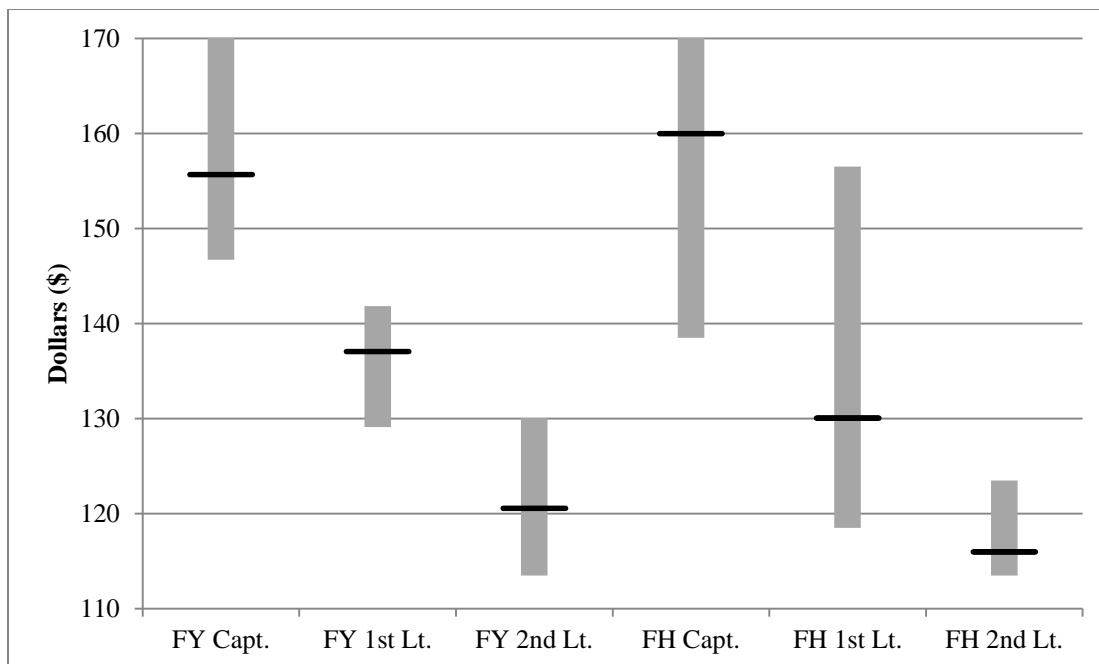


Figure 8.4 Estimated Mean Monthly Salaries For Commissioned Officers By Grade. Ranges Represented By Gray Bars and Means Represented By Black Lines.

Non-Military Demographic Data and its Influence of Status

A commissioned officer's socio-economic status was also influenced by several other non-military sources such as the value of his real and personal estates and the number of his dependents and appear to correlate with, but maybe was not influenced by, his age and his previous non-military profession or his attendance of the United States Military Academy. The influence of these variables on the social, economic and military status and authority of the commissioned officers who served at Fort Yamhill and Fort Hoskins are explored below.

Commissioned Officer Wealth. The most direct non-military influence on the economic status of commissioned officers was likely the value of their wealth. For the purposes of this study a commissioned officer's wealth was determined by the value of his real and personal estates as reported in the *United States Federal Census* records of 1850 and 1860. At both Fort Yamhill and Fort Hoskins commissioned officers with the grade of captain had the highest reported values of real and personal estates followed the subaltern officers at each post (Figure 8.5).

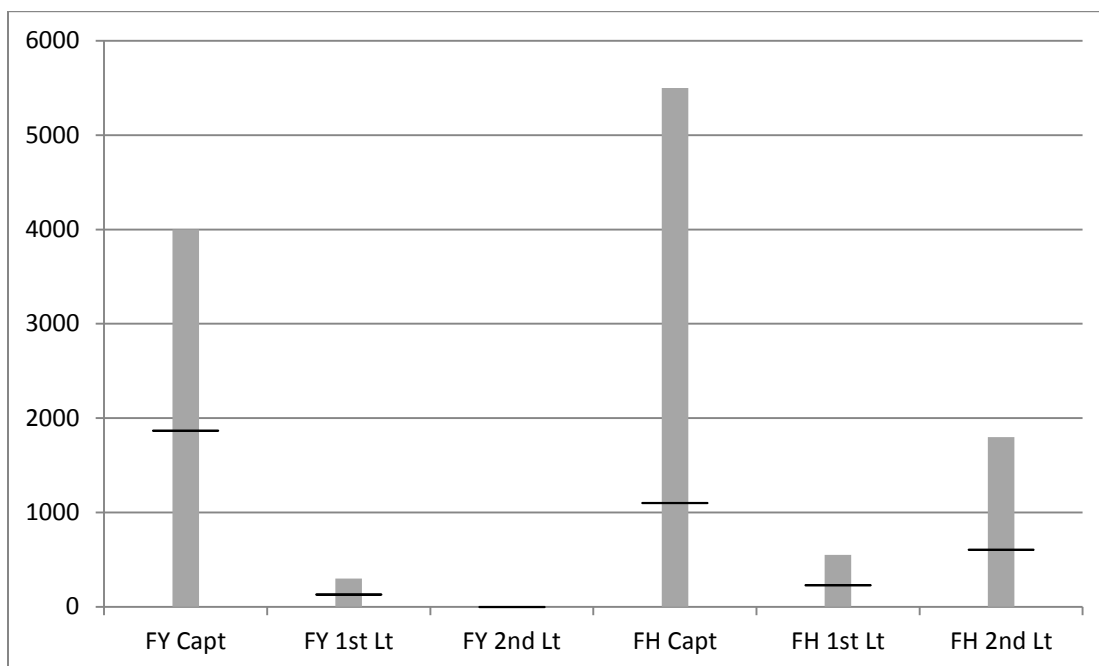


Figure 8.5 Wealth Of Commissioned Officers By Grade. Ranges Represented By Gray Bars and Means Represented By Black Lines.

Captains at both Fort Yamhill and Fort Hoskins were, by far, the wealthiest commissioned officers in terms of the reported value of their real and personal estates. At Fort Yamhill captains had a reported value of their estates ranging from \$0 to \$4,000 with an average reported value of \$1,867 (the equivalent of about a year of army wages). This was considerably higher than the values reported for both first lieutenants, who reported estates ranging from \$0 to \$300 with an average reported value of \$133 (the equivalent of about a month of army wages), and second lieutenants who all had real and personal estates valued at \$0 in either 1850 or 1860. A similar pattern is observed at Fort Hoskins where captains had a reported value of their estates ranging from \$0 to \$5,500 and an average reported value of \$1,100 (again, about year of army wages). Again, this is considerably higher than the values reported for both first lieutenants, who reported estates ranging from \$0 to \$550 with an average reported value of \$230 (or almost two months of army wages), and second lieutenants who reported estates ranging from \$0 to \$1,800 and an average reported value of \$606 (or five months army wages). Clearly captains were much wealthier than their subaltern officers at both posts.

Previous Job Class and Profession. The job class and profession of officers before their commission in the United States Army or before their assignment to Fort Yamhill and Fort Hoskins may have had an impact on their socio-economic status. Given that higher class professions tended to have more “respectability”, or higher social status, and were often compensated with greater salaries, or higher economic status, it follows that those individuals who held higher class professions tended to have higher socio-economic status over those individuals who had professions which were classified as lower class. In all the commissioned officers at Fort Yamhill and Fort Hoskins held at least ten job types prior that have for the purposes of this study been divided and grouped based required skill and level of managerial duties into four job classes based loosely on Warner et al. (1949): upper-middle, lower-middle, upper-lower and lower-lower (Figure 8.6).

At both Fort Yamhill and Fort Hoskins higher graded officers tended to have had previous professions that were considered higher class (upper-middle class) while their subaltern officers tended to have previous professions that were considered

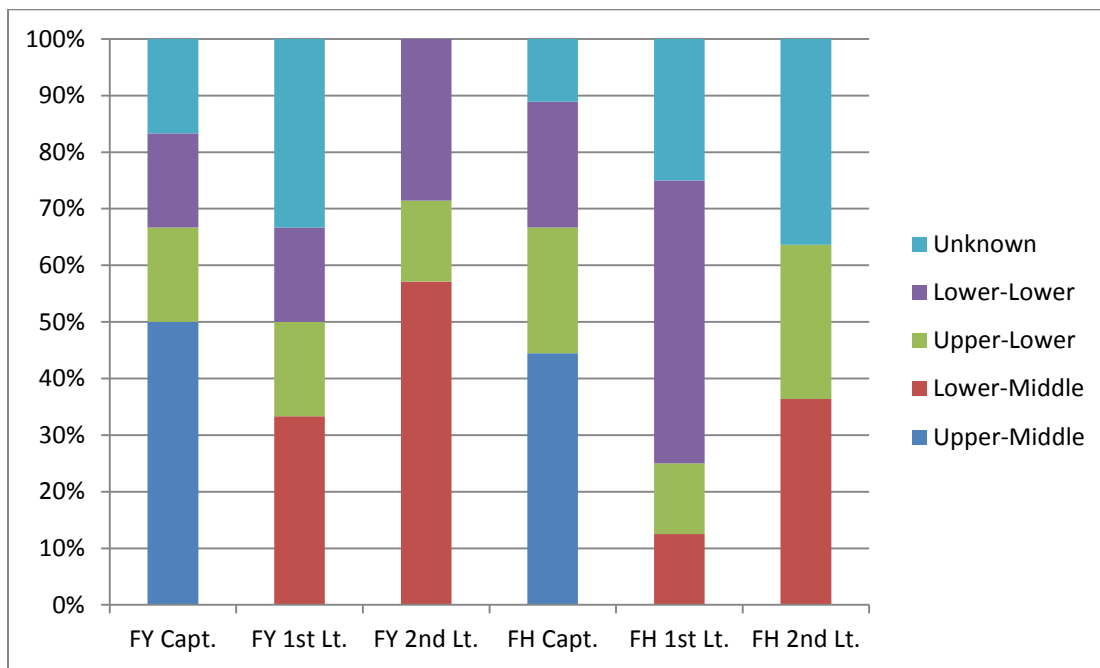


Figure 8.6 Distribution of Previous Jobs/Professions Held By Commissioned Officer Grade By Job Classification

lower (lower-middle, upper-lower and lower-lower) class. At Fort Yamhill the majority of captains (50.0%) had previous professions that would have been considered upper-middle class while none of the first or second lieutenants had previous professions of a similar level. Instead both first lieutenants and second lieutenants tended to have previous professions of lower-middle class, 33.3% and 57.1%, respectively. A similar pattern was observed at Fort Hoskins where 44.4% of captains had previous professions that would have been considered upper-middle class also with no first or second lieutenants having professions of a similar level. Instead first lieutenant tended to have lower-lower (50.0%) previous professions and second lieutenants tended to have lower-middle (36.4%) professions. If it is true that higher economic status (salaries) and higher social status (respectability and prestige) correlate with the class level of an commissioned officer's previous profession then captains would had higher socio-economic status than subaltern officers (first lieutenants and second lieutenants) at both Fort Yamhill and Fort Hoskins.

Marital Status and Number of Dependents. The marital status and the number of dependents supported by a commissioned officer may be an indirect measure of an officer's economic position. It is logical to assume that as the number of people being supported (dependents) by a commissioned officer increases so does the economic cost to support those people increase. Therefore, it is hypothesized here that it may be possible to view the number of dependents (wives, children and wards) supported by a commissioned officer as an indication of his economic status. At both Fort Yamhill and Fort Hoskins officers with the grade of captain tended to have more dependents than their subaltern officers (Figure 8.7).

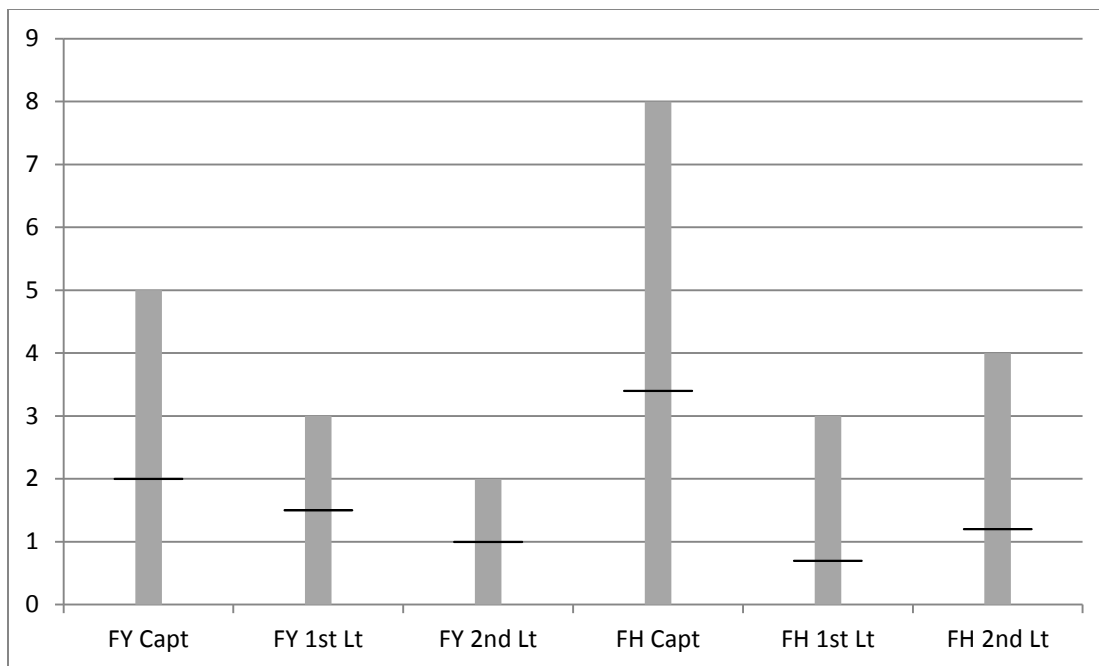


Figure 8.7 Number of Dependents By Grade. Ranges Represented By Gray Bars and Means Represented By Black Lines.

At Fort Yamhill captains supported a total of 12 dependents (three wives and nine children) with an average number of dependents supported per captain of 2.00 dependents. The total number of dependents supported by an individual captain ranged from 5 (one wife and four children) to zero (with three captains appearing to have been bachelors with no known dependents). The number of dependents supported by captains was far greater than the number of dependents supported by both first and second lieutenants. First lieutenants at Fort Yamhill supported a total of only nine dependents (four wives and five children) with an average number of dependents supported per first lieutenant of 1.5 dependents. The total number of dependents supported by an individual first lieutenant ranged from 3 (one wife and two children) to zero (with two first lieutenants appearing to have been bachelors with no known dependents). Second lieutenants at Fort Yamhill also supported far fewer dependents, only six dependents (four wives and two children) with an average number of dependents supported per second lieutenant of 1.0 dependents. The total number of dependents supported by an individual second lieutenant ranged from two (one wife and one child) to zero (with three second lieutenants appearing to have been bachelors with no known dependents).

A similar pattern was observed at Fort Hoskins where captains supported a total of 31 dependents (8 wives and 23 children) with an average number dependents supported per captain of 3.4 dependents. The total number of dependents supported by an individual captain ranged from 8 (one wife and seven children) to zero (with only one captain appearing to have been a bachelor with no known dependents). First lieutenants at Fort Hoskins supported a total of only 5 dependents (three wives and two children) with an average number of dependents supported per first lieutenant of only 0.7 dependents. The total number of dependents supported by an individual first lieutenant ranged from 5 (one wife and four children) to zero (four of the first lieutenants appear to have been bachelors with no known dependents). Second lieutenants at Fort Hoskins supported a total of ten dependents (three wives and seven children) with an average number of dependents supported per second lieutenant of 1.2 dependents. The total number of dependents supported by an individual second lieutenant ranged from four (one wife and three children) to zero (with five of the second lieutenants appearing to have been bachelors with no known dependents).

Although it is not a direct measure of economic status the number of dependents supported by a commissioned officer does inform on his general socio-economic position. Several contemporary authors and historians of the period have stated that it was difficult for the lower graded commissioned officers (i.e., first and second lieutenants) to support a family with their Army salaries, especially along the frontier, and that many of them waited for the higher salaries associated with the higher military grades (i.e., captain and above) before marrying and starting a family (Adams 2009; Glisan 1874).

Commissioned Officer Age. At both Fort Yamhill and Fort Hoskins a commissioned officer's age tended to correlate with his grade so that the oldest commissioned officers also tended to be highest graded commissioned officers (Figure 8.8). Captains at both Fort Yamhill and Fort Hoskins tended to be the oldest commissioned officers followed by both first lieutenants and second lieutenants. At Fort Yamhill captains ranged in age from 30 to 44 years and averaged 36.4 years of age. This was considerable higher than both first lieutenants, who ranged in age from

26 to 32 years and averaged just 29.4 years of age, and second lieutenants, who ranged in age from 25 to 43 years and averaged 30.1 years of age. A similar pattern is seen at Fort Hoskins where captains ranged in age from 31 to 47 years and averaged 37.1 years of age, first lieutenants ranged in age from 26 to 36 years and averaged 30.2 years of age and second lieutenants ranged in age from 22 to 41 with and averaged just 29.7 years of age.

Although commissioned officer age does appear to correlate with grade it is unlikely that it had as a direct impact on the socio-economic status of commissioned officers. Because of the Army's reliance on seniority for promotion and defining military status (i.e., rank) other variables such as length of military service (i.e., years of military experience) likely had a more direct influence on the military, social and economic status of an officer than an officer's age. Instead, a commissioned officer's age may have been a more informal level of status. Generally being older captains at both posts may have been treated with greater respect and reverence by their subaltern officers as being the more experienced (both militarily and personally) members of the socio-cultural fabric the military. This may have been especially true

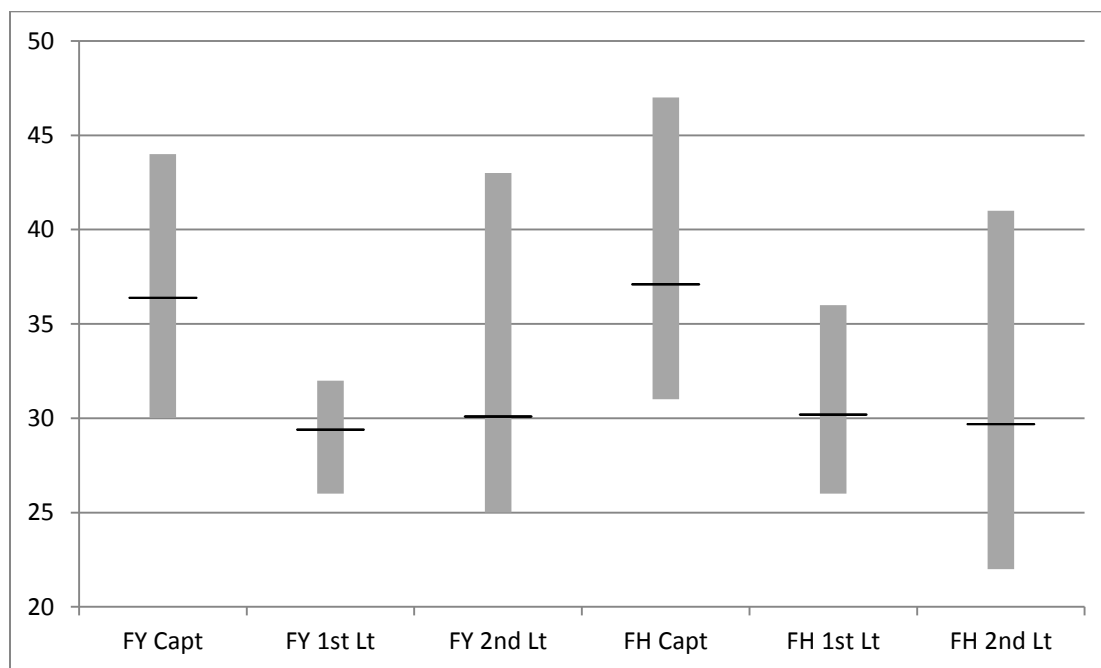


Figure 8.8 Commissioned Officer Age By Grade. Ranges Represented By Gray Bars and Means Represented By Black Lines.

at isolated frontier military posts where the commissioned officers of your garrison may have been the only other members of your peer group for several miles.

United States Military Academy Graduate and Class Rank. Overall only 18 of the 47 (38.3%) commissioned officers who served at either Fort Yamhill or Fort Hoskins graduated from the United States Military Academy (USMA). At first glance this number seems extremely low until one analyzes the data by the type of United States Army service each of the commissioned officers were assigned to, either Regular or Volunteer. At both Fort Yamhill and Fort Hoskins 9 of the 10 (90%) regular army officers graduated from the USMA. This is in direct contrast to the volunteer army officers where none of the commissioned officers from either post who were assigned to volunteer army regiments attended or graduated from the United States Military Academy. Given the dramatic difference seen between regular army officers and volunteer army officers it follows to reason that a commissioned officer's United States Military Academy attendance may have influenced the military status (i.e., grade and rank) of officers who served in the Regular Army service but was unlikely to have been an influence on the military status of commissioned officers in the Volunteer Army service.

For commissioned officer's serving in the United States Regular Army service one's attendance and graduation from the United States Military Academy may have been an influence in the military status (both grade and rank) at Fort Yamhill and Fort Hoskins. Interesting, at both posts all of the Regular Army captains had attended and graduated from the United States Military Academy and the only two officers who did not graduate were both subaltern officers, one first lieutenant (Owen) at Fort Yamhill and one second lieutenant (McCall) at Fort Hoskins. It is unclear if the lack of the attendance of the United States Military Academy contributed to the lower grades of these two officers specifically (i.e., if the fact that they did not attend and graduate from the United States Military Academy hindered their upward mobility within the Army) but it is interesting that all of the captains from both posts attended and graduated and that it was only the subaltern officer groups that contained commissioned officers who did not attend or graduate.

Graduating class rank also does not appear to have been a contributing factor to the military status of commission officers at Fort Yamhill or Fort Hoskins.

Although 18 of the commissioned officers who served at Fort Yamhill and Fort Hoskins attended and graduated from the United States Military Academy (USMA) none of them graduated higher than in the 65th percentile in their class (Figure 8.9). At Fort Yamhill first lieutenants had the highest average graduating rank percentile (56th) followed by second lieutenants (25th) and lastly by captains (17th). The opposite pattern was observed at Fort Hoskins where captains had the highest average graduating rank percentile (32nd) followed by second lieutenants (19th) and none of the first lieutenants who served at Fort Hoskins graduated from the USMA.

At Fort Yamhill USMA graduating class rank does not appear to have been a major influence on a commissioned officers military status (grade or rank) since second lieutenants had a higher graduating class rank on average than both first lieutenants and captains and first lieutenants had a higher graduating class rank on average than captains. But, at Fort Hoskins the graduating class rank may have been an influence on a commissioned officers military status since captains had a higher

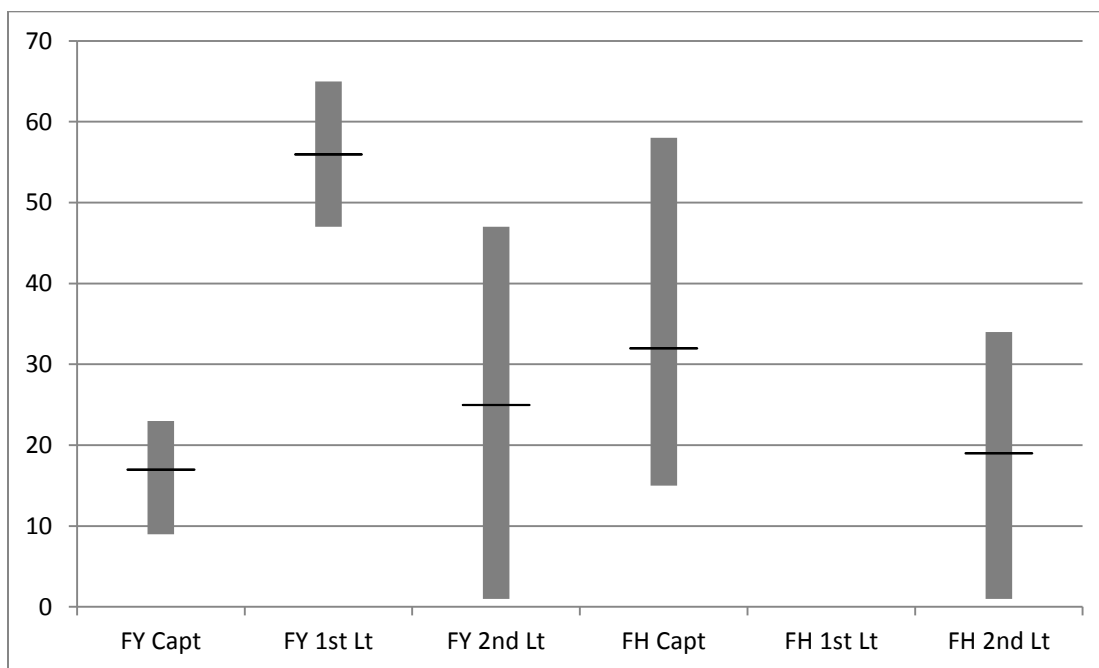


Figure 8.9 USMA Graduation Rank Percentile By Grade. Ranges Represented By Gray Bars and Means Represented By Black Lines.

graduating class rank on average than first lieutenants and second lieutenants and first lieutenants had a higher graduating class rank on average than second lieutenants.

Summary

While an officer's grade, role, rank, pay and wealth all appear to be major factors in determining the economic and military status of commissioned officers other demographic variables such as marital status, number of dependents, previous profession and United States Military Academy attendance do not. This is not surprising given that the structure of the United States Army is based on the variables of grade, role and rank and compensates those of higher status with greater pay. While the other demographic variables, with the exception of wealth, do not appear to have a major impact on the economic and military status of officers they may have an impact on their social status.

Status and Subsistence Article Purchases

As discussed in Chapter 5 the subsistence purchasing records for commissioned officers who served at Fort Hoskins have been located and included in this study. Although these records are incomplete and only represent the purchases made by three commissioned officers at Fort Hoskins (Captain Frederick Seidenstricker, First Lieutenant Funk and Second Lieutenant Herzer) for only a 21 month period between June 1862 and February 1864 they do provide a revealing glimpse at the purchasing behaviors of commissioned officers at Fort Hoskins.

Total Costs of Subsistence Articles Purchased

Captain Seidenstricker purchased more subsistence articles and spent more money on those purchases than either of his subaltern officers, First Lieutenant Funk and Second Lieutenant Herzer (Figure 8.10). In total Captain Seidenstricker purchased \$270.35 worth of subsistence stores from the Commissary Department at Fort Hoskins which was 3.5 times more than Second Lieutenant Herzer who purchased only \$77.87 worth

of subsistence stores and 4.7 times more than First Lieutenant Funk who purchased only \$57.47 worth of subsistence stores. On average Captain Seidenstricker spent \$30.03 per month on the purchase of subsistence stores which was also 3.5 times more than Second Lieutenant Herzer who spent only \$8.65 per month and 4.2 times more than First Lieutenant Funk who spent only \$7.18 per month.

If greater subsistence article purchases can be indicative of higher status, then clearly Captain Seidenstricker was economically superior to his subaltern officers at Fort Hoskins. Not only did Captain Seidenstricker purchase more subsistence stores and spent far more money on those purchases than his subaltern officers it also appears that he purchased enough subsistence stores to provide his subaltern officers with their meals. For example, between July 1862 and March 1863 Captain Seidenstricker purchased at total of \$270.35 worth of subsistence stores while First Lieutenant Funk only purchased \$57.47 worth of subsistence stores and Second Lieutenant Herzer only \$16.57 worth of subsistence stores.

In addition for every month between July 1862 and March 1863 Captain Seidenstricker purchased the greatest number of subsistence articles and for several of

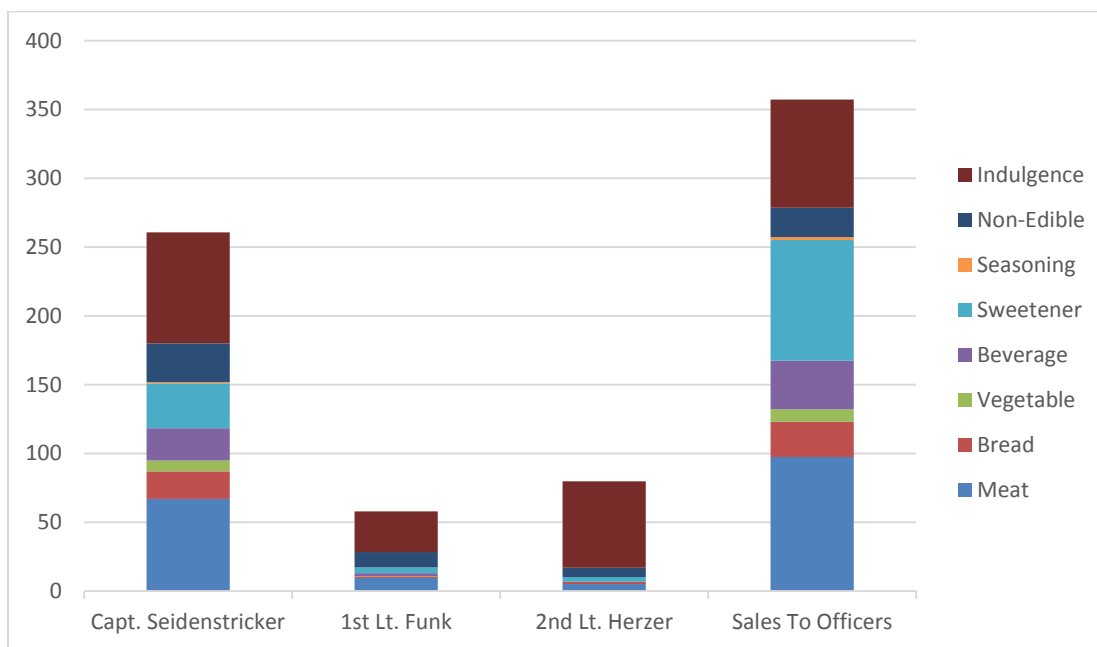


Figure 8.10 Total Cost (\$) Of Subsistence Articles Purchases By Commissioned Officers at Fort Hoskins

the months was the only officer who purchased staple foods such as meat, bread and vegetables while his subaltern officers only purchased non-staple subsistence articles such as sugar, coffee, candles and whiskey. In fact 81.3% of the total subsistence articles purchased by First Lieutenant Funk and 88.4% of the subsistence articles purchased by Second Lieutenant Herzer were of these non-staple subsistence articles while these articles comprised only 62.0% of the total subsistence articles purchased by Captain Seidenstricker. The fact that Captain Seidenstricker was purchasing such great numbers of subsistence articles of all types, but especially of the staple food articles such as meat, bread and vegetables, and the fact that his subaltern officers were purchasing so little, and usually only non-staple items, suggests that Captain Seidenstricker may have been regularly hosting his subaltern officers during meals. This interpretation of the data is further supported by the fact that beginning in April 1863, when Captain Seidenstricker was reassigned to another post, the bulk of subsistence stores purchased were not listed as purchased by First Lieutenant Funk or Second Lieutenant Herzer as would be expected but instead were listed “sales to officers”. Interestingly those subsistence stores labeled as “sales to officers” was nearly identical in type, quantity and cost as those previously purchased by Captain Seidenstricker prior to April 1863. This shift in subsistence purchases suggests that while Captain Seidenstricker was present at the post he purchased the bulk of the subsistence stores for all of the commissioned officers and hosted his subordinate officers to meals but after the departure of Captain Seidenstricker the remaining commissioned officers purchased their subsistence stores communally as part of an “officers mess” instead of individually as before.

Variety of Subsistence Articles Purchased

Captain Seidenstricker also purchased a greater variety of subsistence articles than his subaltern officers suggesting higher socio-economic status (Figure 8.11). Captain Seidenstricker purchased a total of 22 different subsistence stores including three types of meat (ham, pork and beef), one type of bread (flour), three types of vegetables (beans, rice and potatoes), four types of beverages (tea, Java coffee, Costa Rica coffee and Rio coffee), three types of sweetener (molasses, crushed sugar and

brown sugar), two types of seasoning (vinegar and salt), three types of non-edibles (sperm candles, adamantine candles and soap) and three types of indulgences (pickles, superior whiskey and common whiskey).

Captain Seidenstricker's subaltern officer's purchased far less variety of subsistence articles than their captain, just 12 different articles each. First Lieutenant Funk purchased just two types of meat (ham and beef), one type of bread (flour), one type of vegetable (rice), two types of beverages (tea and Costa Roca coffee), three types of sweetener (powdered sugar, crushed sugar and brown sugar), no seasoning, one type of non-edible (sperm candles) and two types of indulgences (superior whiskey and common whiskey). And, Second Lieutenant Herzer purchases just two types of meat (ham and pork), two types of bread (corn meal and flour), no vegetables and no beverages, three types of sweetener (molasses, crushed sugar and brown sugar), no seasoning, two types of non-edibles (adamantine candles and soap) and three types of indulgences (pickles, superior whiskey and common whiskey).

Clearly Captain Seidenstricker was purchasing a much wider variety of subsistence articles than either of his subaltern officers (22 versus 12 and 12). The

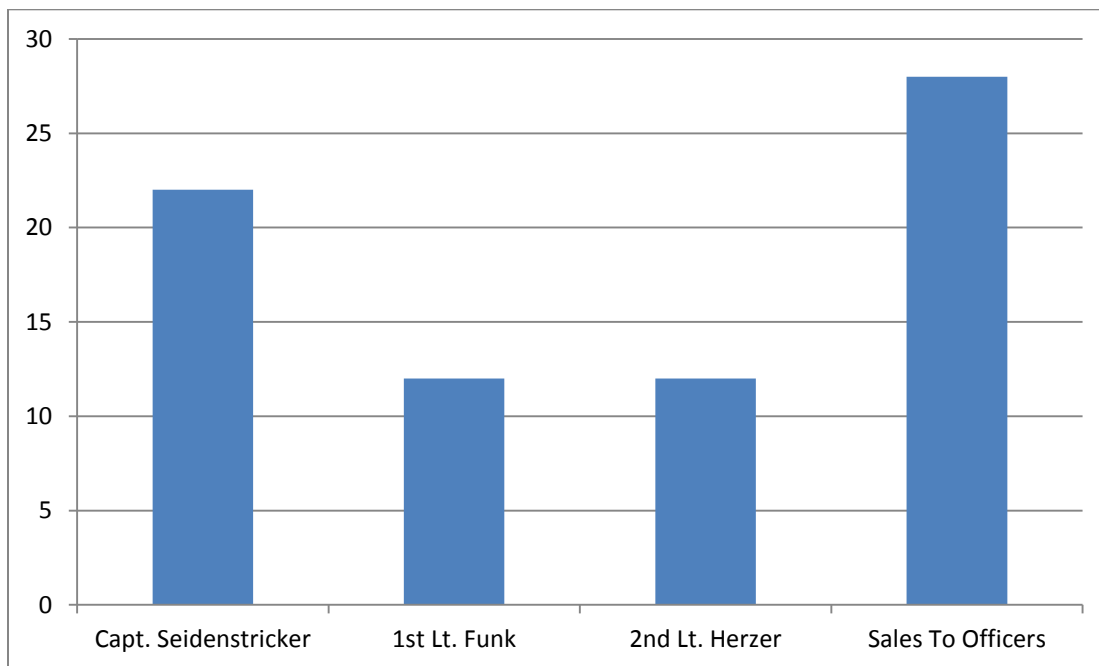


Figure 8.11 Variety of Subsistence Articles Purchases By Commissioned Officers At Fort Hoskins

much wider variety of subsistence articles is representative of a much more diverse diet reflecting higher status (Curet and Pestle 2010). Diversity of food articles was valued for its connotation of abundance (Adams 2009:111).

Purchases of Individual Subsistence Articles

Although Captain Seidenstricker purchased a far greater amount of subsistence articles, and ultimately spend far more money on the purchase of foods from the Commissary Department, for all of the food classes he tended to purchase the cheaper food articles over the more expensive food articles within each food class. The opposite appears to be true of his subaltern officers in that although they purchased far fewer amounts of subsistence articles, and thus spent far less money on those purchases, they tended to purchase more expensive food articles in higher quantities than cheaper food articles within each food class.

Meat Purchases. Although Captain Seidenstricker spent far more on meat purchases (\$66.88) than either First Lieutenant Funk (\$9.42) or Second Lieutenant Herzer (\$5.04) and he tended to purchase more of the cheaper meats such a beef (\$0.08 per pound) and less of the more moderately priced and expensive meats such as pork (\$0.10 per pound) and ham (\$0.16 per pound) than either of his subaltern officers (Figure 8.12). Captain Seidenstricker's total meat purchases were dominated by the lower priced beef (85.6%) and contain less of the moderately priced pork (3.7%) and the higher priced ham (10.7%). This is direct contrast to the purchasing behavior of both First Lieutenant Funk and Second Lieutenant Herzer. First Lieutenant Funk's meat purchases were also dominated by lower priced beef (56.0%) but also contained more of the higher priced ham (44.0%), and Second Lieutenant Herzer's total meat purchases were dominated by the higher priced ham (66.7%) and the moderately priced pork (33.3%) but contained no purchases for the lowest priced beef (0%).

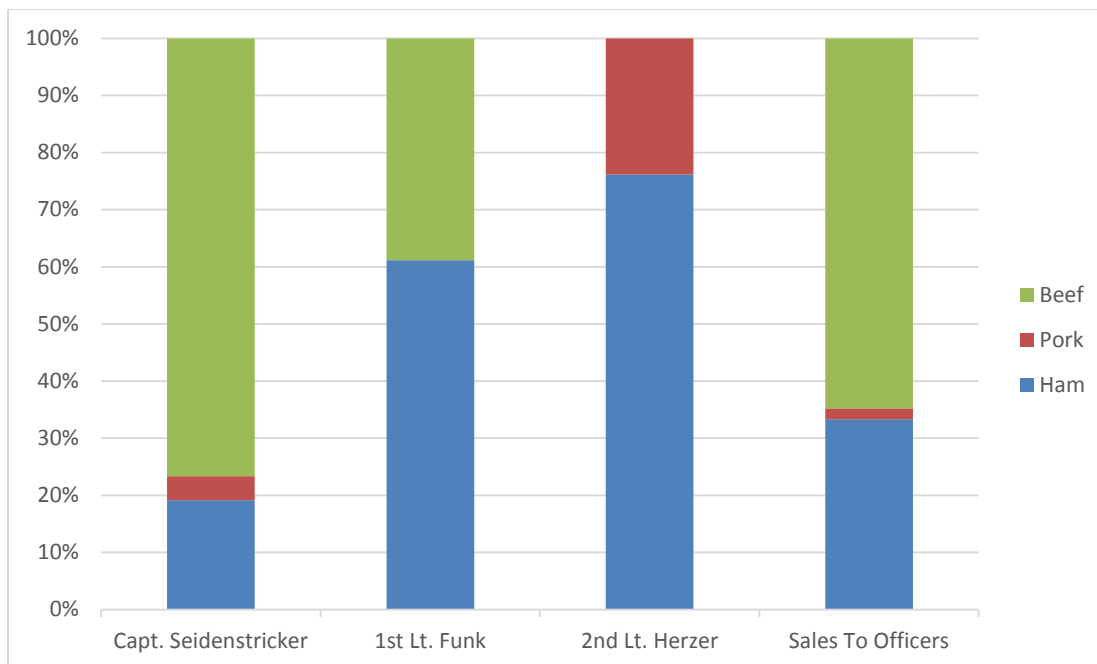


Figure 8.12 Meat Purchases By Specific Food Article at Fort Hoskins

Bread Purchases. Captain Seidenstricker also spent far more on bread purchases (\$20.09) than either First Lieutenant Funk (\$1.23) or Second Lieutenant Herzer (\$1.58) and he tended to purchase more of the cheaper breads such as flour (\$0.035 per pound) and less of the more expensive breads such as cornmeal (\$0.07 per pound) than either of his subaltern officers (Figure 8.13). Captain Seidenstricker's and First Lieutenant Funk's total bread purchases were comprised exclusively of the lower priced flour (100%). This is direct contrast to the purchasing behavior Second Lieutenant Herzer whose total bread purchases was dominated by the higher priced cornmeal (80.0%) and contained less of the lower priced flour (20.0%).

Vegetable Purchases. Again Captain Seidenstricker spent far more on vegetable purchases (\$7.89) than either First Lieutenant Funk (\$0.20) or Second Lieutenant Herzer (\$0.00) and he tended to purchase more of the cheaper vegetables such as potatoes (\$0.017 per pound) and less of the moderately priced and expensive vegetables such as hominy (\$0.045 per pound) and beans (\$0.048 per pound) and rice (\$0.065 per pound) than either of his subaltern officers (Figure 8.14). Captain

Seidenstricker’s total vegetable purchases were dominated by the moderately priced beans (66.3%) and lower priced potatoes (32.2%) and contain less of the higher priced rice (1.4%). This is direct contrast to the purchasing behavior of First Lieutenant Funk whose vegetable purchases were comprised exclusively of the higher priced rice (100%). Second Lieutenant Herzer made no purchases of vegetables.

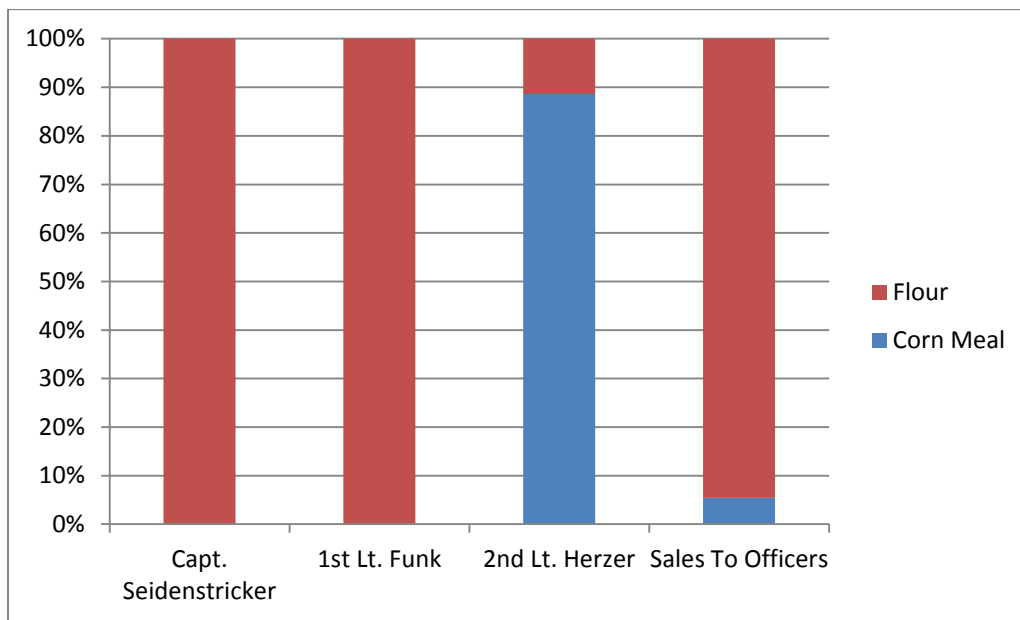


Figure 8.13 Bread Purchases By Specific Food Article at Fort Hoskins

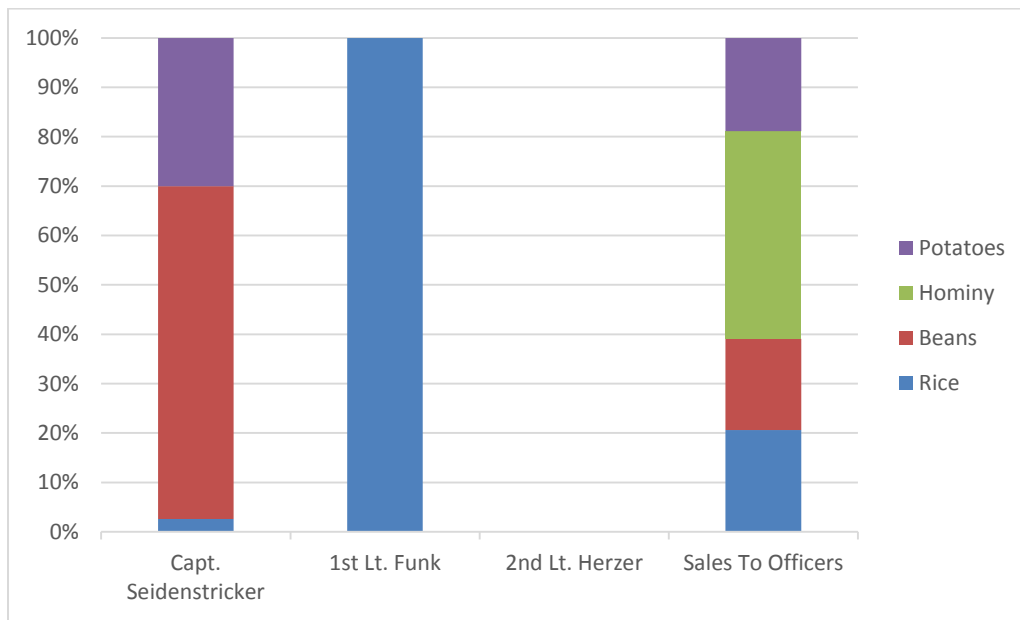


Figure 8.14 Vegetable Purchases By Specific Food Article at Fort Hoskins

Beverage Purchases. Captain Seidenstricker also spent far more on beverage purchases (\$23.38) than either First Lieutenant Funk (\$2.15) or Second Lieutenant Herzer (\$0.00) and he, again, tended to purchase more of the cheaper beverage items such a Rio coffee (\$0.132 per pound) and Costa Rica coffee (\$0.15 per pound) and less of the moderately priced beverages such as Java coffee (\$0.30 per pound) and more expensive beverages such as tea (\$0.70 per pound) than his subaltern officers (Figure 8.15). Captain Seidenstricker’s total beverage purchases were dominated by the lower priced Costa Rica (65.8%) and Rio (23.3%) coffees and contain less of the moderately priced Java coffee (7.8%) and the higher priced tea (3.1%). This is direct contrast to the purchasing behavior of First Lieutenant Funk whose beverage purchases were also dominated by lower priced Costa Rica coffee (71.4%) but contained more of the higher priced tea (28.6%). Second Lieutenant Herzer made no purchases of beverages.

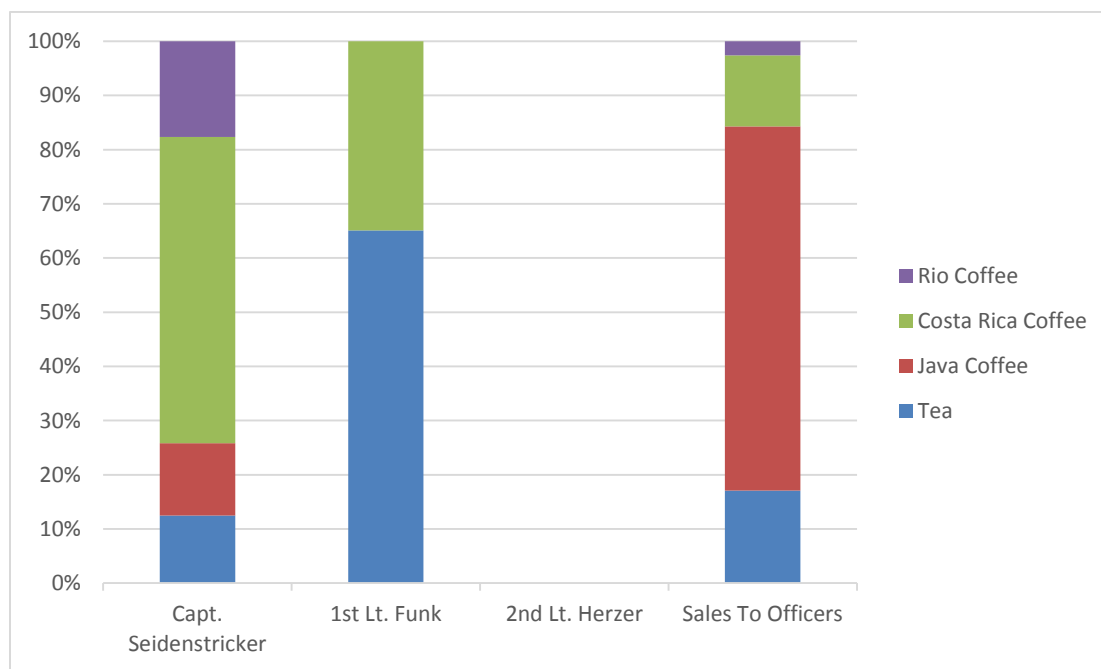


Figure 8.15 Beverage Purchases By Food Article at Fort Hoskins

Sweetener Purchases. Captain Seidenstricker also spent far more on sweetener purchases (\$32.76) than either First Lieutenant Funk (\$4.17) or Second Lieutenant Herzer (\$3.65) but he tended to purchase more of the moderately priced sweeteners such a brown sugar (\$0.112 per pound) and crushed sugar (\$0.122 per pound) and less of the cheaper sweeteners such as molasses (\$0.075 per pound) or more the expensive sweeteners such as powdered sugar (\$0.13 per pound) than either of his subaltern officers (Figure 8.16). Captain Seidenstricker's total sweetener purchases were dominated by the moderately priced crushed sugar (46.9%) and brown sugar (40.4%) and contain less of the lower priced molasses (12.7%) and none of the highest priced powder sugar (0.0%). This is direct contrast to the purchasing behavior of First Lieutenant Funk whose sweetener purchases were also dominated by the moderately priced brown sugar (45.7%) and crushed sugar (31.4%) but also contained more of the highest priced powdered sugar (22.9%) and none of the cheapest priced sweetener, molasses (0.0%). Second Lieutenant Herzer's total sweetener purchases were more mixed and also dominated by the moderately priced brown sugar (41.8%) and crushed sugar (33.4%) but contained considerably more of the lowest priced sweetener, molasses (24.8%).

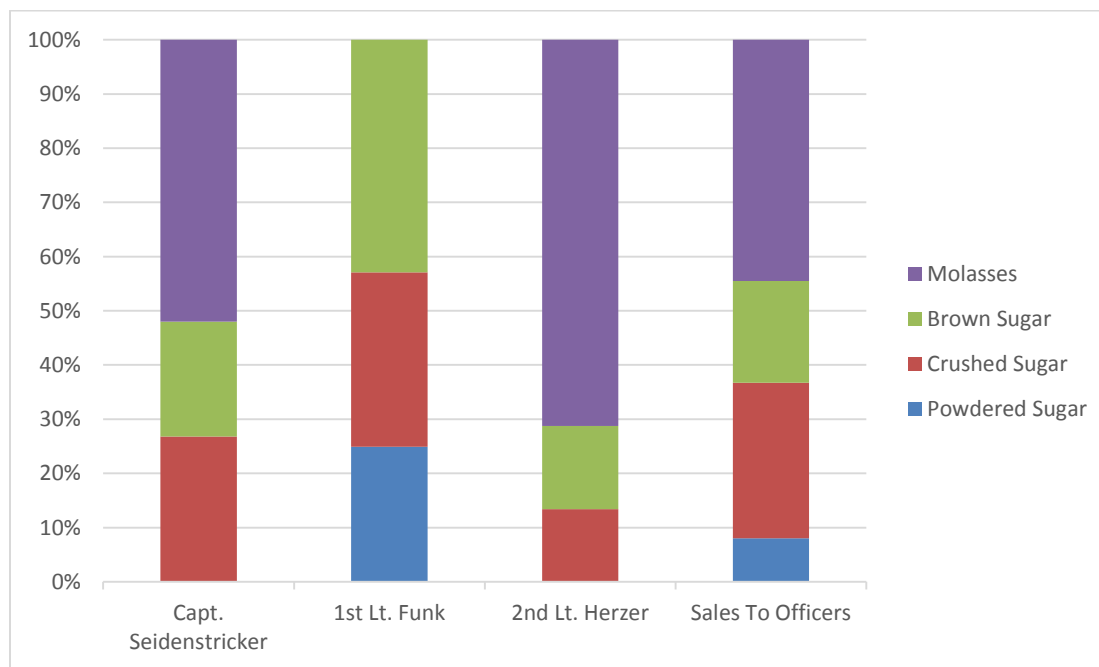


Figure 8.16 Sweetener Purchases By Food Article at Fort Hoskins

Candle Purchases. Captain Seidenstricker also spent far more on the purchasing of candles (\$28.17) than either First Lieutenant Funk (\$11.22) or Second Lieutenant Herzer (\$5.28) but he tended to purchase more of the lower priced candles such as adamantine candles (\$0.24 per pound) and less of the more expensive candles such as sperm candles (\$0.51 per pound) (Figure 8.17). Captain Seidenstricker's total candle purchases were dominated by the lower priced adamantine candles (69.0%) and contained less of the higher priced sperm candles (31.0%). This is direct contrast to the purchasing behavior of both of his subaltern officers where First Lieutenant Funk purchased exclusively the higher priced sperm candles (100%) and Second Lieutenant Herzer purchases exclusively the lower priced adamantine candles (100%).

Whiskey Purchases. Captain Seidenstricker also spent more on the purchasing of whiskey (\$77.46) than either First Lieutenant Funk (\$29.50) or Second Lieutenant Herzer (\$61.57) and all three of the commissioned officers tended to purchase the higher priced superior whiskey (\$2.50 per gallon) over the lower priced

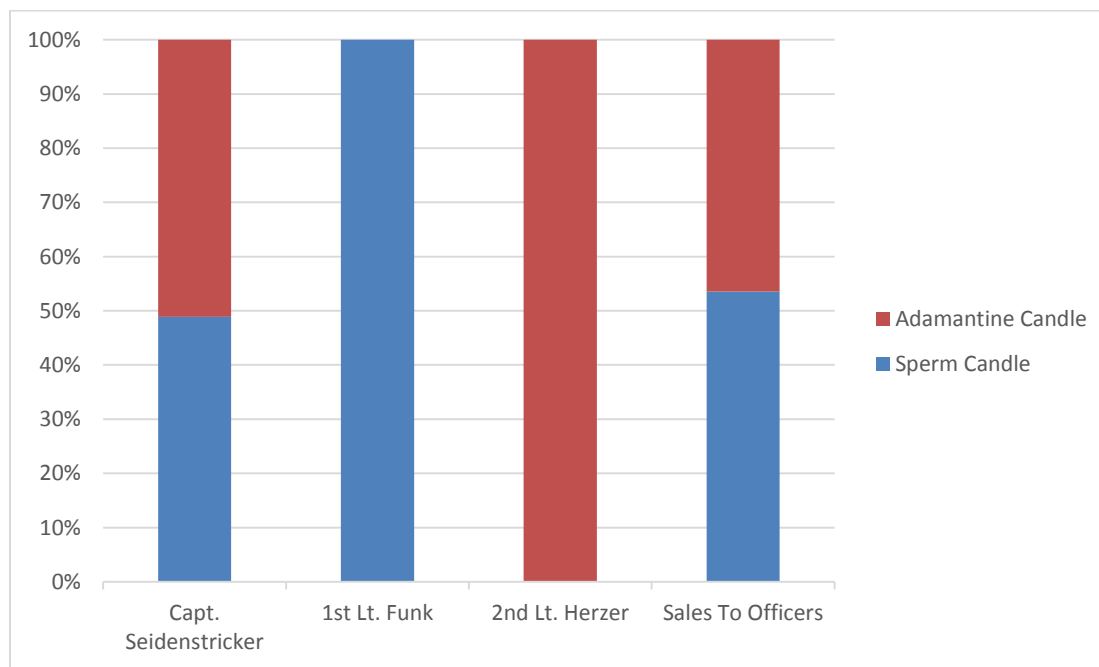


Figure 8.17 Candle Purchases By Food Article at Fort Hoskins

common whiskey (\$0.75 per gallon) (Figure 8.18). Captain Seidenstricker's total whiskey purchases were dominated by the higher priced superior whiskey (64.7%) but did contain a considerable amount of lower priced common whiskey (35.2%). The total whiskey purchases of First Lieutenant Funk displayed similar proportions where he 62.5% of his whiskey purchases were for superior whiskey and just 37.5% of his purchases were for common whiskey. The purchasing pattern of Second Lieutenant Herzer was quite different in that he almost exclusively purchased superior whiskey (95.1%) over common whiskey (4.9%).

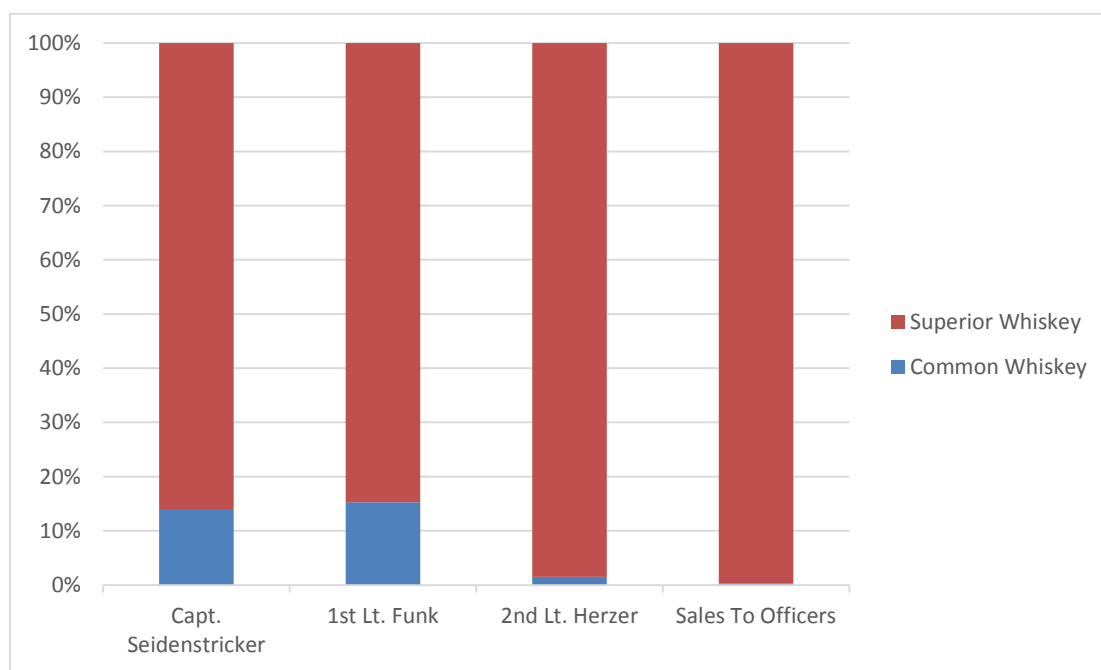


Figure 8.18 Whiskey Purchases By Food Article at Fort Hoskins

Subsistence Account Book Index Analysis. As discussed in Chapter 3 an index of subsistence articles was created from the price and purchasing data presented in the *Fort Hoskins Subsistence Account Book*. This index is used here to compare the relative amount of money spent by each commissioned officer on the different classes of food articles. The individual index values represent the average cost of the food articles in each food class and can be compared between individual food article and class purchases regardless of the volume purchased. The index values for the purchases of meat, bread, vegetables, beverages, sweeteners, candles and whiskey are presented below (Figure 8.19).

First Lieutenant Funk had the highest index values for vegetables (3.25), beverages (2.31), sweeteners (1.59) and candles (2.13) suggesting that he tended to purchase the more expensive foods within each of these classes (i.e., rice, tea, powdered sugar, sperm candles, etc.) while both Captain Seidenstricker and Second Lieutenant Herzer tended to purchase the more moderately and cheaper priced foods within these classes (i.e., potatoes, Rio coffee, molasses, adamantine candles, etc.). Second Lieutenant Herzer had the highest index values for meat (1.75), bread (1.80) and whiskey (3.21) suggesting that he tended to purchase more expensive foods within each of these classes (i.e., ham, cornmeal, superior whiskey, etc.) while both Captain Seidenstricker and First Lieutenant Funk tended to purchase the more moderately priced and cheaper foods within these classes (i.e., beef, flour, common whiskey, etc.). Interestingly Captain Seidenstricker had the lowest index value for four of the seven food classes (meat, bread, vegetables and beverages) and the highest index value for none of the food classes suggesting that although Captain Seidenstricker purchased far more subsistence articles and spent far more on the purchase of food articles overall, he tended to purchase the cheaper or more moderately priced food articles over the more expensive ones. Conversely, both First Lieutenant Funk and Second Lieutenant Herzer purchased less subsistence articles and spent far less on the purchase of food articles overall, they both tended to purchase the more moderately priced and expensive food articles over the cheaper ones.

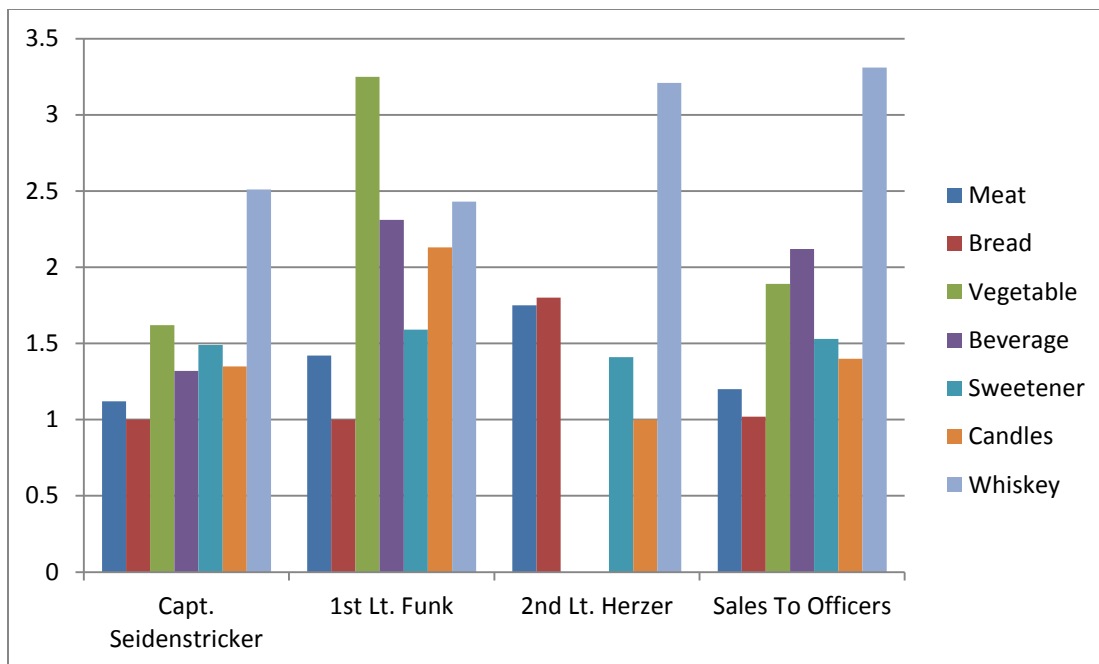


Figure 8.19 Subsistence Account Book Index Values By Food Class For Commissioned Officers At Fort Hoskins

Summary

Although the above data represents the subsistence purchasing behavior of just three commissioned officers at Fort Hoskins the patterns they display are interesting and may inform on how social and economic status was expressed. Clearly Captain Seidenstricker purchased a far greater quantity and variety of subsistence artifacts, including the more expensive food articles over all, and therefore ultimately spent far more money on those purchases than did his subaltern officers. But when compared proportionally Captain Seidenstricker tended to purchase greater quantities of the cheaper food articles in relation to the more expensive subsistence articles. This suggests that although the captain did purchase far more and more high quality subsistence articles overall, clearly demonstrating his economic power, his subaltern officers attempted to compete, not by out purchasing their superior in terms of overall quantity or cost, but by purchasing more of the highest cost articles at the expense of purchasing greater quantities of subsistence articles overall.

Commissioned Officer Status and the Built Environment

Officers' Row was not only the location of the living quarters for the commissioned officers at each post but the "Row" was also the socio-cultural apex of military life where commissioned officers participated in and materialized their socio-cultural rituals of calling, dining and other forms of conspicuous consumption that they used to demonstrate their membership as members of the socio-cultural elite and as the military and social superiors of the army post. Eight attributes or features/structures would be useful in comparing, contrasting and evaluating each of the officers' quarters as material expressions of socio-economic status. These attributes are: (1) location of the officers' quarters; (2) house size; (3) number of rooms and types of rooms; (4) number and size of porches; (5) number and size of fenced yards; (6) number and size of sinks; (7) number and size of outbuildings; and (8) distance to other post buildings and will be discussed below.

Officers' Quarters Location

All of the commissioned officers' quarters at both Fort Yamhill and Fort Hoskins were isolated along one side of the fort quadrangle colloquially called Officers' Row. At Fort Yamhill Officers' Row was located along the eastern side of the fort quadrangle near the top of a west facing slope. Positioned above the rest of the post Officers' Row at Fort Yamhill would have allowed for the least obstructed view of the other fort structures and the Grand Ronde Indian Agency to the west. The captains' quarters (FYH1) is located on the northern end of Officers' Row and would have had the least obstructed view of the entrance road and post gate as well as the rest of the post with the exception of FYH3, FYH4, FYH5 and FYH6 which would have been obscured from view by FYH2. The other commissioned officers' quarters at Fort Yamhill examined in this study (FYH2 and FYH3) would have had similar views of the post as FYH1 with two key exceptions: 1) both FYH2 and FYH3 would not have been able to see entrance road nor the post gate as these would have been obstructed by from view by FYH1; and 2) the views to the north and south of both

FYH2 and FYH3 would have been obscured by other commissioned officers quarters, FYH1 and FYH3 in the case of FYH2 and FYH2 and FYH4 in the case of FYH3.

A similar pattern is observed at Fort Hoskins where Officers' Row was located along the southwestern side of the fort quadrangle on the leading edge of a terrace which overlooked the Luckiamutte River and King Valley to the south. Although not elevated as at Fort Yamhill the Officers' Row at Fort Hoskins was also strategically positioned to allow for the least obstructed view of the entrance road and post gate to the northeast and the other fort structures. The captain's quarters (FHH1) is located at the eastern end of Officers' Row and would have had the least obstructed view of the entrance road and post gate as well as the rest of the post with the exception of the blacksmith and carpenter shops which would have been obscured from view by FHH2. The other commissioned officers' quarters at Fort Hoskins (FHH2 and FHH3) would have had similar view of the post as FHH1 with two key exceptions: 1) both FHH2 and FHH3 would have had obscured views of the entrance road to the east which would have been obscured by the adjutant's office, guardhouse and barracks; and 2) the views of the Luckiamutte River and Kings Valley (south and southeast) of both FHH2 and FHH3 would have been obscured by other commissioned officers' quarters, FHH1 in the case of FHH2 and FHH2 in the case of FHH3.

At both Fort Yamhill and Fort Hoskins FYH1 and FHH1 held the most prominent position in terms of their unobstructed views of the posts and the surrounding environment. The ability to conduct unobstructed surveillance of the post from the front porches and/or parlors of these quarters may have been key reasons for their selection and as quarters by the captains at the post and would have most certainly been an attractive option for commissioned officers focused on a life of leisure and comfort. This would have most certainly contributed to these quarters being considered the most desirable by the commissioned officers and therefore their position within the post may have reflected higher status which would have been conferred their occupants.

Officers' House Size and Interior Spaces

The commissioned officers' houses at Fort Yamhill varied considerably by size and configuration. Fort Yamhill House 1 (FYH1) was the largest of the commissioned officers houses at Fort Yamhill with eight rooms and a bay window in the parlor which provided approximately 2,168 square feet of interior living space. Fort Yamhill House 3 (FYH3) was the second largest of the commissioned officers houses (2,153 square feet of interior living space) and also had eight rooms but lacked a bay window in the parlor. Fort Yamhill House 2 (FYH2) was considerably smaller (only 1,514 square feet of interior living space), also lacked a bay window but was also only comprised of two rooms (likely a parlor and a bedroom). All three commissioned officers houses at Fort Hoskins appear to have been identical in size (1,370 square feet of interior living space), comprised of six rooms and had no special features such as bay windows.

With the exception of the bay window at FYH1 and the considerably smaller and officers house at FYH2 there appears to be little variation between the commissioned officers houses at both posts. The number of rooms present in FYH1 and FYH3 would have certainly made those houses more desirable than FYH2 and the presence of the bay window and the slightly larger interior living space (14 square feet) in the parlor likely made FYH1 a more desirable officers house than FYH3. The same cannot be said at Fort Hoskins. As all three of the commissioned officers' houses appear to have been identical in layout, number of rooms and total square footage of interior living space it is unlikely that these variables were factors in determining the desirability, and therefore status, of the officers' houses at Fort Hoskins.

Number and Size of Porches

Each of the commissioned officers houses had at least one porch that would have provided additional square footage of exterior living space to the officers' quarters at each post, but the number and size of porches at both posts does not appear to be an indicator of status. At Fort Yamhill FYH1 and FYH3 have the same number of porches (n=2) and the same amount of exterior living space covered by porches (257

square feet). As a smaller house FYH2 only had one porch (front) and therefore also a much smaller amount of exterior living space covered by porches (184 square feet). At Fort Hoskins all three commissioned officers houses had the same number of porches (n=4) and the same amount of exterior living space covered by porches (761 square feet). With the exception of FYH2 at Fort Yamhill, which had fewer porches and less exterior living space covered by porches, the number and size of exterior living spaces covered by porches did not vary between the commissioned officers houses at either post and therefore was unlikely to be a contributing factor in determination and selection of the most desirable quarters by the commissioned officers at each post.

Number and Size and Fenced Yards

The number and size of fenced yards at both Fort Yamhill and Fort Hoskins showed the most variation between the commissioned officers quarters at both posts than any other variable examined. At both Fort Yamhill and Fort Hoskins each of the commissioned officers quarters had at least one fenced yard that enclosed the officer's house, his sink and any additional outbuildings (sheds) that were associated with his quarters. At Fort Yamhill both FYH1 and FYH3 had a single fenced yard each and FYH3 had the largest fenced yard (10,633 square feet) of the commissioned officers quarters examined followed by FYH1 (7,303 square feet). FYH2 apparent did not have its own fenced yard and was enclosed by the fenced yard for FYH1. At Fort Hoskins all of the commissioned officers quarters had two fenced yards (a front yard and a back yard) with FHH1 having the largest combined fenced property (8,563 square feet) followed by FHH2 (4,038 square feet) and lastly by FHH3 (3,999 square feet).

At Fort Yamhill the number and size of the commissioned officers' fenced yards does not appear to be an accurate indicator of status. Of the three commissioned officers' quarters examined FYH3, an officers' quarters associated with a subaltern officer, had the largest yard and FYH1, an officers quarters associated with the highest ranking officer (captains), had the smallest yard and shared its yard with another commissioned officer house (FYH2). But at Fort

Hoskins the number and size of the commissioned officers' fenced yards do appear to reflect differences in status with the highest ranking officers having larger fenced yards than lower ranking officers. Although all three commissioned officers quarters had two yards FHH1, the quarters associated with the captains, had the largest combined yard followed by the commissioned officers quarters associated with the subaltern officers (FHH2 and FHH3).

Number and Size of Sinks

The number and size of sinks does not appear to an indicator of status at Fort Yamhill or Fort Hoskins. At both post each officers' quarters was provided with access to a sink. At Fort Yamhill FYH1 and FYH2 appear to have shared a single one-seat sink centered along the eastern edge of the fenced yard and FYH3 appears to have had its own one-seat sink also centered along the eastern edge of the fenced yard. At Fort Hoskins all three commissioned officers' quarters had their own two-seat sinks centered in their respective backyards and aligned with the northwestern wall of each house.

The sinks display no variation in number or size for each commissioned officers' quarters at Fort Hoskins and therefore the number and size of sinks were unlikely to have been considered a status marker. At Fort Yamhill the pattern is less clear. It was assumed that each of the commissioned officers' quarters would have been equipped with its own sink so that fact that FYH1 shared a sink with FYH2 and FYH3 did not share a sink with another commissioned officers quarters was surprising. This is especially true if we considered that FYH1 was occupied by a captain (the highest ranking commissioned officer at Fort Yamhill) and that FYH2 and FYH3 were occupied by subaltern officers of lower rank. If this was the case the fact that the captain shared a sink with a subaltern officer while a lower ranking subaltern officer did not share a sink with another commissioned officer is puzzling. The reason(s) why some of the commissioned officers quarters at Fort Yamhill shared sinks (FYH1 and FYH2, FYH5 and FYH6) while others did not (FYH3 and FYH4) remains unknown.

Number and Size of Outbuildings

The number and size of outbuildings appears to reflect differences in status between the three commissioned officers' quarters at Fort Hoskins. None of the commissioned officers quarters at Fort Yamhill appear to have had outbuildings. The outbuildings depicted on the 1864 Chase Map appear to have been enclosed sheds with a single opening (door) on one side and were likely used to store the commissioned officers' allowance of wood. Two identical sheds are depicted behind FHH1, each measuring approximately 13 feet by 21 feet (273 square feet) with opening centered on their northeastern walls. Together the sheds measured 558 square feet. No sheds were depicted behind FHH2. Two sheds were also depicted behind FHH3, each measuring 11 feet by 11 feet (121 square feet) and also with an opening on one wall. Together the sheds measured 242 square feet. Instead of centered on the northeastern walls as at FHH1 the opening was positioned differently for each shed at FHH3. The easternmost shed did have its opening on the northeastern wall but it was offset to the east or closer to FHH2 and the westernmost shed had its opening centered on its northwestern wall facing away from FHH3.

At Fort Hoskins the number and size of outbuildings (sheds) associated with each commissioned officer quarters' appears to reflect differences in officer status. The two sheds behind FHH1 were over twice the combined size of the two sheds behind FHH3 (558 square feet versus 242 square feet). In addition the placement of the sheds in the southeast corner of the FHH3 yard are closer to FHH2 and the variation in the openings (the opening for the easternmost shed oriented more towards FHH2 and the opening for the westernmost shed oriented more towards FHH3) for the sheds behind FHH3 suggests that the easternmost shed was likely used by the occupants of FHH2 and the westernmost shed was likely used by the occupants of FHH3. If this is the case then total square footage of each of the sheds for the subaltern officers would have only been 121 square feet or nearly 5 times less than that of the captain. Given that the captain was allotted 1.75 times to 1.8 times more wood per month than his subaltern officers he would have needed more space to store such wood. Therefore, the much larger exterior storage space provided by the shed behind FHH1 would have been more desirable than the smaller sheds behind FHH3.

Distance to Other Post Buildings

As discussed in Chapter 2 the location of an officer's quarters with the fort and specifically in relation to the other structures of the post was an important factor in the determining the most prominent and desirable quarters (quarters with the highest social status). In general, those quarters that were closer to the lower status buildings (enlisted men's quarters and laundresses) and the fort buildings associated with the noisy, more odorous and labor intensive activities of the post (i.e. stables, blacksmith, carpenter shop, etc.) were considered less desirable and those quarters further away from these structures were more desirable.

At both Fort Yamhill and Fort Hoskins the captains' quarters (FYH1 and FHH1) were the best positioned of commissioned officers quarters in terms of their distance from lower status structures, more noisy or odorous structures and those structures associated with more manual labor (Table 8.1). At Fort Yamhill FYH1 was the closest of the commissioned officers' quarters to the sentry box and post gate which would have provided for the best surveillance of the post and was the closest officers' quarters to the adjutants' office which would have made FYH1 the most connected officers' quarters with the administration of the post. FYH1 was also the furthest officers' quarters from the rest of the buildings at the post including the other commissioned officers quarters. Being the furthest from the rest of the other structures especially the militarily/socially inferior (subaltern officers, enlisted barracks and laundress quarters), the most noisy and odorous (hospital, kitchen, laundress, bakery, stables and blacksmith shop) and those structures associated with the most manual labor (messhall, kitchen and warehouse) would have clearly made FYH1 the most desirable officers' quarters with the highest military and social status.

A very similar pattern is observed at Fort Hoskins where FHH1 was the closest commissioned officers' quarters to the sentry box, post gate and guardhouse which would have provided the best surveillance and was the closest officers' quarters to the adjutant's office which would have made FHH1 the most connected officers' quarters with the administration at the post. FHH1 was also the furthest officers' quarters from the rest of the buildings at the post including the other

Table 8.1 Distance to Other Post Buildings By Commissioned Officer Quarters

Post Building	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
Commanding Officer's House	-	32.7	79.0	-	29.9	57.8
Nearest Officer's House	32.7	23.3	23.3	29.9	27.9	27.6
Sentry and Post Gate	116.3	157.0	196.7	499.7	511.9	530.2
Adjutant's Office	467.4	466.3	470.3	222.6	239.2	268.2
Enlisted Barracks	486.8	455.6	433.7	388.7	386.8	380.6
Enlisted Messhall	551.5	524.1	507.4	N/A	N/A	N/A
Enlisted Kitchen	557.2	527.4	502.5	N/A	N/A	N/A
Guardhouse	549.0	545.8	551.0	314.5	327.1	350.5
Warehouse	630.1	629.0	630.7	425.0	395.1	374.7
Blockhouse	701.5	686.3	679.8	N/A	N/A	N/A
Hospital	757.4	702.5	657.5	582.1	616.0	654.4
Laundresses (Closest)	794.2	763.7	739.9	354.8	303.9	259.2
Bakery	976.1	953.1	931.5	413.7	370.6	337.5
Stables	1,031.7	1,011.6	995.9	454.9	420.4	387.8
Sutler's Store	1,128.6	1,128.9	1,131.2	787.8	797.4	811.5
Blacksmith Shop	1,234.4	1,214.3	1,195.8	451.1	395.1	341.3
Carpenter Shop	N/A	N/A	N/A	423.9	367.5	314.3
Root Cellar	N/A	N/A	N/A	436.9	415.9	409.4
Powder Magazine	N/A	N/A	N/A	447.3	422.7	411.8

commissioned officers quarters. Just as at Fort Yamhill being the furthest from the rest of the other structures especially the militarily/social inferior (subaltern officers, enlisted barracks and laundress quarters), the most noisy and odorous (laundress, bakery, root cellar, powder magazine, stables, carpenter shop and blacksmith shop) and those structures associated with the most manual labor (warehouse) would have clearly made FHH1 the most desirable officers' quarters with the highest military and social status.

The layout of United States Army posts were not only purposeful for meeting the defense and subsistence needs of the Army they were also very specifically laid out to reflect and reinforce the ideological barriers between soldiers and commissioned officers of different military grades and ranks (Adams 2009:133). All posts had an "officers' row" which was set purposely apart from their social, economic and military inferiors. These areas were set apart from the rest of the post by both physical barriers (fences, orchards, parade ground, etc.) and ideological

barriers (distance, orientation, viewshed, etc.) and when these barriers were violated commissioned officers noticed (Adams 2009:152).

Summary

As discussed above the built environment of the commissioned officers quarters at both Fort Yamhill and Fort Hoskins reflect inequalities in military status.

Commissioned officers were not permitted to build their quarters, therefore they had little control or influence on the scale, prominence and plan. But instead of expressing status through architecture they expressed their military, social and economic status through the selection of their quarters by rank (USWD 1861a, 1861b) and through interior decoration (Adams 2009:120). The authority of superior officers to have first choice would have permitted them to choose the best or most desirable quarters, as appears to be the case at both Fort Yamhill and Fort Hoskins.

At Fort Yamhill and Fort Hoskins the captains occupied the most desirable quarters (FYH1 and FHH1) which at Fort Yamhill was indicated by the house with most prominence (distinguished by the bay window), the largest scale (slightly more square footage) and the best position along Officers' Row (best viewshed and the furthest distance from the other post buildings, especially those that were socially and militarily inferior). The same was true at Fort Hoskins where captains occupied the most desirable quarters indicated by the house with the largest yard, greatest number and size of outbuildings and the best position along Officers' Row (best viewshed and the furthest distance from the other post buildings, especially those that were socially and militarily inferior).

Expressions of Status in the Material Culture

In this section I discuss the material expressions of status as reflected in the artifacts recovered from the six commissioned officers quarters excavated at Fort Yamhill and Fort Hoskins. This analysis and the following discussion includes the artifacts recovered from the captain's quarters at both posts (FYH1 and FHH1) and two

subaltern officers quarters from each post (FYH2, FYH3, FHH2 and FHH3). As discussed in Chapters 2 and 3 several methods for the inference of status from archaeological materials are used in this project to interpret the archaeological assemblages recovered from each of the six commissioned officers quarters. The expression of status within each artifact group, class, type and category are discussed in terms of the relative quantity, quality and variety of artifacts recovered as well as discussions about specific and/or unique artifacts that may reflect status. For several artifact types and categories additional qualitative approaches were used including ratio analysis for ceramicware and glassware vessels and price index analysis for ceramicware vessels and preference index analyses for butchery cuts.

Expressions of Status in the Total Artifact Assemblage

As discussed in Chapter 2 status, in the grossest of terms, can sometimes be expressed through the relative quantity, quality and variety of artifacts of a total artifact assemblage where a greater number of artifacts, higher quality artifacts and a greater variety of artifact types may all suggest higher status (Wason 1994:115, 125-126). Because commissioned officers' were restricted by military regulation and practice on the outward expression of their status using the built environment (i.e., their quarters) they instead turned inward and spent exorbitant amounts so that the interiors of his homes reflected their military, social and economic statuses (Adams 2009:121).

Quantity of Artifacts. At both Fort Yamhill and Fort Hoskins more artifacts were recovered from the captain's quarters at both posts than were recovered from any of the subaltern officers quarters (Figure 8.20). At Fort Yamhill 365 artifacts were recovered from FYH1 1.8 times the number of artifacts recovered from FYH2 (n=209) and 2.0 times the number of artifacts recovered from FYH3 (n=178). A similar pattern is observed at Fort Hoskins where 474 artifacts were recovered from FHH1 nearly 1.5 times the number of artifacts recovered from FHH2 (n=323) and 2.8 times the number of artifacts recovered from FHH3 (n=172). If the total number of material possessions is a reflection of a commissioned officers socio-economic status

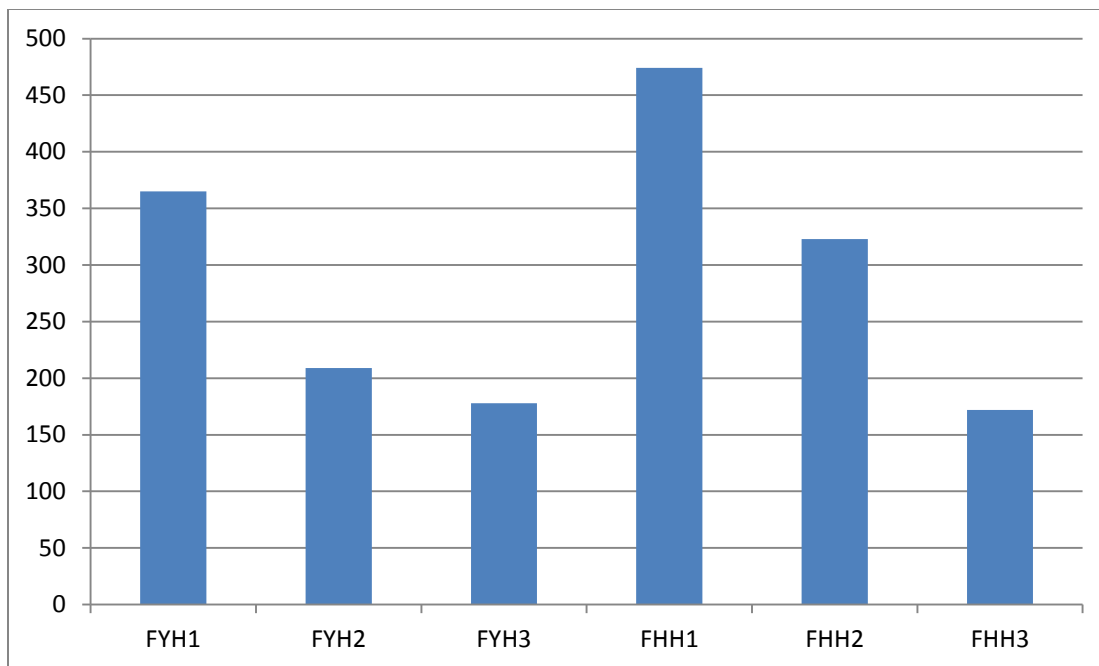


Figure 8.20 Total Number of Artifacts By Commissioned Officer Quarters

then clearly the occupants of FYH1 and FHH1 had much higher socio-economic status than the occupants of FYH2 and FYH3 and FHH2 and FHH3, respectively.

Quality of Artifacts. A similar pattern is also observed when the relative quality of artifacts recovered from each of the commissioned officers quarters is examined (Figure 8.21). At both Fort Yamhill and Fort Hoskins the archaeological collections recovered from FYH1 and FHH1 contained a far greater number of high quality artifacts than were recovered from the subaltern officers' quarters. At Fort Yamhill 47 high quality/expensive artifacts were recovered from FYH1 comprising 12.7% of the total FYH1 artifact assemblage while only 15 were recovered from FYH2 comprising just 7.2% of the FYH2 assemblage and only 7 were recovered from FYH3 comprising just 3.9% of the FYH3 assemblage. A similar pattern is observed at Fort Hoskins where 114 high quality artifacts were recovered from FHH1 comprising 24.1% of the total FHH1 artifact assemblage while only 27 were recovered from FHH2 comprising just 8.4% of the FHH2 assemblage and just 28 were recovered from FHH3 comprising 16.3% of the FHH3 assemblage. If a greater number of high quality artifacts is a reflection higher status then clearly the occupants

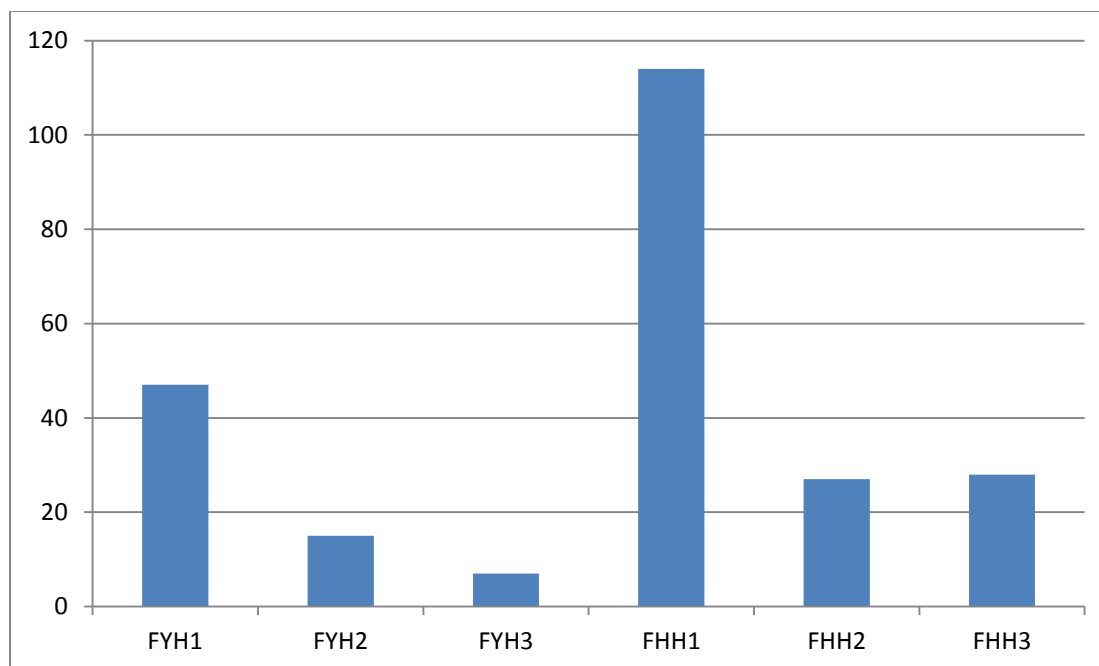


Figure 8.21 Number of High Quality/Expensive Artifacts By Commissioned Officer Quarters

of FYH1 and FHH1 had much higher socio-economic status than the occupants of FYH2 and FYH3 and FHH2 and FHH3, respectively.

Variety of Artifacts. A similar pattern is observed when the variety of artifacts recovered from each of the commissioned officers' quarters is examined (Figure 8.22). At both Fort Yamhill and Fort Hoskins the archaeological assemblages recovered from FYH1 and FHH1 contained a far greater variety of artifacts than were recovered from the subaltern officers' quarters. At Fort Yamhill artifacts from 100 different categories were recovered from FYH1 while artifacts from only 69 categories were recovered from FYH2 and artifacts from just 64 categories were recovered from FYH3. A similar pattern is observed at Fort Hoskins where artifacts from 116 different categories were recovered from FHH1 while artifacts from only 79 categories were recovered from FHH2 and artifacts from just 65 categories were recovered from FHH3. Again, if a greater variety of material possessions is a reflection of higher status then clearly the occupants of FYH1 and FHH1 had much higher socio-economic status than the occupants of FYH2 and FYH3 and FHH2 and FHH3, respectively.

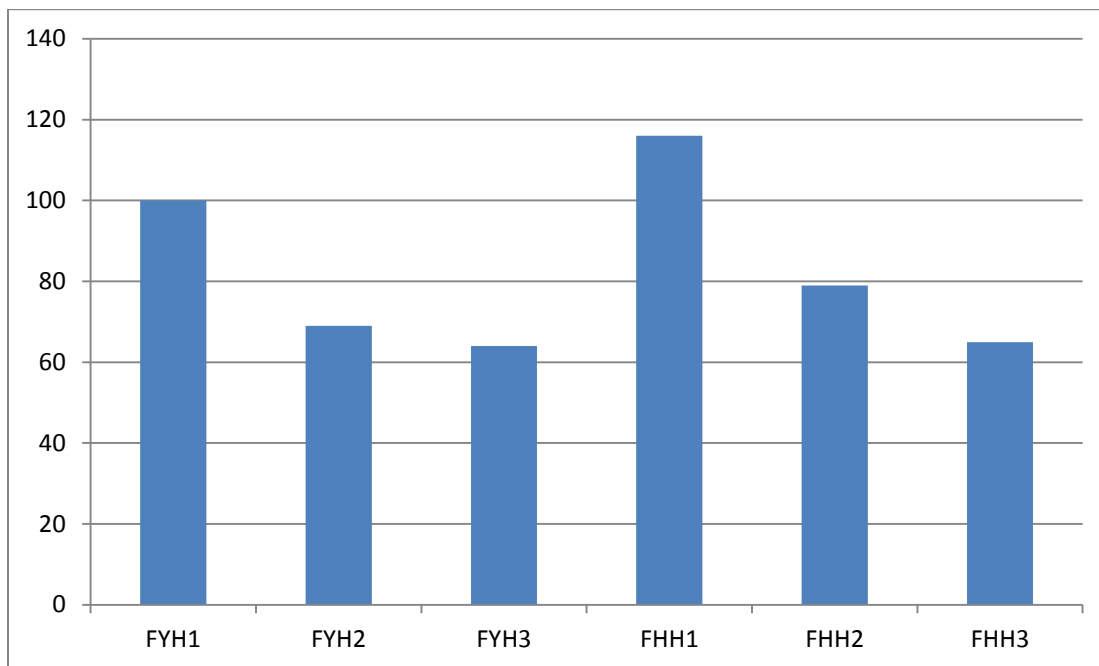


Figure 8.22 Variety of Artifact Categories By Commissioned Officer Quarters

In terms of overall quantity, quality and variety of artifacts the artifact assemblages recovered from FYH1 and FHH1 clearly reflect a higher socio-economic status than the assemblages recovered from FYH2, FYH3, FHH2 and FHH3. The artifact assemblages recovered from both FYH1 and FHH1 contains more artifacts, of a greater variety and often of higher quality than those recovered from the other commissioned officers quarters. Given that commissioned officers with the grade of captain occupied FYH1 at Fort Yamhill and FHH1 at Fort Hoskins it is reasonable to conclude that those officers had higher socio-economic status than their subaltern officers who occupied the other commissioned officers quarters (FYH2, FYH3, FHH2 and FHH3). The rest of this chapter examines the expression of status as it is reflected in the variation in the quantity, quality and variety of artifacts at the artifact group, class, type and category levels.

Patterns in the Artifact Groups. Overall the artifact assemblages recovered from each of the six commissioned officers quarters are similar in their relative proportions of domestic, military and personal group artifacts (Figure 8.23). At Fort

Yamhill and Fort Hoskins the artifact assemblages recovered from FYH1 and FYH3 and FHH1 and FHH3 are dominated by domestic artifacts, 58.6% and 59.6%, and 51.3% and 55.8%, respectively and to a lesser degree at FYH2 (48.3%) and FHH2 (28.5%). In contrast the artifact assemblages recovered from FYH2 and FHH2 are dominated by personal artifacts, 48.3% and 56.6%, respectively, and to a lesser degree at FYH1 (38.4%), FYH3 (37.1%), FHH1 (43.2%) and FHH3 (32.0%). Military artifacts comprise the smallest proportion of the total artifact assemblages from all of the commissioned officers quarter's at each post, but tend to increase in proportion along officers' row from the first to the third commissioned officers quarters (FYH1=3.0%, FYH2=3.3%, FYH3=3.4% and FHH1=5.5%, FHH2=14.9% and FHH3=12.2%).

The overall pattern of domestic, military and personal artifacts suggests that the captains who occupied FYH1 and FHH1 and the subaltern officers who occupied FYH3 and FHH3 had similar consumption patterns in terms of proportion, but maybe not in scale, with a bigger emphasis on the purchase and consumption of domestic items over personal items. Conversely the occupants of FYH2 and FHH2 appear to

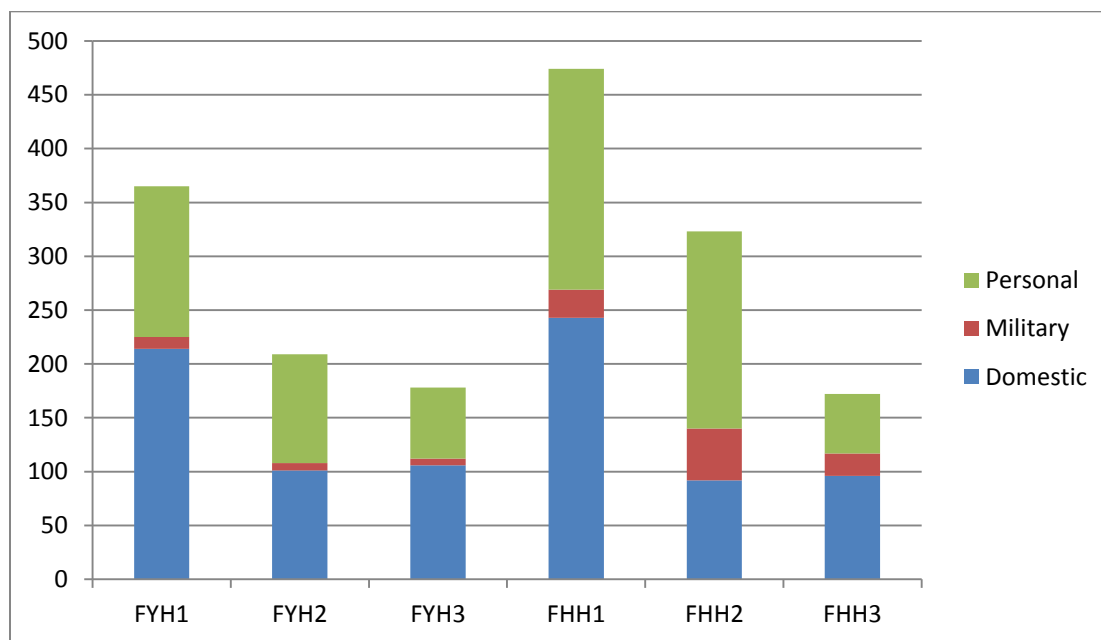


Figure 8.23 Total Number of Artifacts By Artifact Group and Commissioned Officer Quarters

have a larger emphasis on the purchase and consumption of personal items over domestic items. While it is interesting that the both forts share the same overall pattern (i.e., the first and third commissioned officers' quarters dominated by domestic items and the second commissioned officers' quarters dominated by personal items and a general increase in military artifacts from the first to the third commissioned officers' quarters at each post) the reasons for these patterns remain elusive and require additional research.

Domestic Artifacts. The domestic artifact assemblages contain artifacts pertaining to the furnishing of the home, the storage, preparation, presentation, serving and the consumption of food and drink, the food containers and remains of the foods consumed and artifacts pertaining to the general maintenance and repair of the household and its members. At both Fort Yamhill and Fort Hoskins more domestic artifacts were recovered from the captains' quarters (FYH1=214, FHH1=243) than were recovered from the subaltern officers' quarters (FYH2=101, FYH3=106, FHH2=92, FHH3=96) (Figure 8.24). Similarly a greater variety of domestic artifacts were recovered from the captains' quarters (FYH1=45, FHH1=47) than were recovered from the subaltern officers' quarters (FYH2=21, FYH3=24, FHH2=32, FHH3=28) and more high quality items were recovered from the captains' quarters (FYH1=54, FHH1=112) than were recovered from the subaltern officers' quarters (FYH2=13, FYH3=8, FHH2=31, FHH3=31). The higher quantities, greater variety and higher quality of domestic items recovered from the captains' quarters suggest a higher economic status within the domestic sphere and that the captains, and their families, placed much greater emphasis on the practice and expression of domesticity and gentility.

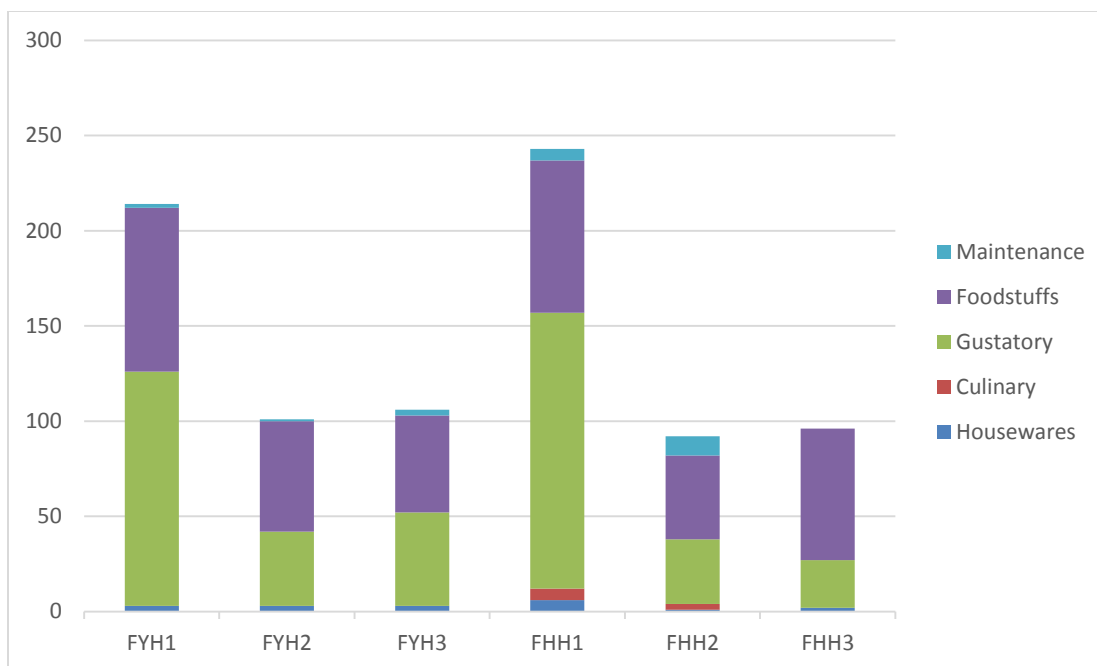


Figure 8.24 Domestic Group Artifact Assemblages by Functional Class

At both Fort Yamhill and Fort Hoskins the domestic artifact assemblages recovered from the captains' quarters are dominated by gustatory artifacts, 57.5% and 59.7%, respectively. This stands in stark contrast to the assemblages recovered from the subaltern officers' quarters at both posts which were dominated by foodstuffs at FYH2 (57.4%), FYH3 (48.1%), FHH2 (47.8%) and FHH3 (71.9%). This distinctive difference between captains and the subaltern officers is interesting and potentially illustrates different purchasing behaviors reflecting differences in social and economic status. Gustatory artifacts are those items used in the presentation and consumption of food (i.e., plates, bowls, cups, utensils, etc.) and therefore were durable goods intended to be curated and receive continued use; whereas foodstuffs are the remains of food items which were consumed (i.e., faunal material, food bottles and canisters) and therefore were non-durable goods intended to be consumed all at once or over a short period of time and then discarded. Since durable goods generally cost more than non-durable consumable (Riordan 1985) goods the predominance of gustatory items (durable goods and therefore more expensive) at FYH1 and FHH1 and the predominance of foodstuffs (non-durable and therefore less expensive) at

FYH2, FYH3, FHH2 and FHH3 suggests that the captains (FYH1, FHH1) had higher economic status than the subaltern officers (FYH2, FYH3, FHH2, FHH3).

Houseware Artifacts. The houseware artifact assemblages contain artifacts pertaining to the furnishing and decoration of the home such as tables, chairs, lamps, wood stoves, pictures, potted plants and decorative bric-a-brac (Figure 8.25). At Fort Yamhill the houseware artifact assemblages show little difference in the quantity, quality and variety of artifact between the commissioned officers' quarters. Only nine houseware artifacts in total were recovered at Fort Yamhill, three from each of the commissioned officers, with all three of the assemblages containing one furniture item (caster) and one lighting device (oil lamp) each. Two stove parts were also recovered, one from FYH1 and the other from FYH2, and a single porcelain figurine from FYH3. With the exception of the porcelain figurine, a high quality luxury item, recovered from FYH3 all of the houseware assemblages recovered from Fort Yamhill are unremarkable. Unlike Fort Yamhill the houseware artifact assemblages recovered from Fort Hoskins show considerable variation in the quantity, quality and variety of objects recovered from each of the commissioned officers' quarters. At Fort Hoskins more houseware artifacts were recovered from the captains' quarters (FHH1=6) than the subaltern officers' quarters (FHH2=1, FHH3=2). Similarly a greater variety of houseware artifacts were recovered from the captains' quarters (FHH1=5, FHH2=1, FHH3=2) as well as more high quality items (FHH1=2, FHH2=0, FHH3=0).

While the recovery of houseware items from all of the commissioned officers quarters at Fort Yamhill suggests that the commissioned officers who occupied these quarters furnished and decorated their homes with furniture, stoves, lighting devices and decorative items there does not appear to be any variation between the captains and the subaltern officers. The one exception is the porcelain figurine recovered from FYH3 which may indicate a higher status as a more costly luxury item. The differences in the houseware assemblages recovered from the commissioned officers' quarters at Fort Hoskins suggest that captains had higher status assemblages than the subaltern officers which included not only more items (3 to 6 times more) but also more high quality items (n=2) such as porcelain chamber sticks and porcelain

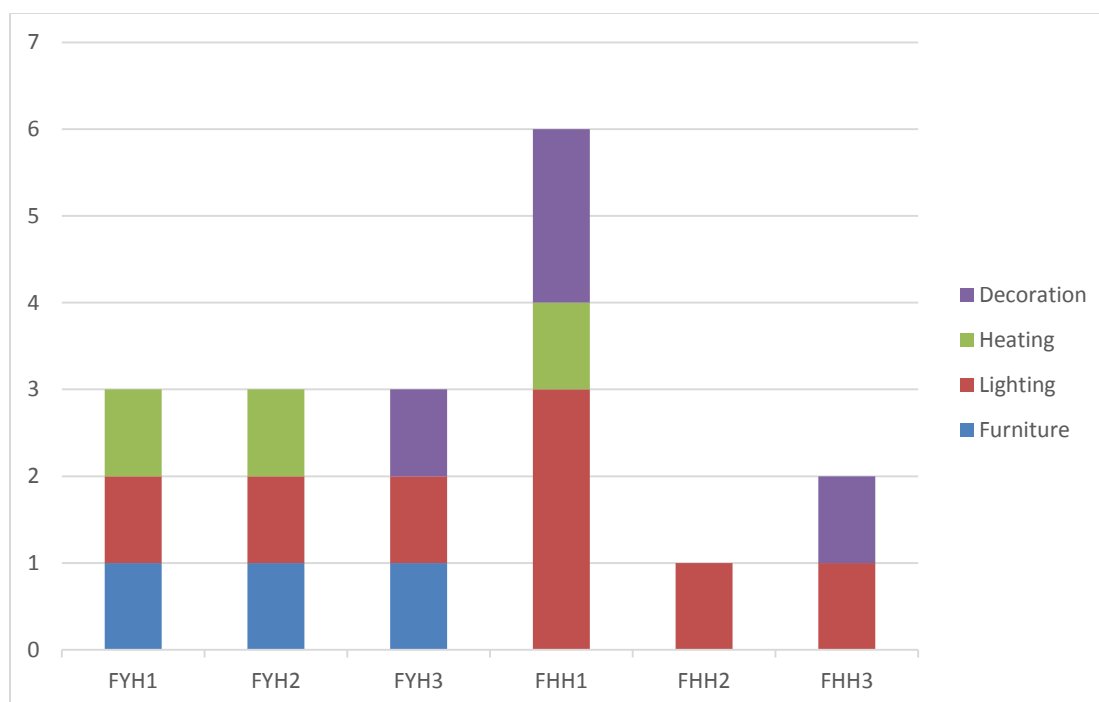


Figure 8.25 Houseware Artifact Assemblages By Functional Type

figurines. The relatively small number of houseware items recovered overall (just nine items from each post) suggests that these items were either costly and therefore rare and highly curated or durable and therefore unlikely to break (or break into identifiable fragments) and enter the archaeological record.

In addition to symbolizing social and economic status differences among the commissioned officers some types of houseware items may have had a secondary role as a teaching tool representing cultural and ideological values and lessons. The porcelain figurine recovered from FYH3 is molded in the likeness of a little girl, wearing a cloak and carrying a basket, possibly “Little Red Riding Hood” from European folklore. Anthropologists and folklorists have put forth several interpretations of the function of these myths but most consider them a tool for teaching youth about societal norms and life lessons. The most prominent interpretations of the Little Red Riding Hood myths are those viewing the story as a tool for educating female youth about puberty/rebirth/growth and to warn them of strangers (Dundes 1989; Tatar 2004).

The other porcelain figurine, recovered from FHH1, is even more intriguing given the military context in which it was found. Molded in classical form the female

figure is wearing scaled armor and holding a spear, the figurine likely represents the Greek goddess of Athena or the Roman goddess Minerva. For both ancient cultures the goddesses represented the traits of wisdom, strategic warfare and both goddesses were a sponsor of the arts (Hughes 1995). It is likely that this figurine was purchased and displayed to represent the officer's, and his family's, subscription to such values. It is also interesting that both of the figurines are female especially the Athena/Minerva figurine rather than a figurine of their male counterpart (Ares/Mars). The choice of the former may have been to place emphasis on feminine domain of the home within (and possibly in contrast to) the emphasis of the masculine domain of the fort. The different aspects of war that each goddess and god represent may have also been an influence. Where Athena/Minerva represents the intelligent, strategic and generalship (leadership) of war, Ares/Mars represents the physical, violent and untamed aspects of war (Hanson 2005:113; Burkert 2004:141), perhaps choosing the figurine of Athena/Minerva represents a preference of the former over the latter.

Culinary Artifacts. The culinary artifact assemblages contain artifacts pertaining to the storage and preparation of food and drink such stoneware crocks, mixing bowls, baking vessels, kettles and cook stoves. While no culinary artifacts were recovered at Fort Yamhill only nine culinary items were recovered at Fort Hoskins (Figure 8.26). At Fort Hoskins far more culinary items were recovered from the captains' quarters (FHH1=6) than the subaltern officers' quarters (FHH2=3, FHH3=0). Similarly a greater variety of culinary artifacts were recovered from the captains' quarters (FHH1=4, FHH2=2, FHH3=0) although no high quality culinary items were recovered from any of the commissioned officers quarters.

Although culinary items rarely directly represent status (i.e., being costly or status symbols) they do represent high status dining behavior. The much higher number and variety of culinary items recovered from the captains' quarters (FHH1) than from the subaltern officers quarters (FHH2, FHH3), especially the storage and cooking vessels which may suggests a greater variety of foods were being prepared and consumed, suggests more formal and genteel dining behavior (McBride et al.

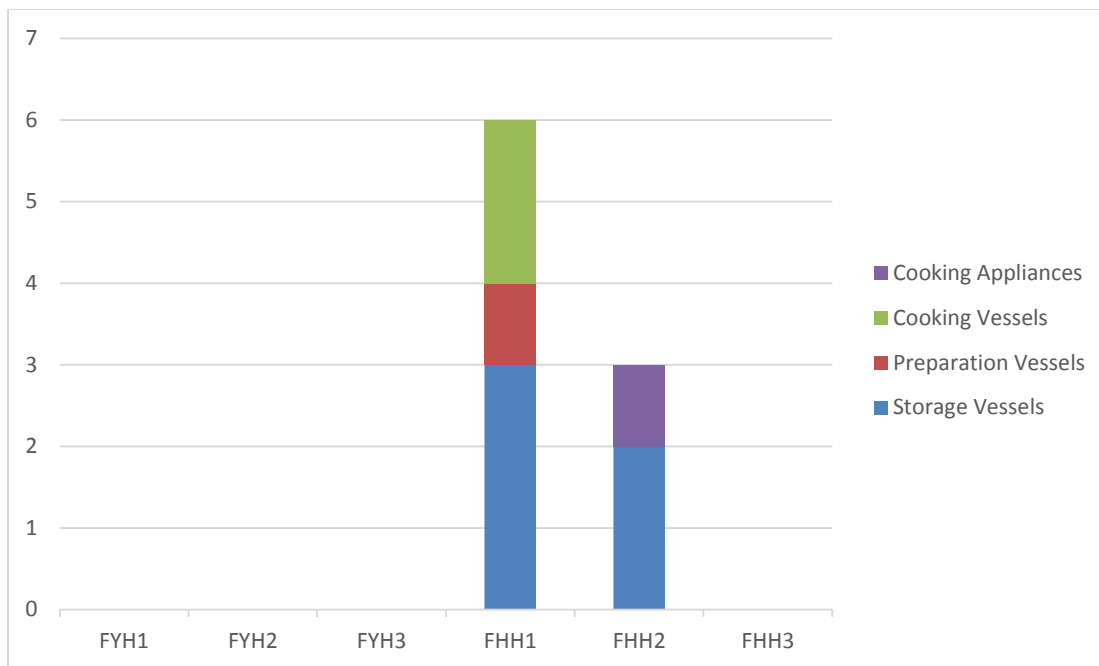


Figure 8.26 Culinary Artifact Assemblages by Functional Type

2000:112). More formal and genteel dining behaviors were considered to be indicative of higher social and economic status.

Gustatory Artifacts. The gustatory artifact assemblages contain artifacts pertaining to the presentation and consumption of food and drink such as drinking, eating and serving vessels made of glass, ceramic and metal and eating utensils such as spoons, forks and knives. At both Fort Yamhill and Fort Hoskins more gustatory artifacts were recovered from the captains' quarters (FYH1=123, FHH1=145) than were recovered from the subaltern officers' quarters (FYH2=39, FYH3=49, FHH2=34, FHH3=25) (Figure 8.27). Similarly a greater variety of gustatory artifacts were recovered from the captains' quarters (FYH1=23, FHH1=21) than were recovered from the subaltern officers' quarters (FYH2=10, FYH3=10, FHH2=12, FHH3=10) and more high quality items were recovered from the captains' quarters (FYH1=24, FHH1=45) than were recovered from the subaltern officers' quarters (FYH2=4, FYH3=2, FHH2=8, FHH3=3). The higher quantities, quality and variety of gustatory items recovered from the captains' quarters at both posts suggest higher social and economic status and a larger emphasis on the leisure ritual of dining which

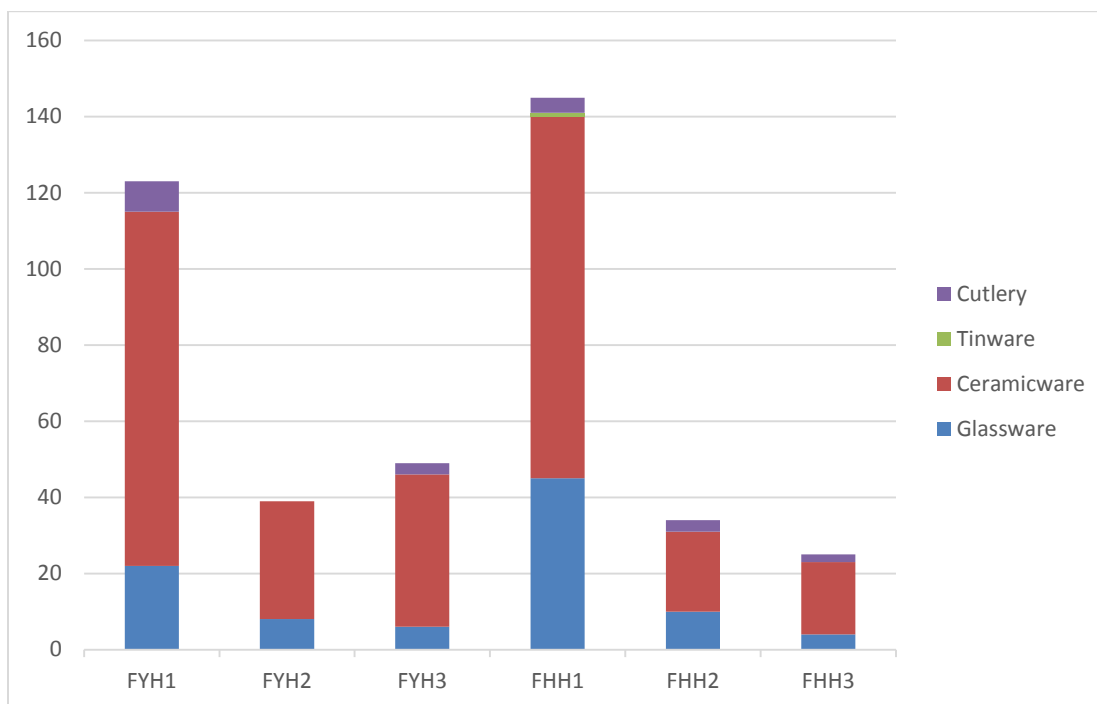


Figure 8.27 Gustatory Artifact Assemblages By Functional Type

was so important to many commissioned officers as an expression of gentility (Adams 2009:42-43, 81-84).

The gustatory artifact assemblages recovered from both posts, especially the captains' quarters (FYH1, FHH1), clearly display social and economic disparity between the commissioned officers. Food and its consumption were considered strong indicators of bourgeois culture in the urban Northeast and army officers consumed liberally to demonstrate their genteel aspirations and their social and economic power (Adams 2009:114). As will be discussed in more detail below commissioned officers at both posts used food and drink and its consumption from fine glassware and expensive ceramicware to demonstrate they belonged among the social, cultural and economic elite of America.

Glassware Vessels. The glassware artifact assemblages contain vessels used in the presentation and the consumption of food and drink and as the name suggests are made of glass and includes items such as tumblers, stemware, shot glasses, decanters, plates, bowls, butter dishes, compotes and celery vases (Figure 8.28). At

both Fort Yamhill and Fort Hoskins far greater quantities of glassware vessels were recovered from the captains' quarters (FYH1=22, FHH1=45) than were recovered from the subaltern officers' quarters (FYH2=8, FYH3=6, FHH2=10, FHH3=4). Similarly a much greater variety of vessel forms were recovered from the captains' quarters (FYH1=9, FHH1=5) than were recovered from the subaltern officers' quarters (FYH2=3, FYH3=2, FHH2=4, FHH3=1) and more high quality (i.e., cut glass) items were recovered from the captains' quarters (FYH1=2, FHH1=2) than were recovered from the subaltern officers' quarters (FYH2=1, FYH3=0, FHH2=2, FHH3=0).

The disparity in the overall quantity of glassware vessels recovered from each of the commissioned officers quarters clearly demonstrates the higher economic status of the captains in relations to the subaltern officers. This will be discussed further within the variation (reflecting difference in the social and economic status) in vessel form, decoration and matched sets below.

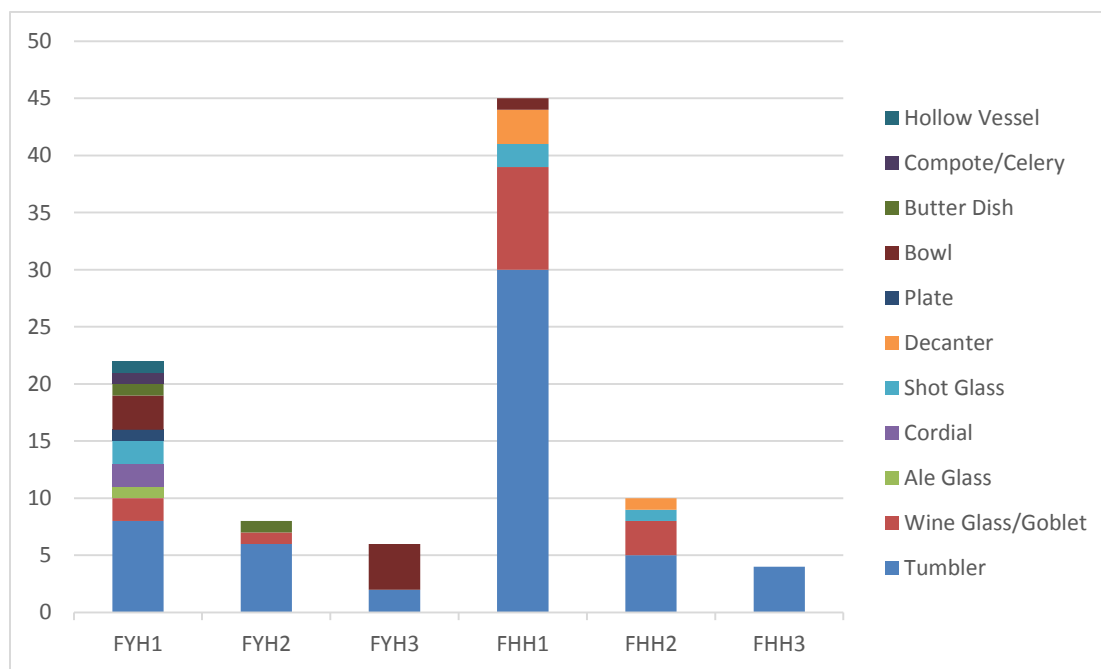


Figure 8.28 Glassware Assemblages By Vessel Form

Glassware Vessel Forms. The glassware assemblages recovered also display considerable variation in the number and specific types of vessel forms. At Fort Yamhill nine glassware vessel forms were recovered from the captains' quarters (FYH1) while fewer vessels forms were recovered from the subaltern officers' quarters, only three glassware vessels forms were recovered from FYH2 and just two at FYH3. A similar, but less dramatic, pattern was observed at Fort Hoskins where five vessels forms were recovered from the captains' quarters (FHH1) while only four vessels forms were recovered from FHH2 and just one being recovered from FHH3.

The overall greater variety of vessels forms recovered from the captains' quarters (FYH1, FHH1) suggests a greater variety of food and drink was being consumed (McBride et al. 2000:111). In addition the greater number of specialized vessel forms (i.e., cordials, wine glasses/goblets, ale glasses, shot glasses, decanters, butter dishes, compote/celery vases) recovered from the captains' quarters (FYH1, FHH1) suggests more formal and genteel consumption behaviors (McBride et al. 2000:112). The cordial, ale glass, butter dish and compote/celery specifically were unique vessels forms that had specific uses suggesting more formal dining associated with bourgeois values (Adams 2009:110). This contrasts dramatically with the more common vessel forms such as the tumbler which had a much wide range of uses and comprised the bulk of the glassware assemblages recovered from the subaltern officers' quarters (FYH2, FYH3, FHH2, FHH3).

Glassware Vessel Decoration. The glassware assemblages recovered from each of the commissioned officers quarters also displayed differences in decoration type and pattern (Figure 8.29). Although slight, glassware decoration types did vary between the assemblages. At Fort Yamhill three decorative types (cut, pressed and undecorated) were recovered from the captains' quarters (FYH1) while only two types (cut and pressed) were recovered from FYH2 and just one type (pressed) was recovered from FYH3, the subaltern officers' quarters. A similar pattern is observed at Fort Hoskins where four decorative types (cut, pressed, roughed and plain/undecorated) were recovered from the captains' quarters while only three (cut, pressed and plain/undecorated) from FHH2 and just one (pressed) from FHH3.

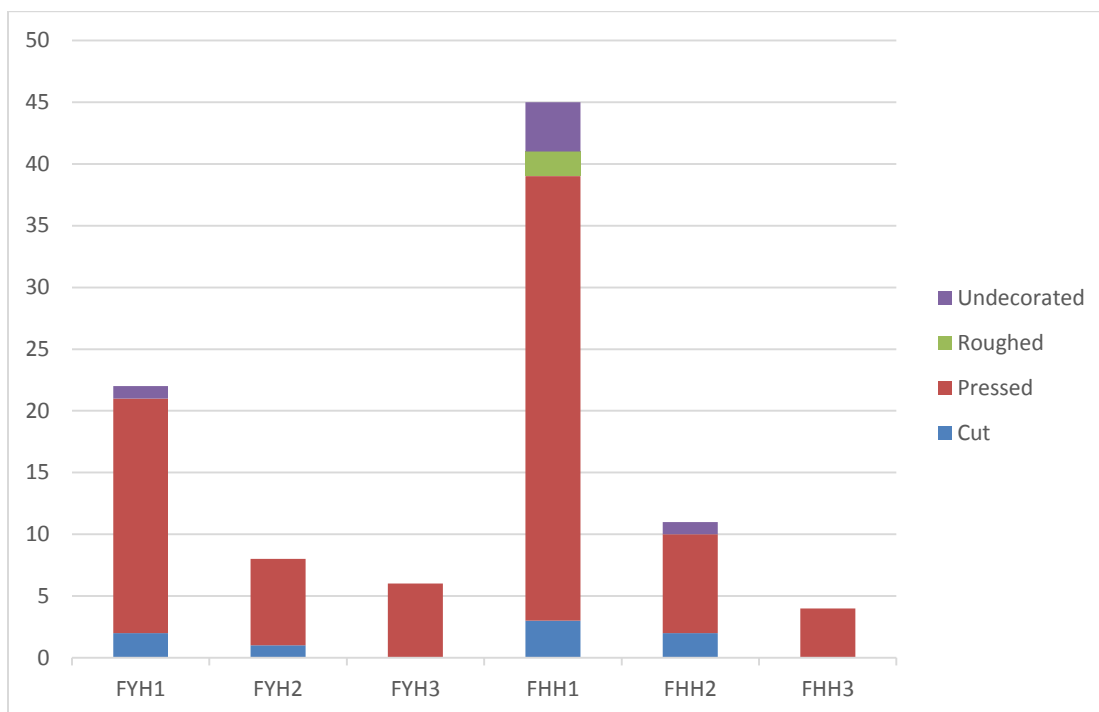


Figure 8.29 Glassware Vessel Assemblages By Decoration Type

Not only was there a difference in the decoration types and the number of decoration types reflected in the glassware assemblages but also distinct difference in the quality of decoration types. At both Fort Yamhill and Fort Hoskins more vessels with cut glass patterns were recovered from the captains' quarters (FYH1=2, FHH1=3) than were recovered from the subaltern officers' quarters (FYH2=1, FYH3=0, FHH2=2, FHH3=0). During the 19th century cut glass vessels were much more expensive than pressed glass vessels so much so that the technology used to produce pressed glass vessels was developed in order to replicate the decorative look of cut glass patterns and make decorated glass vessels more affordable (Jones 2000; Revi 1973).

A difference in the number of decorative patterns and number of matched sets within the glassware assemblages was also observed (Figure 8.30). At Fort Yamhill 10 decorative patterns were found in the glassware assemblage recovered from the captains' quarters (FYH1) with far fewer found in the assemblages recovered from the subaltern officers' quarters, five at FYH2 and four at FYH3. A similar pattern

was also observed at Fort Hoskins where nine decorative patterns were observed in the glassware assemblage recovered from the captains' quarters (FHH1) and far fewer in the assemblages recovered from the subaltern officers' quarters, only four in the assemblage recovered from FHH2 and just one in the assemblage recovered from FHH3. The same pattern is reflected in the number of matched sets of glassware vessels. At Fort Yamhill and Fort Hoskins far more matched sets of glassware vessels were recovered from the captains' quarters (FYH1=4, FHH1=6) than were recovered from the subaltern officers' quarters (FYH2=1, FYH3=1, FHH2=1, FHH3=1). The greater number of decorative patterns and more matched sets recovered from the captains' quarters (FYH1, FHH1) is indicative of genteel or more formal dining (Fitts 1999; Wall 1994a, 1994b). Matching sets were also expensive and usually a mark of the upper classes (McBride et al. 2000; Miller et al. 1994; Williams 1987).

The greater number of glassware vessels and vessel forms, the greater number decorative types, patterns and matched sets recovered from the captains' quarters (FYH1, FHH1) at both Fort Yamhill and Fort Hoskins suggest that the occupants

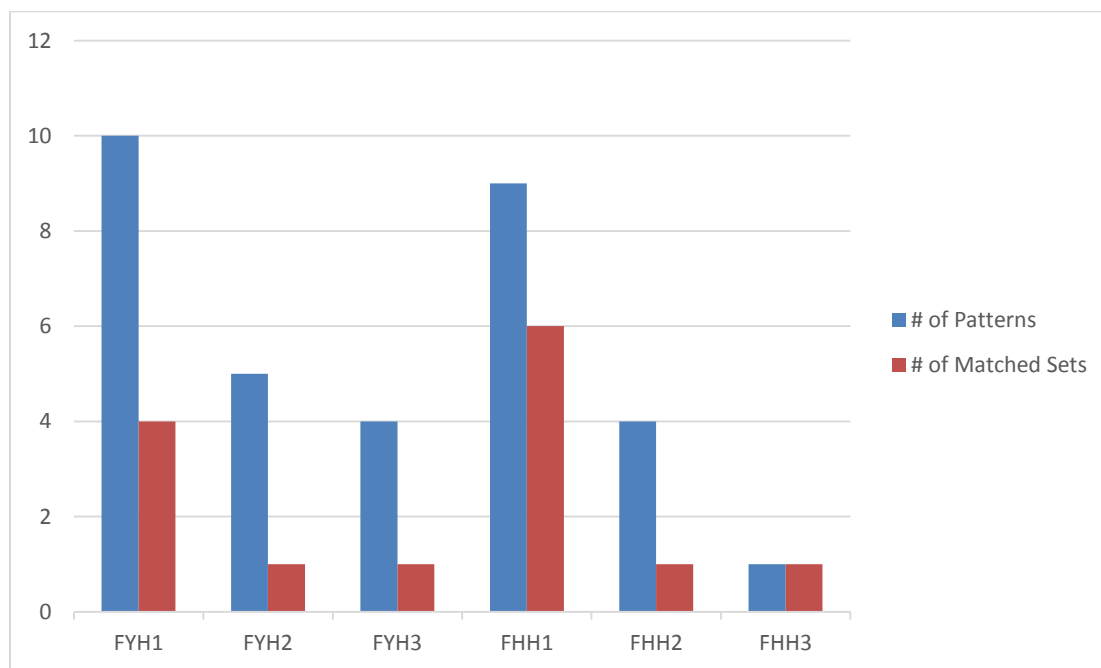


Figure 8.30 Number of Decorative Patterns and Matched Sets in Glassware Assemblages

placed a considerable emphasis on expressing the high social status through genteel and more formal dining behavior. The greater numbers of more expensive glassware vessels and the greater number of matched sets recovered from the captains' quarters (FYH1, FHH1) also suggests that these officers were expressing their higher economic status through the purchase and use of more expensive glassware vessel types and matched sets.

Ceramicware Vessels. The ceramicware artifact assemblages contain vessels used in the presentation and the consumption of food and drink and as the name suggests are made of ceramic and includes items such as tea and coffee cups, tea and coffee pots, creamer, sugars, plates, bowls, platters, tureens, pitchers, butter tubs and dishes (Figure 8.31). At both Fort Yamhill and Fort Hoskins far greater quantities of ceramicware vessels were recovered from the captains' quarters (FYH1=93, FHH1=95) than were recovered from the subaltern officers' quarters (FYH2=31, FYH3=40, FHH2=21, FHH3=19). Similarly a much greater variety of vessel forms were recovered from the captains' quarters (FYH1=10, FHH1=12) than were recovered from the subaltern officers' quarters (FYH2=7, FYH3=5, FHH2=6, FHH3=7) (Figure 8.31) and more high quality (i.e., porcelain, gilded and transfer-printed) vessels were recovered from the captains' quarters (FYH1=22, FHH1=43) than were recovered from the subaltern officers' quarters (FYH2=3, FYH3=2, FHH2=6, FHH3=3) (Figures 8.32 and 8.33). The disparity in the overall quantity, quality and variety of ceramicware vessels recovered from each of the commissioned officers quarters clearly demonstrates the higher economic status of the captains in relations to the subaltern officers. This will be discussed further within the variation (reflecting difference in the social and economic status) in paste, vessel form, decoration and matched sets below.

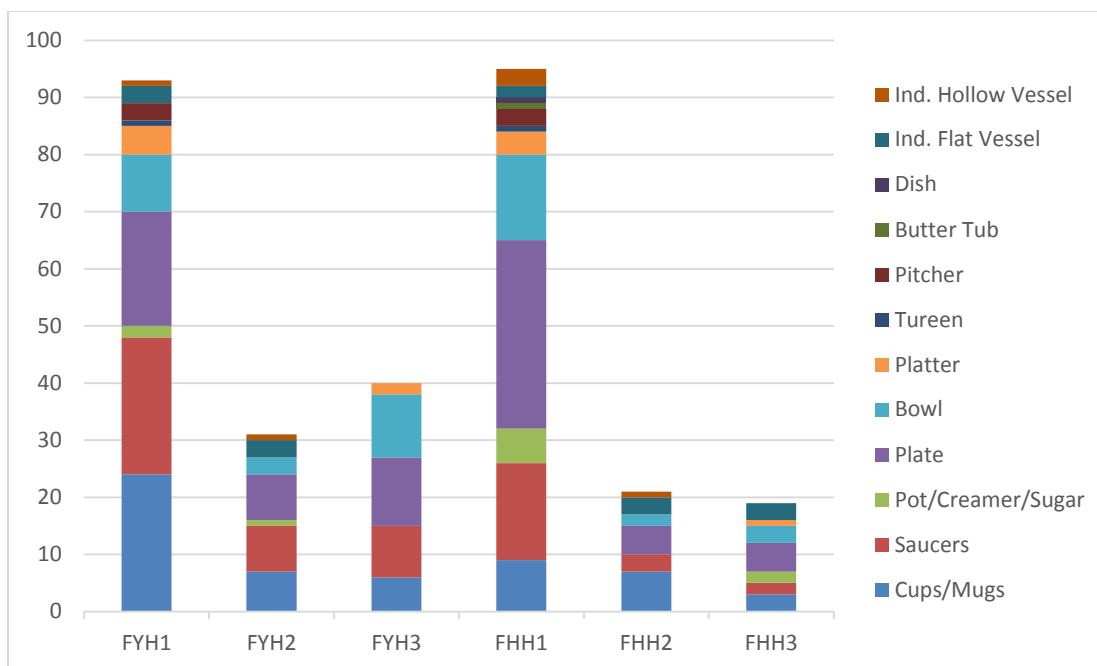


Figure 8.31 Ceramicware Assemblages By Vessel Form

Ceramicware Vessel Form. The ceramicware assemblages recovered also display considerable variation in the number and specific types of vessel forms. At Fort Yamhill 10 ceramicware vessel forms were recovered from the captains' quarters (FYH1) while fewer vessels forms were recovered from the subaltern officers' quarters, only seven ceramicware vessels forms were recovered from FYH2 and just five ceramicware vessels forms were recovered at FYH3. A similar, but more dramatic, pattern was observed at Fort Hoskins where 12 vessel forms were recovered from the captains' quarters (FHH1) while just six vessels forms were recovered from FHH2 and seven vessels forms being recovered from FHH3. The overall greater variety of vessels forms recovered from the captains' quarters (FYH1, FHH1) suggests a greater variety of food and drink was being consumed, a consumption pattern typically associated with gentility and higher social status (McBride et al. 2000:111).

In addition a greater number and variety of serving vessels and serving vessel forms were also recovered from the captains' quarters (FYH1, FHH1) at both posts. At Fort Yamhill nine (9.6%) serving vessels were recovered from FYH1, while no serving vessels were recovered from FYH2 (0%) and just two serving vessels were

recovered from FYH3 (5.0%). A nearly identical pattern was observed at Fort Hoskins where 10 serving vessels were recovered from FHH1 (10.5%), while no serving vessels were recovered from FHH2 (0%) and just one serving vessel was recovered from FHH3 (5.2%). A higher number and proportion of serving vessels is often linked to more formal and genteel dining and higher social and economic status (Fitts 1999; McBride and Esarey 1995; Otto 1977, 1980; Wall 1994a, 1994b, 1999). According to Miller (1980) serving vessels such as platters were 50 percent more expensive than plates.

Plate-to-bowl ratios also reflect different consumption patterns. At both Fort Yamhill and Fort Hoskins the lowest plate-to-bowl ratios were associated with the third commissioned officers' quarters (FYH3=1.09 to 1 and FHH3=1.6 to 1), the commissioned quarters' hypothesized to have housed the lowest graded officers, second lieutenants, at both posts. All of the other officers' quarters at both posts had plate-to-bowl ratios at least twice as high (FYH1=2 to 1, FYH2=2.6 to 1, FHH1=2.2 to 1, FHH2=2.5 to 1). The lower plate-to-bowl ratios associated with FYH3 and FHH3 suggests that those subaltern officers were consuming more stews, soups and beans, meals more commonly associated with lower status (McBride et al. 2000:111), while higher plate-to-bowl ratios associated with FYH1, FYH2, FHH1 and FHH2 suggest that those officers were probably consuming more formal meals possibly of large cuts of meat. This appears to be at least partially supported by the fact that the only two "steak cuts" were recovered from the captains' quarters at Fort Yamhill (FYH1).

Ceramicware Vessel Paste. The ceramicware assemblages recovered from each of the commissioned officers' quarters also vary by vessel paste (Figure 8.32). At both Fort Yamhill and Fort Hoskins the captains' quarters produced the greatest number and highest percentage of porcelain vessels (FYH1=14 or 15%, FHH1=35 or 36.8%). The subaltern commissioned offices' quarters at both posts produced far fewer porcelain vessels (FYH2=2 or 6.4%, FYH3=1 or 2.5%, FHH2=5 or 23.8%, FHH3=2 or 10.5%). Conversely higher percentages of whiteware vessels were recovered from the subaltern officers' quarters (FYH2=16.1%, FYH3=25.0%, FHH2=23.8%,

FHH3=21.1%) than were recovered from the captains' quarters (FYH1=12.9%, FHH1=15.8%). The proportion of ceramicware vessels made of ironstone were relatively equal across all of the commissioned officers' quarters at Fort Yamhill but tended to increase from the first to the third commissioned officers' quarters at Fort Hoskins (FYH1=71.0%, FYH2=77.4%, FYH3=72.5%, FHH1=47.4%, FHH2=52.4%, 68.4%).

Given the fact that porcelain vessels were some of the most expensive ceramicware vessels and non-transfer printed whiteware vessels were some of the cheapest ceramicware vessels available in the middle of the 19th century (Miller 1980, 1991; Miller et al. 1994) the captains' quarters (FYH1, FYH2) have much more expensive ceramicware assemblages than the subaltern officers' quarters (FYH3, FHH2, FHH3). This is also supported by the variations in ceramicware vessel decoration. White ironstone ceramics grew enormously in popularity in the United States after 1840 and because they were considered fashionable and more expensive than other non-transfer printed whiteware vessels (McBride et al. 2000:111; Miller 1980; 1991) they became associated with the middle and upper middle classes. The

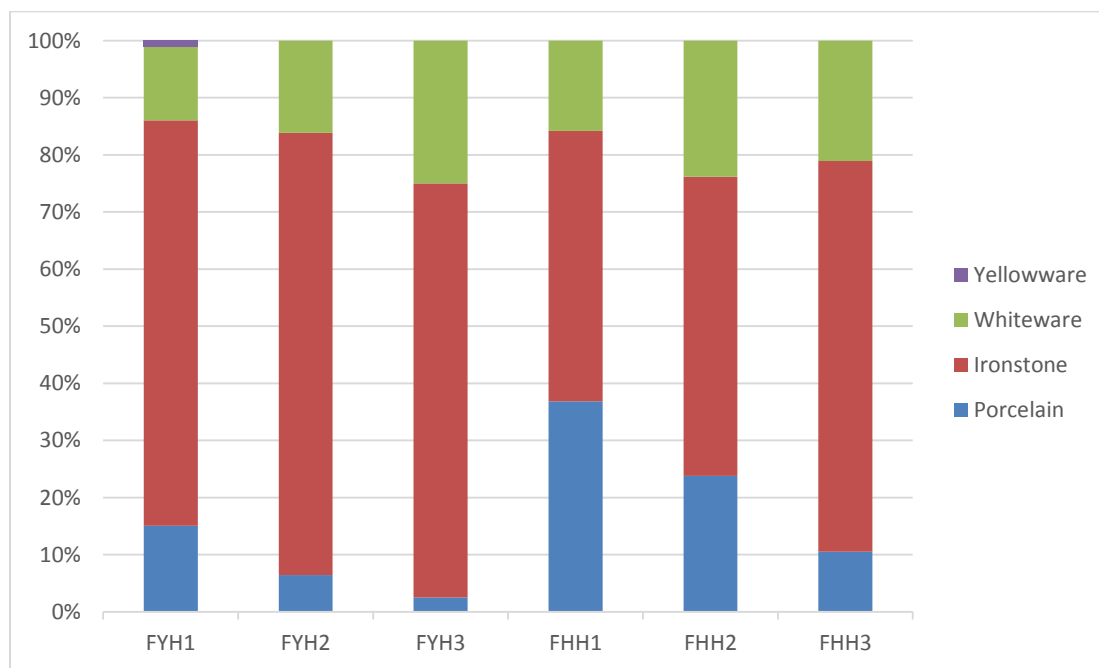


Figure 8.32 Ceramicware Assemblages By Vessel Fabric Type

dominance of white ironstone at all six of the commissioned officers' quarters clearly reflects their membership in the stratum of the upper-middle class.

Ceramicware Decoration. The ceramicware assemblages recovered from each of the commissioned officers' quarters, with a few exceptions, show only a slight variation in decoration (Table 8.33). Molded and undecorated/plain vessels dominate all of the ceramicware assemblages (FYH1=76.3%, FYH2=80.6%, FYH3=75.0%, FHH1=78.9%, FHH2=76.2%, FHH3=8.2%). And, little meaningful variation in the ceramicware assemblages is observed in hand-painted (FYH1=6.5%, FYH2=9.7%, FYH3=5.0%, FHH1=1.1%, FHH2=9.5%, FHH3=0.0%) and edge decorated (FYH1=0.0%, FYH2=3.2%, FYH3=2.5%, FHH1=4.2%, FHH2=0.0%, FHH3=0.0%) vessels. But, variation does appear to be present in the gilded, transfer printed, sponge decorated and annular/banded decorated vessels.

Gilded vessels (all porcelain teawares, i.e., cups, saucers and pot/creamer/sugar lids) were only recovered from the captains' quarters (FYH1=4 [4.3%], FHH1=3 [3.2%]) at both posts. The distribution of transfer-printed vessels

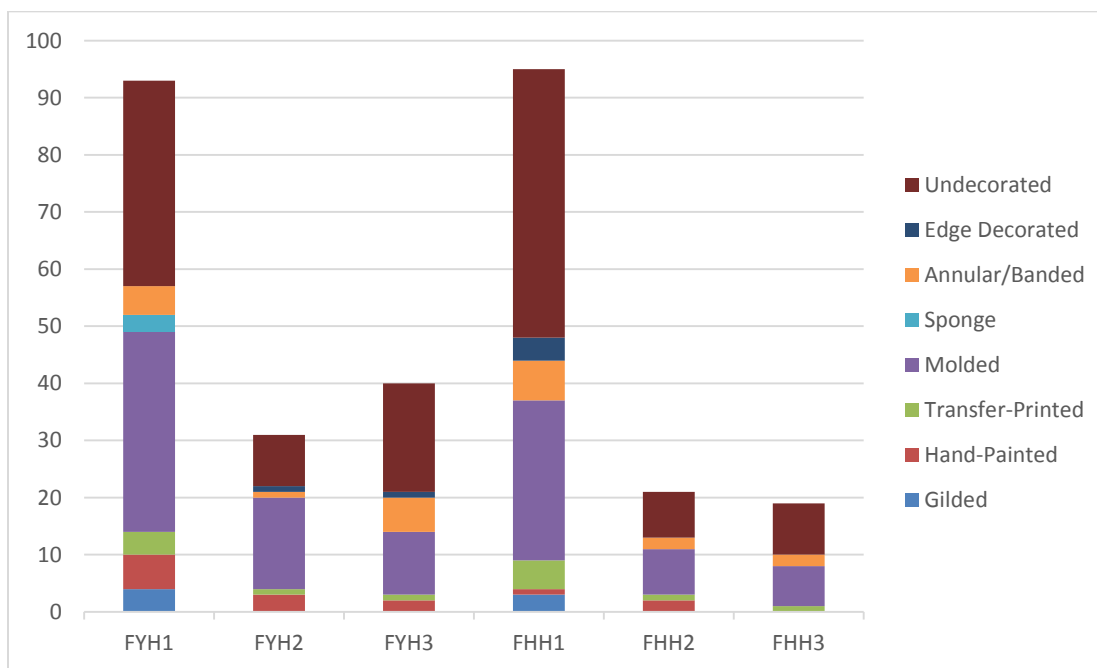


Figure 8.33 Ceramicware Vessel Assemblage By Decorative Type

displays a similar pattern, with far more vessels recovered from the captains' quarters (FYH1=4 [4.3%], FHH1=5 [5.3%]) at both posts. Conversely, annular/banded (dipt) decorated vessels (all whiteware bowls) were more commonly recovered from the subaltern officers' quarters at both posts (FYH1=5.4%, FYH2=3.2%, FYH3=15.0%, FHH1=7.4%, FHH2=9.5%, FHH3=10.5%). Lastly, sponge decorated vessels (all teawares) were only recovered from the captains' quarters at Fort Yamhill (FYH1=3 [3.2%]).

Given the fact that gilded (especially porcelain vessels) and transfer-printed vessels were the most expensive ceramicware decorative types available during the middle of the 19th century (Miller 1980, 1991; Miller et al. 1994) the captains' quarters at both posts clearly had much more expensive ceramicware assemblages. Sponge decorated teas recovered from the captains' quarters at Fort Yamhill (FYH1) also tended to be a more expensive ceramic decoration. This contrasts with the annular/banded (dipt) decorated bowls recovered more commonly from the subaltern officers' quarters at each post which were the cheapest decorated bowl type (Miller 1980, 1991; Miller et al. 1994).

Miller CC Index Analysis. The above discussion clearly demonstrates that the captains' quarters at both posts had much more expensive and higher status ceramicware assemblages. This is supported by the results the Miller CC Index analysis (Miller 1980, 1991) (Figure 8.34). At both Fort Yamhill and Fort Hoskins the captains' quarters ceramicware assemblages produced the highest CC Index values for all vessel forms: teas (FYH1=2.98, FYH2=2.07, FYH3=1.96, FHH1=2.96, FHH2=2.25, FHH3=1.95), flatware (FYH1=2.62, FYH2=2.31, FYH3=1.98, FHH1=2.90, FHH2=2.34, FHH3=2.43) and bowls (FYH1=2.22, FYH2=2.15, FYH3=2.12, FHH1=1.83, FHH2=1.14, FHH3=1.59). Clearly the ceramicware assemblages recovered from the captains' quarters (FYH1, FHH1) at both posts were much more expensive due in large part to the abundance of porcelain vessels and the higher incidence of gilded and transfer-printed decoration.

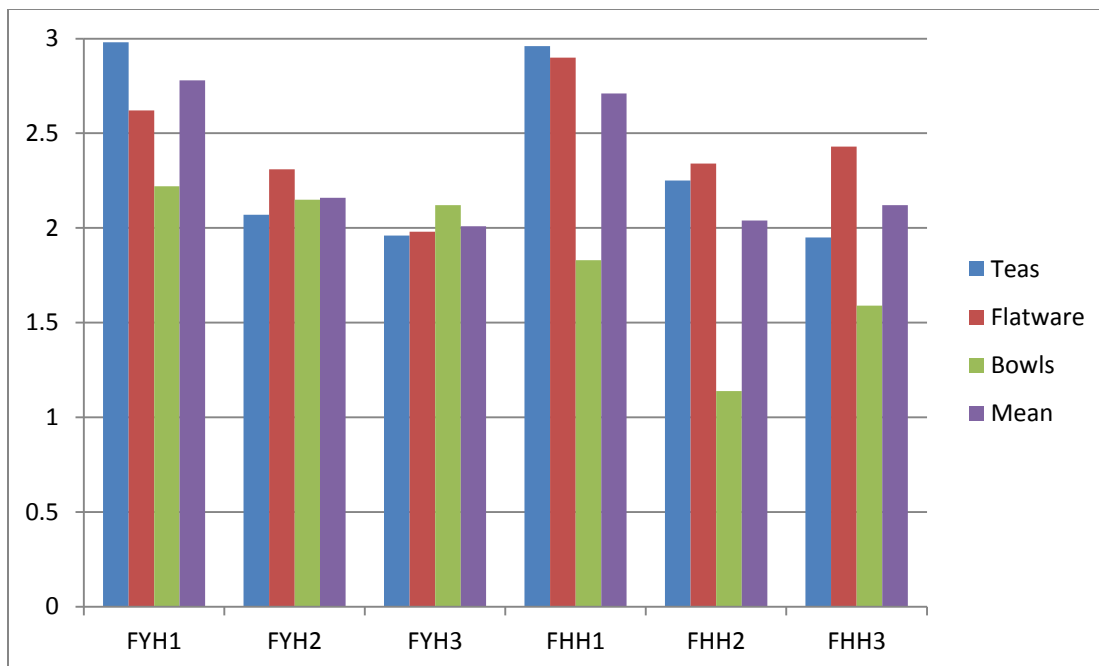


Figure 8.34 Miller CC Index Values for Ceramicware Vessels

Ceramicware Decorative Patterns and Matched Sets. A difference in the number of ceramicware decorative patterns and number of matched sets was also observed within the assemblages recovered from both posts (Figure 8.35). A greater number of decorative patterns and matched sets were recovered from the captains' quarters (FYH1, FHH1) than were recovered from the subaltern officers' quarters (FYH2, FYH3, FHH2, FHH3) at both posts. At Fort Yamhill 28 decorative patterns and 13 matched sets were recovered from FYH1, while only 15 patterns and two matched sets were recovered from FYH2, and 18 patterns and two matched sets were recovered from FYH3. A similar pattern was observed at Fort Hoskins where 26 decorative patterns and 12 matched sets were recovered from FHH1, while only 12 decorative patterns and four matched sets were recovered from FHH2, and just 6 decorative patterns and one matched set was recovered from FHH3.

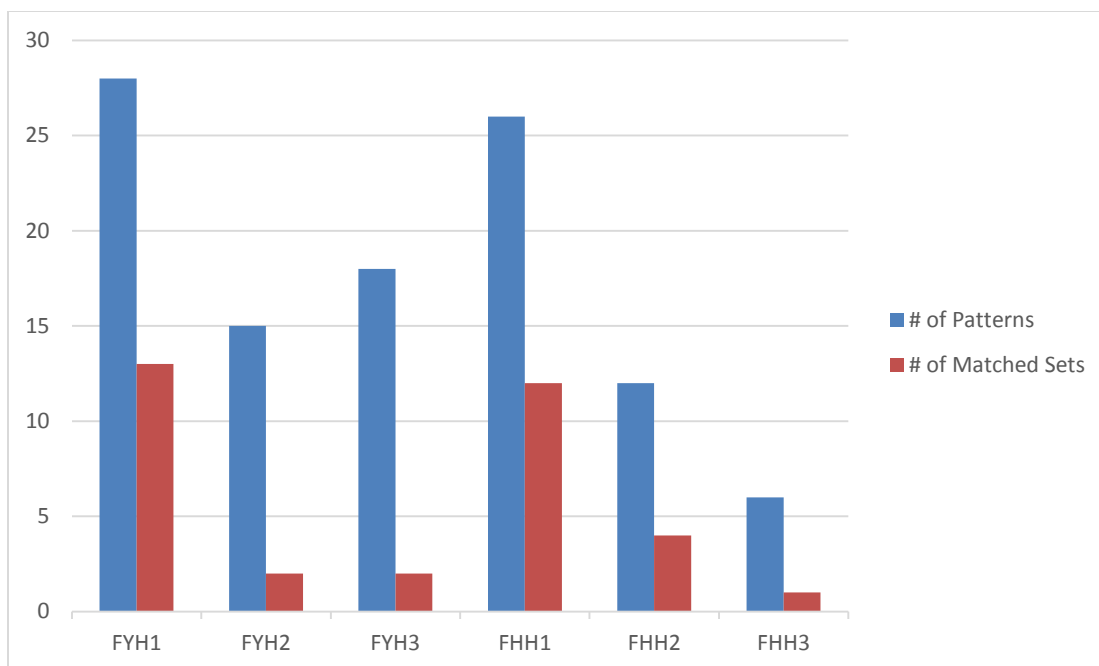


Figure 8.35 Number of Decorative Patterns and Matched Sets in Ceramicware Assemblages

Supporting the patterns observed in the vessel form, paste, decoration and Miller CC Index above, the greater number of decorative patterns and more matched sets recovered from the captains' quarters at both posts suggests more expensive and higher status assemblages were recovered from the captains' (FYH1, FHH1) than were recovered from the subaltern officers' quarters. These patterns are indicative of genteel or more formal dining (Fitz 1999; Wall 1994a, 1994b) and the matching sets, being expensive, are a mark of the upper class status (McBride et al. 2000; Miller et al. 1994; Williams 1987).

Cutlery. The cutlery artifact assemblage contains implements that are specifically used in the preparation, serving and the consumption of food such as forks, spoons and knives. At both Fort Yamhill and Fort Hoskins a greater number of cutlery items were recovered from the captains' quarters (FYH1=8, FHH1=4) than were recovered from the subaltern officers' quarters (FYH2=0, FYH3=3, FHH2=3, FHH3=2) (Figure 8.36). Although slight, a greater variety of cutlery forms were also recovered from the captains' quarters (FYH1=3, FHH1=3) than were recovered from

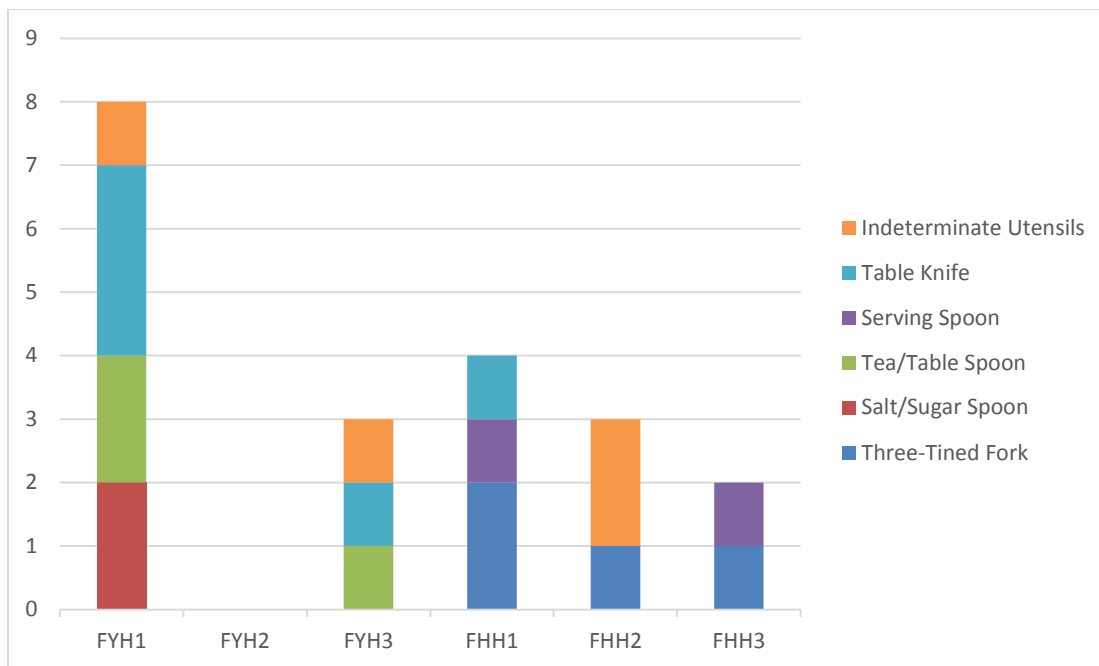


Figure 8.36 Cutlery Assemblages By Utensil Form and Type

the subaltern officers' quarters (FYH2=0, FYH3=2, FHH2=1, FHH3=2). No high quality cutlery items were recovered from either post.

Only two of the cutlery items, salt/sugar spoons recovered from FYH1, may reflect social and/or economic status. Both spoons are made of pewter, are petite and molded with a "Rococo" shell design on the heel. The small size of the spoons suggests that they were salt/sugar spoons and they were likely only used for that purpose as their small size would have limited their use for other purposes. Being a specialized utensil, likely associated with formal tea service, they represent more genteel and therefore higher status dining behavior.

Foodstuff Artifacts. The foodstuff assemblage includes the physical remains of the foods consumed and the containers in which food was packaged such and the remains of cows, pigs, chickens, deer, elk, geese, oysters, clams, food canisters, food bottles and condiment bottles. At both Fort Yamhill and Fort Hoskins more foodstuffs were recovered from the captains' quarters (FYH1=86, FHH1=80) than were recovered from the subaltern officers' quarters (FYH2=58, FYH3=51, FHH2=44, FHH3=69), although the disparity is far less dramatic as with other artifact

classes and types (Figure 8.37). In addition, a greater variety of foodstuffs were recovered from the captains' quarters at Fort Yamhill (FYH1=17) than were recovered from the subaltern officers' quarters (FYH2=7, FYH3=9) at that post. This is not true at Fort Hoskins where roughly equal varieties of foodstuffs were recovered from all of the commissioned officers' quarters (FHH1=13, FHH2=15, FHH3=16). More high quality foodstuffs were also recovered from the captains' quarters (FYH1=30, FHH1=63) than were recovered from the subaltern officers' quarters (FYH2=9, FYH3=5, FHH2=23, FHH3=28).

The higher quantities, greater variety and higher quality of foodstuffs recovered from the captains' quarters suggest a higher social and economic status. For commissioned officers food symbolized a spectrum of bourgeois values (Adams 2009:110) including gentility, propriety and social and economic status the unequal distribution of food between the commissioned officers' quarters reflects the inequality present in the commissioned officers. This is discussed in more detail below concerning the specific foodstuff types.

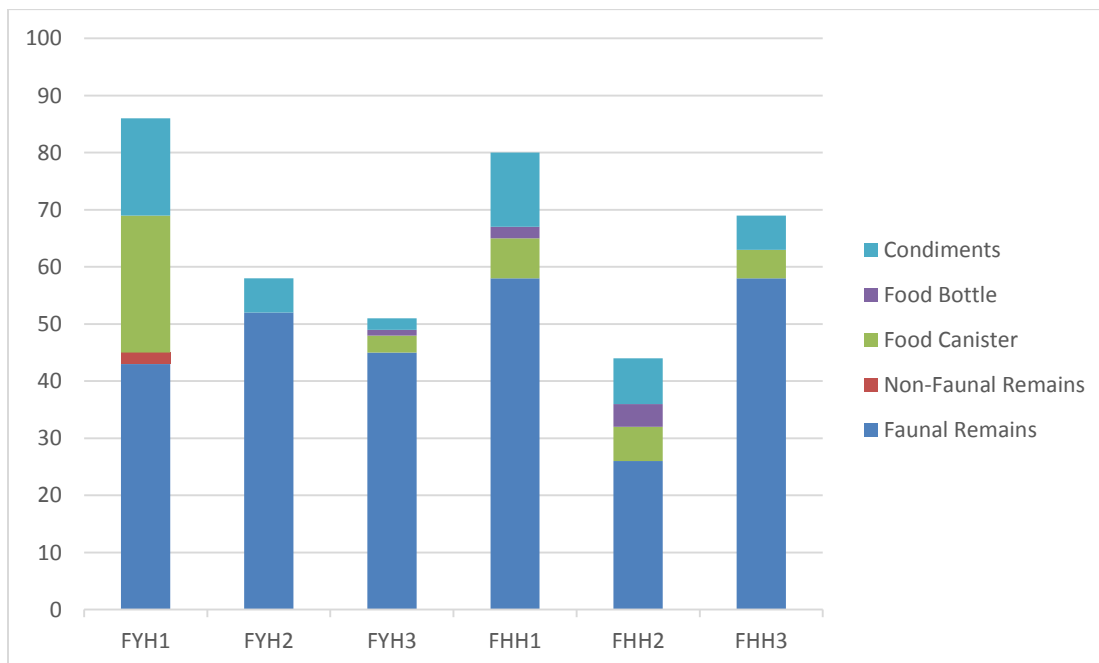


Figure 8.37 Foodstuff Assemblages By Type and Category

Faunal Remains. A variety of species were identified in the faunal material recovered from Fort Yamhill and Fort Hoskins including large bodied mammals such as cow (*Bos taurus*), pig (*Sus scrofa*), deer (*Odocoileus sp.*) and elk (*Cervus sp.*), fowl such as chicken (*Gallus gallus domesticus*), geese (*Anser sp.*) and indeterminate fowl (*Galliform*), fish (*Osteichthyes*) and shellfish species such as oysters (*Ostrea lurida*), clams (*Tresus sp.* and *Protothaca Staminea*) and cockles (*Clinocardium nuttallii*) (Figure 8.38). Overall the faunal assemblages recovered from the commissioned officers' quarters had similar quantities of faunal remains (FYH1=43, FYH2=52, FYH3=45, FHH1=59, FHH2=25, FHH3=58) and taxonomic diversity (FYH1=5, FYH2=5, FYH3=4, FHH1=5, FHH2=7, FHH3=7, species) but varied in their species composition and butchery cuts.

Taxonomic Representation. Two types of faunal foods were recovered at both posts: 1) "staple" meats represented by large bodied mammals (i.e., cow, pig and deer/elk) and "luxury" meats represented by fowl (chicken, geese, galliform fowl) and aquatic animals (fish and marine shellfish) (Adams 2009:112; Horton 2014:390). At Fort Yamhill the large bodied mammal faunal assemblage recovered from the captains'

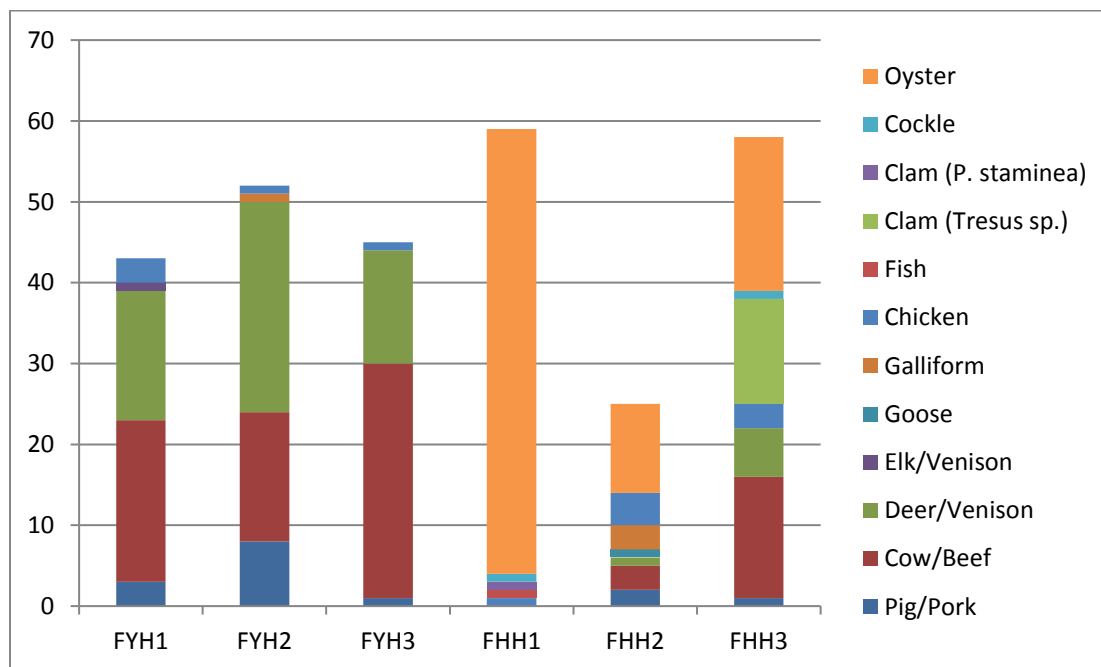


Figure 8.38 Faunal Assemblages By Taxa

quarters (FYH1) was dominated by cow (50%) followed by deer/elk (42.5%) and pig (7.5%) (Figure 8.39). In contrast the faunal assemblage recovered from FYH2 was dominated by deer (52%) followed by cow (32%) and pig (16%); and the assemblage recovered from FYH3 was dominated by cow (65.9%) followed by deer (31.8%) and pig (2.3%). A completely different pattern was observed at Fort Hoskins. Although no large bodied mammals were recovered from the captains' quarters (FHH1) the assemblage recovered from FHH2 was dominated by cow (50%) followed by pig (33.3%) and deer (16.7%), and the assemblage recovered from FHH3 was dominated by cow (68.2%) followed by deer (27.3%) and pig (4.5%).

The unequal distribution of the large bodied mammal remains recovered from both posts suggests variations in economic status between the commissioned officers. At Fort Yamhill the higher percentage of pork (16%) coupled with the moderate percentage of beef (32%) and highest percentage of venison (52%) recovered from FYH2 represents a mix of high and low status characteristics. Pork (\$0.10/lb) cost more than beef (\$0.08/lb) and therefore its higher prevalence at FYH2 suggests

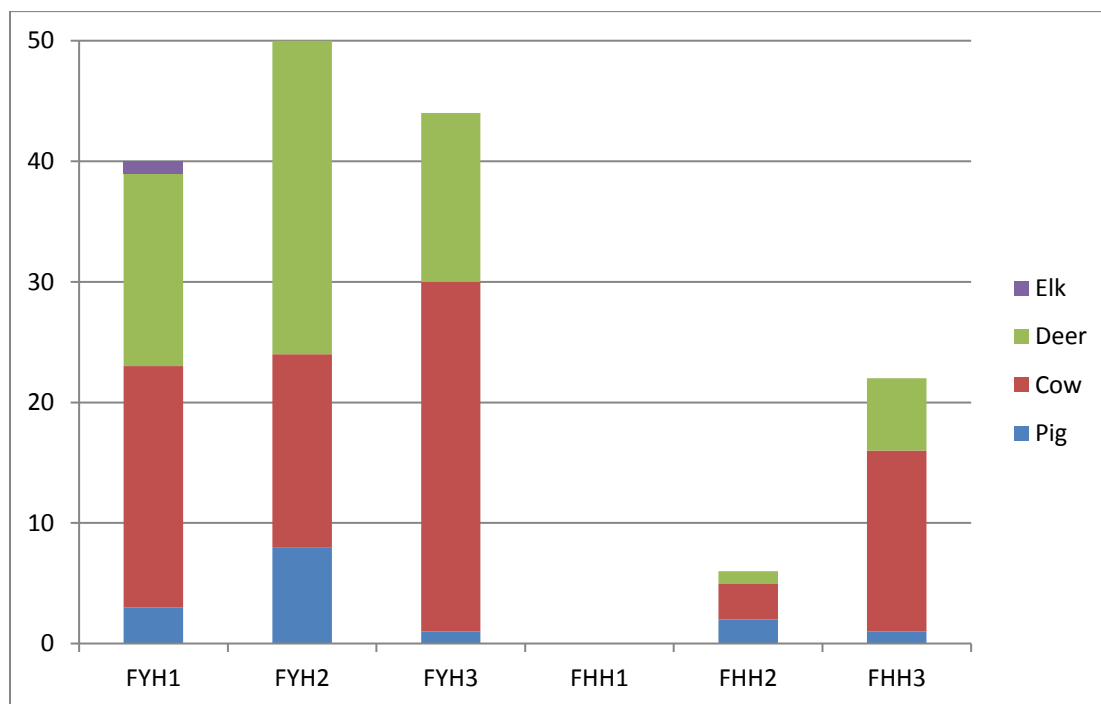


Figure 8.39 Large Mammal Faunal Remains By Taxa

higher expenditures reflecting higher economic status but the prevalence of venison suggests lower economic status overall as the higher costs of pork were tempered through the acquisition of “free” meat from recreational and/or subsistence hunting. In contrast the lower percentages of pork (7.5% and 2.3%) coupled with the larger percentages of beef (50% and 65.9%) and lower percentage of venison (42.5% and 31.8%) recovered from FYH1 and FYH3, respectively, suggests more moderate expenditures of less pork and more beef but also less reliance on “free” venison and subsistence hunting. This pattern may reflect a higher economic status of the commissioned officers who occupied FYH1 and FYH3. At Fort Hoskins the pattern is more mixed. The higher percentage of pork (33.3%) and moderate percentage of beef (50%) and the lower percentage of venison (16.7%) recovered from FHH2 suggests a higher economic status. Conversely, the lower percentage of pork (4.5%) and the higher percentage of both beef (68.2%) and venison (27.3%) recovered from FHH3 suggest a lower economic status. Unfortunately no beef, pork or venison remains were recovered from FHH1 and therefore no comparison can be made.

The faunal assemblages recovered from both posts also included “luxury” meats such as chicken, geese, galliform fowl, fish, oysters and clams. The faunal assemblages recovered at Fort Yamhill included just fowl (chicken and unidentified galliform fowl) while the faunal assemblages recovered from Fort Hoskins also includes fowl (chicken, geese and unidentified galliform fowl) but also fish and marine shellfish (oysters, clams and cockles) (Figure 8.40). At Fort Yamhill the faunal assemblage recovered from the captains’ quarters (FYH1) contained one chicken and two chicken eggs (6.9%) and from the subaltern officers quarters one chicken (1.9%) and one unidentified galliform from FYH2 and one chicken (4.4%) from FYH3. At Fort Hoskins the non-mammal faunal assemblage recovered from the captains quarters (FHH1) was dominated by 55 oysters (94.8%), one clam (3.4%) and one chicken (1.7%). Fewer oysters and more clams, geese, unidentified galliform fowl and chicken were recovered from the subaltern officers’ quarters including 11 oysters (57.9%), four chicken (21.1%), three unidentified galliform fowl (15.8%) and one goose (5.3%) from FHH2 and 19 oysters (52.8%), 14 clams (38.9%) and three chickens (8.3%) from FHH3.

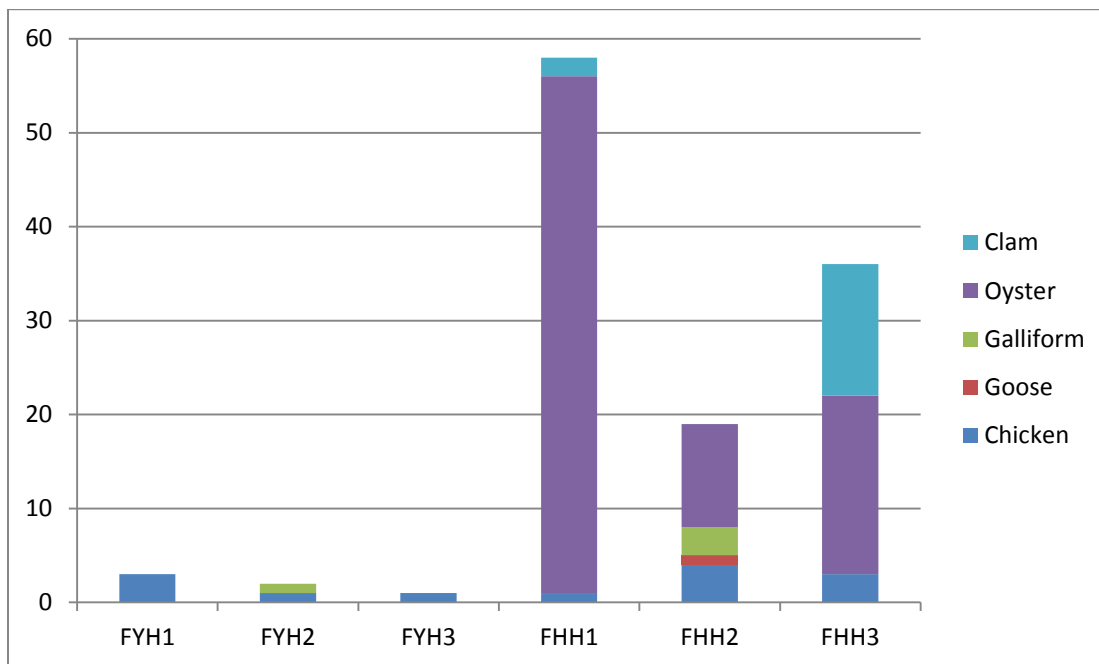


Figure 8.40 Luxury Meat Assemblages By Taxa

At Fort Yamhill only a few luxury meats (all chicken) were recovered from the commissioned officers' quarters. While all three commissioned officers' quarters had identical amounts of chicken ($n=1$, each) only the faunal assemblage recovered from FYH1 contained chicken eggs ($n=2$). Although the sample sizes are extremely small the presence of the chicken eggs at the captains' quarters (FYH1), and their absence from both of the subaltern officers' quarters (FYH2, FYH3), is interesting and may represent status differences, especially true if one considers the relative lack of the sale of eggs to commissioned officers by the Commissary of Subsistence. Despite the common availability of eggs at both posts not once were eggs ever "sold to officers" but were reserved and only "sold to [the] hospital" (FHSAB 1862, FYCB 1856). Special food items such as eggs were often acquired by the Commissary of Subsistence for use as a medical foods used by the post surgeons to combat disease (Davis 2003:65). Corporal Hilleary notes the high prices of eggs sold by merchants in the vicinity of Fort Hoskins in the 1860s (Nelson and Onstad 1965:52). Clearly, chicken eggs were considered a special and costly food item.

At Fort Hoskins the unequal distribution of luxury foods is more apparent. Chicken was recovered in higher quantities from the subaltern officers quarters (FHH2=4, 16%; FHH3=3, 5.1%) than from the captains' quarters (FHH1=1, 1.7%) suggesting higher economic status assemblages. This is stark contrast to unequal distribution of marine shellfish from the site. The faunal assemblage recovered from the captains' quarters (FHH1) contained the largest number of marine shellfish (n=57) followed the subaltern officers' quarters (FHH2=11, FHH3=33). The composition of the shellfish assemblages also differ. While most of the shellfish assemblage recovered from FHH1 were oysters (96.5%) with only a small amount clams and cockles (3.5%) the shellfish assemblage recovered from FHH3 was comprised of a much smaller percentage of oysters (57.6%) and greater quantities of clams and cockles (42.4%). Shellfish, especially oysters, were considered fancy luxury food items for officers (Adams 2009:112) and therefore their unequal distribution suggests that captains had unequal access either because of their higher authority (i.e., first choice to purchase) or higher economic status.

Butchery Cuts and Preferences. Similar patterns of consumption are reflected in the butchery cuts recovered from each of the posts. The underlying assumption in the following butchery cut analysis is that preferred cuts of meat are either more desirable and/or more expensive, and that people with a greater access, either economically or socially, will consume larger quantities of preferred cuts (Horton 2014:390). At Fort Yamhill the butchery cut assemblage recovered from a subaltern officers' quarters (FYH2) contained the greatest diversity of cuts (n=17) followed the captains' quarters (FYH1=13) and the other subaltern officers' quarters (FYH3=13) (Figure 8.41). A similar pattern was observed at Fort Hoskins where the butchery cut assemblage recovered from a subaltern officers' quarters (FHH3) contained the greatest diversity of cuts (n=11) followed by the other subaltern officers' quarters (FHH2=5). No identifiable butchery cuts were recovered from FHH1. The greater diversity of butchery cuts recovered from the subaltern quarters (FYH2 and FHH3) suggests more elaborate preparation and a greater variety of prepared meals, characteristics of more

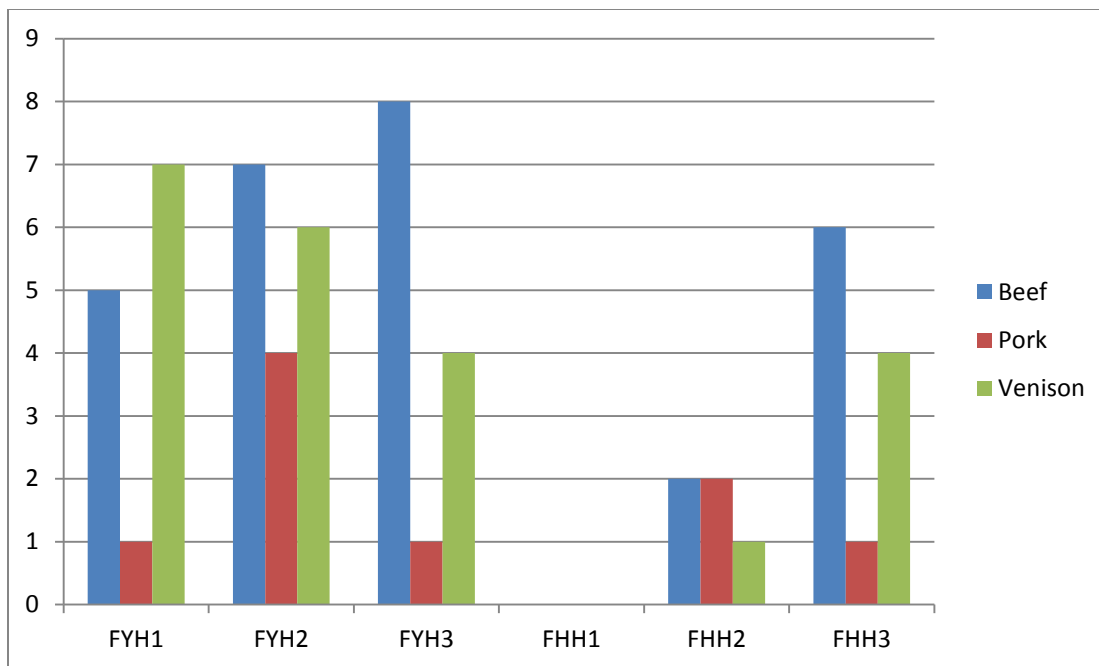


Figure 8.41 Butchery Cut Assemblages By Taxa

genteel and higher status dining behaviors (Adams 2009:111; McBride et al. 2000:121).

The butchery cut assemblages recovered from the subaltern officers' at both posts also contained more high preference butchery cuts than the assemblages recovered from the captains' quarters (Figure 8.42). At Fort Yamhill the butchery cut assemblage recovered from FYH1 contained mostly medium (50%) and low (35%) preference butchery cuts with only a marginal amount of high preference cuts (15%). Although a similar pattern is observed in the butchery cut assemblage recovered from FYH2 (medium preference = 48.6%, low preference = 40.5%, high preference = 10.8%) a very different pattern is observed at FYH3 where the butchery cut assemblage is dominated by high preference butchery cuts (43.2%) followed by medium preference cuts (40.9%) and low preference cuts (15.9%).

At Fort Hoskins the pattern is, again, more mixed. The butchery cut assemblage recovered from FHH2 is nearly identical in proportions to the assemblages recovered from FYH1 and FHH2 (medium preference = 50%, low preference = 33.3% and high preference = 16.7%) and suggests a similar consumption pattern, but the butchery cut assemblage recovered from FHH3 is

different and is comprised of equal parts high preference (40.9%) and low preference (40.9%) butchery cuts followed by fewer medium preference butchery cuts (18.2%). If greater quantities of higher preference butchery cuts reflect higher status (Horton 2014:390) then clearly the subaltern officers' quarters (FYH3 and FHH3) at both posts with the relative proportions of high, medium and low preference butchery cuts being roughly equal at the other of commissioned officers quarters (FYH1, FYH2, FHH1, FHH2).

The quantities and proportions of higher preference butchery cuts recovered from the subaltern officers' quarters is indicative of higher status which directly conflicts the patterns seen in the other artifact types where the artifact assemblages recovered from the captains' quarters (FYH1, FHH1) at both posts reflect higher status.

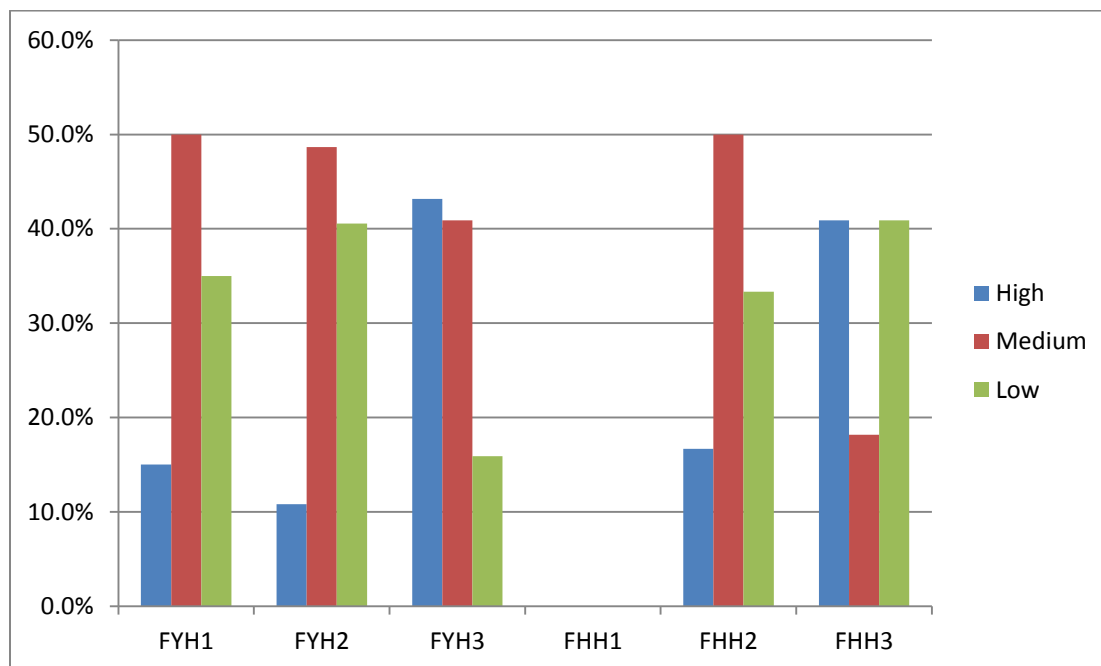


Figure 8.42 Butchery Cut Assemblages By Preference Rank

Butchery Cut Preference Index. The butchery cut preference index analysis supports these conclusions (Figure 8.43). At Fort Yamhill subaltern officers' quarters (FYH3) had the highest butchery preference index values for beef (6.10), pork (6.00) and venison (5.57) while the captains' quarters (FYH1) had the highest preference index value for only poultry (8.66). The pattern is more mixed at Fort Hoskins where the subaltern officers' quarters had the highest butchery preference index values for beef (6.00), pork (3.50) and shellfish (8.00) at FHH2 and the highest index values for venison (4.83) at FHH3 and the highest index values for poultry (8.00) at the captains' quarters (FHH1) and a subaltern officers' quarters (FHH3).

This analysis mirrors many of the results from the subsistence article index analysis above in that although captains' at both posts (FYH1, FHH1) appear to have purchased and consumed far more subsistence articles and meat than their subaltern officers (FYH2, FYH3, FHH2, FHH3) they also tended to purchase and consume items of higher cost and preference in lower proportions and items of lower cost and preference in higher proportions and items than their subaltern officers.

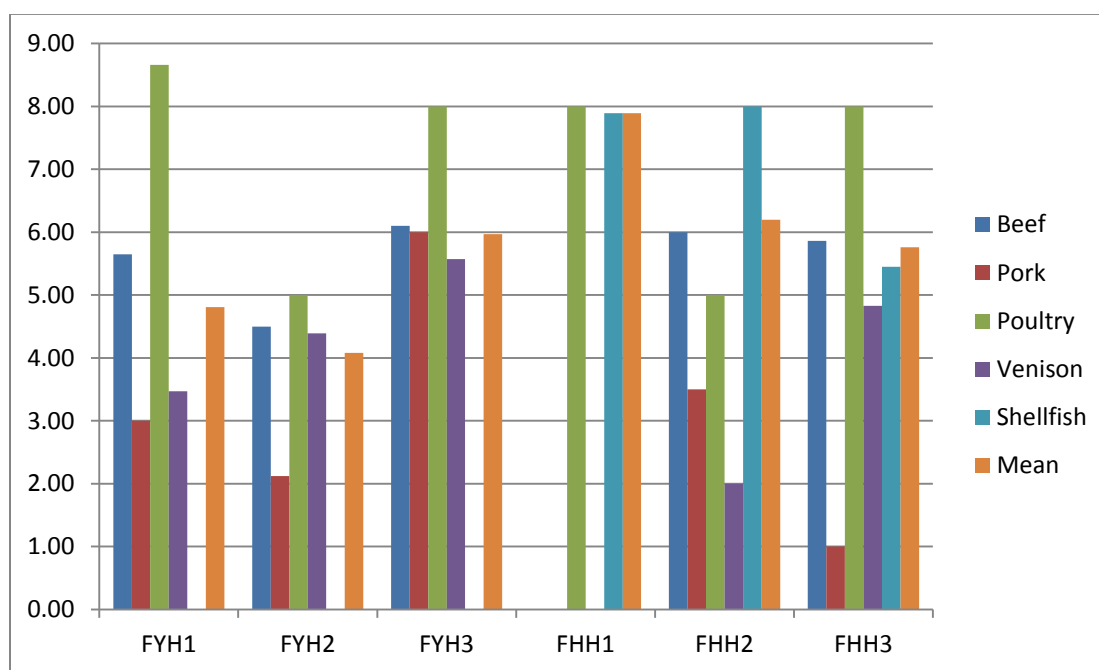


Figure 8.43 Preference Index Values for Butchery Cuts

Food Containers. The food container artifact assemblages are comprised of the vessels that contained commercial available foodstuffs such as canned fruits, vegetables and meats; bottled foods such as pickles, olives, fruits and vegetables; and condiments such as relish, pepper, mustard, olive oil, flavoring extracts and various sauces. At Fort Yamhill far more food containers were recovered from the captains' quarters (FYH1=41) than were recovered from the subaltern officers' quarters (FYH2=6, FYH3=6). A similar, although less dramatic, pattern is observed at Fort Hoskins where more food containers were also recovered from the captains' quarters (FHH1=22) than were recovered from the subaltern officers' quarters (FHH2=18, FHH3=11). Also at Fort Yamhill a greater diversity of food containers were recovered from the captains' quarters (FYH1=9) than were recovered from the subaltern officers' quarters (FYH2=2, FYH3=4). This is not the case at Fort Hoskins where a nearly equal diversity of food containers were recovered from the commissioned officers' quarters (FHH1=7, FHH2=7, FHH3=6) (Figure 8.44).

The greater quantities of food containers recovered the captains' quarters (FYH1, FHH1) at both posts and the greater variety of food containers recovered

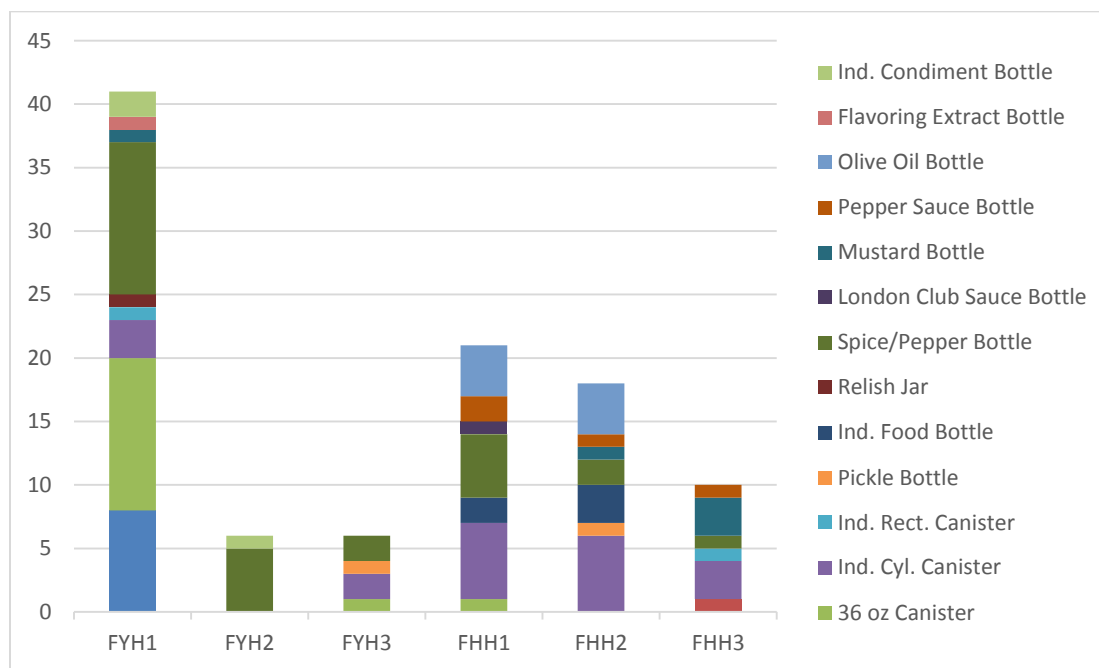


Figure 8.44 Food Container Assemblages By Type

from the captains' quarters (FYH1) at Fort Yamhill suggests higher social and economic status. The greater number of food containers suggests a greater amount of money expended on the acquisition of these foods. Prior to their dramatic increase in their what by the Army during the American Civil War canned goods were an expensive specialty item consumed by few Americans (Smith 2007:92). The greater variety of food containers recovered from the captains' quarters (FYH1) at Fort Yamhill, suggests more elaborate preparation and a greater variety of prepared meals, characteristics of more genteel and higher status dining behaviors (Adams 2009:111; McBride et al. 2000:121).

Household Maintenance and Repair Artifacts. The household maintenance and repair artifacts assemblages contain artifacts pertaining to the general maintenance and repair of the household and its member's possessions and includes items such as needles, scissors, thimbles, pins, glue and cleaning products (Figure 8.45). At Fort Yamhill little variation in the quantity, quality and variety of household maintenance and repair artifacts was observed. The largest number of items were recovered from a subaltern officers' quarters (FYH3=3) followed by the captains' quarters (FYH1=2) and a subaltern officers' quarters (FYH3=1). Only three home maintenance and repair artifact types were recovered in total with little variation among the commissioned officers' quarters (FYH1=2, FYH2=1, FYH3=2). None of the home maintenance and repair artifacts recovered from Fort Yamhill display variation in quality or cost.

Greater variation in the quantity, quality and variety of home maintenance and repair artifacts were recovered from the commissioned officers' quarters at Fort Hoskins. The greatest number of items were recovered from a subaltern officers' quarters (FYH2) but the assemblage was comprised of just two artifact types (straight pins=9 and scissors/sheers=1). Although fewer items were recovered from the captains' quarters (FHH1) overall the assemblage shows greater variety in artifact types (FYH1=4, FHH2=2) and contained more high status items (FHH1=2, FHH2=0, FHH3=0). No home maintenance and repair artifacts were recovered from FHH3.

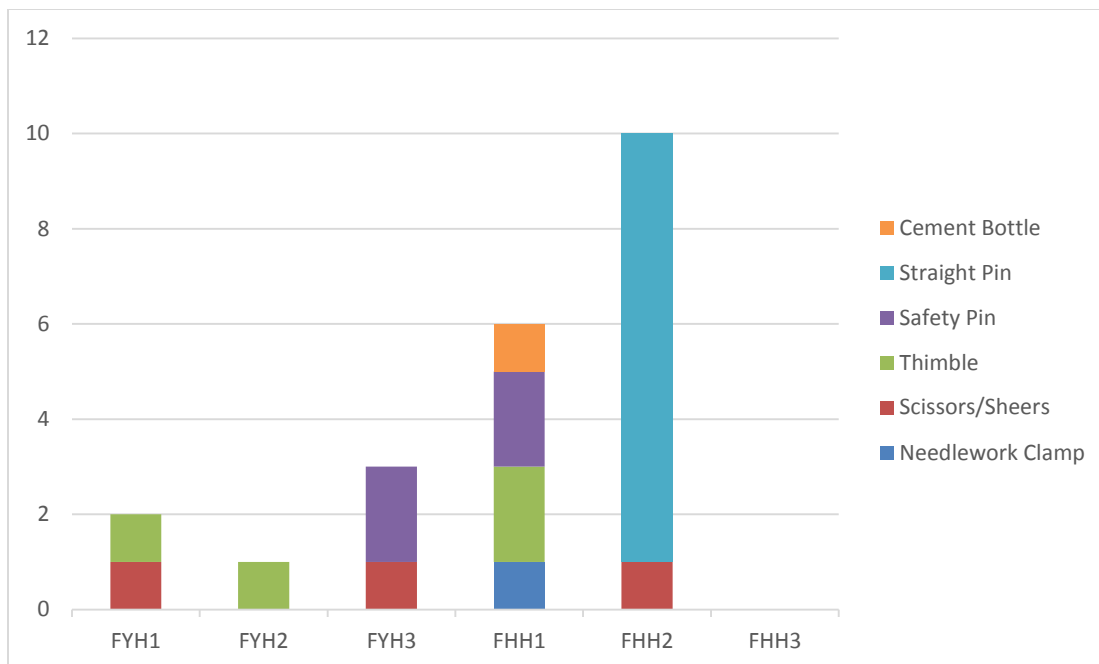


Figure 8.45 Household Maintenance and Repair Assemblages By Type and Category

The home maintenance and repair assemblages recovered from the commissioned officers' quarters at Fort Yamhill show little variation in quantity, quality and variety and therefore it is unlikely they reflect any difference in status. Considerably more variation is observed at Fort Hoskins. Even though more home maintenance artifacts were recovered from FHH2 they were primarily of only one type (straight pins) which is unlikely to have been used as a status marker. The assemblage recovered from FHH1 though does contain several objects that were likely of higher status, one silver thimble and one silver needlework clamp. While both items are utilitarian items the fact that they were both made out of costly materials (silver) they are clearly status markers (Wason 1997:125).

Military Artifacts. The military artifact assemblage contains objects associated with the primary function of the U. S. Army to conduct war and includes the tools to do so such as clothing, weapons and associated objects (Figure 8.46). At Fort Yamhill more military artifacts were recovered from the captains' quarters (FYH1=11) than were recovered from the subaltern officers' quarters (FYH2=7, FYH3=6). This is not true at Fort Hoskins where far more military artifacts were

recovered from a subaltern officers' quarters (FHH2=48) than were recovered from the captains' quarters (FHH1=26) or the other subaltern officers' quarters (FHH3=21). At Fort Yamhill little variation in the variety of military artifacts between the commissioned officers' was observed (FYH1=5, FYH2=3, FYH3=5). Again, this is not true at Fort Hoskins where a much greater variety of military artifacts were recovered from the captains' quarters (FHH1=15) than was observed in the subaltern officers' quarters (FHH2=9, FHH3=7). Lastly, few "high quality" artifacts were recovered from either post (FYH1=1, FYH2=0, FYH3=0, FHH1=1, FHH2=0, FHH3=0).

Military Uniform Artifacts. Several military uniform related artifacts were recovered from Fort Yamhill and Fort Hoskins including military buttons, headwear chinstraps buckles and insignia (Figure 8.47). As the most outward expression of a commissioned officer's military status and heavily prescribed by military regulation one would expect that an officers' uniform (and its parts) to be an accurate reflection and officers' military status especially in his adherence to military regulations as a representation of military discipline.

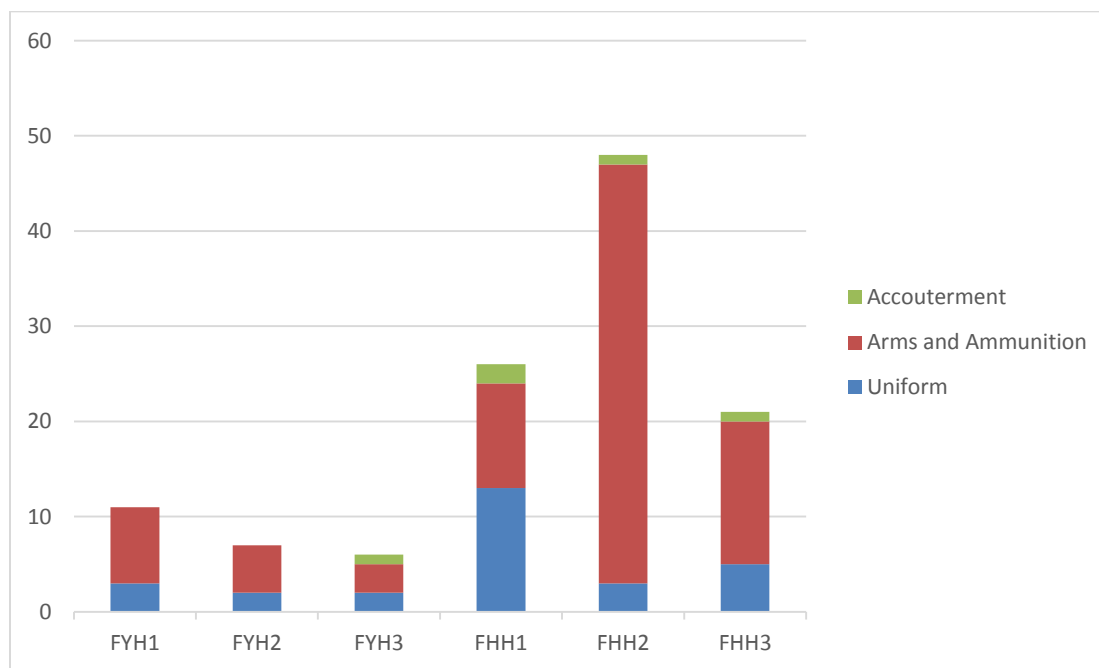


Figure 8.46 Military Group Artifact Assemblages By Functional Class

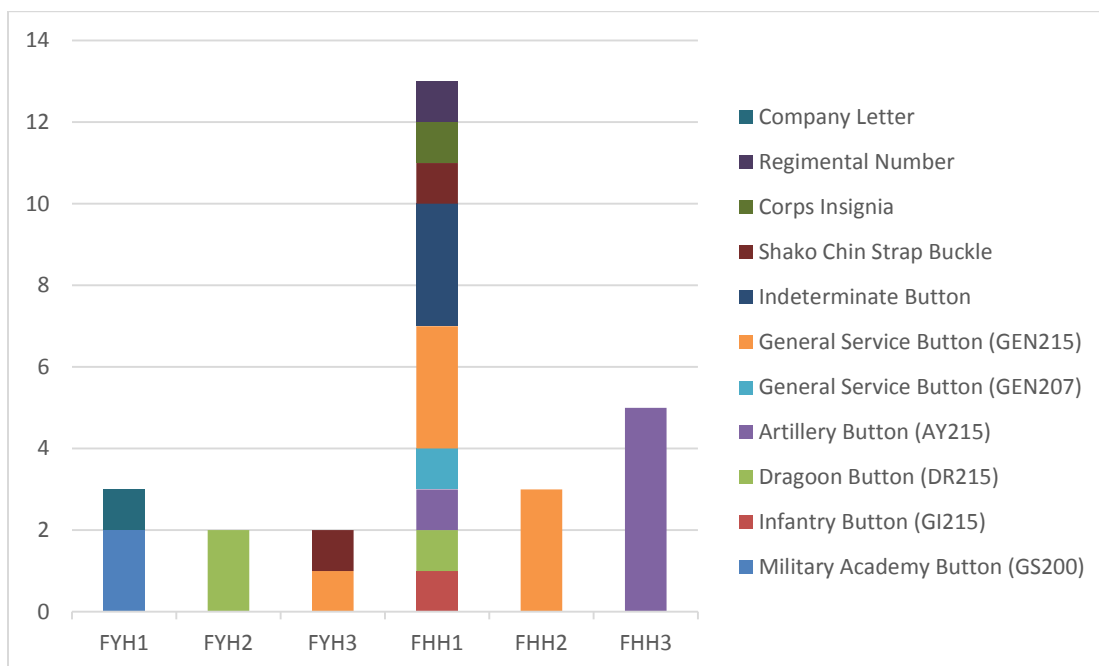


Figure 8.47 Military Uniform Assemblages By Type and Category

Military Buttons. A variety of military buttons were recovered at each post including several regulation and non-regulation buttons. For ease of readability all military button identifications are based on Tice's (1997) *Military Uniform Buttons of the United States 1776-1865* although several other military buttons sources were also used (see Appendix D). The five military buttons recovered from Fort Yamhill include three non-regulation buttons, two military academy cadet buttons (Tice's GS200) recovered from FYH1 and one general service (enlisted men's) button (Tice's GEN215) recovered from FYH3, and two regulation buttons represented by two dragoon officer buttons (Tice's DR215) recovered from FYH2. A much greater number of military buttons were recovered from Fort Hoskins but the pattern in regulation/non-regulation buttons is similar yet more pronounced. The 10 buttons recovered from FHH1 include just one regulation infantry officer button (Tice's GI215) and six non-regulation buttons including one "non-regulation" dragoon officer (Tice's DR215), one "non-regulation" artillery officer (Tice's AY215), three general service (enlisted men's) buttons (Tice's GEN215) and one outdated (c. 1820-1830s regular army/1840s militia and unofficial general service) general service

button (Tice's GEN207). Three indeterminate military buttons, represented by unreadable devices, were also recovered from FHH1. The three military buttons recovered from FHH2 are all non-regulation general service (enlisted men's) buttons (Tice's GEN215) and the five military buttons recovered from FHH3 are all non-regulation artillery officer buttons (Tice's AY215).

Several of these buttons, even the non-regulation ones, might be expected at these posts. For example, it is unlikely that the West Point Military Academy buttons (Tice's GEN200) recovered from FYH1 were actually worn by the commissioned officers but instead may have been kept as souvenirs from his attendance at the U.S.M.A. Two sizes were also recovered suggesting that the buttons originated from two different uniforms as the U.S.M.A. uniform had the same sized buttons on the front, tails pleats and cuffs. And, the c. 1820-1840s general service button (GEN207) was likely a souvenir of one of the older officers who entered military service prior to the Mexican-American War (c.1846-1848) or possibly an heirloom owned by one of the younger officers. Either way it was unlikely that the button was actually worn as part of the uniform by any officer at the post and therefore should be interpreted as either a souvenir or trophy.

The other non-regulation military buttons are more problematic not because of their age but because of corps or rank they represent. No companies of artillery or dragoons were ever stationed at Fort Hoskins, and no regular army officer stationed at Fort Hoskins ever served in an artillery or dragoon regiment (FHPR 1856; Powell 1900), so the presence of a dragoon officer button (Tice's DR215) at FHH1 and especially the six artillery officer buttons (Tice's AY215) recovered from FHH1 (n=1) and FHH3 (n=5) are interesting. These buttons differed little from the regulation buttons of the commissioned officers stationed at Fort Hoskins (the letters "D" and "A" inside the eagle's shield instead of the letter "I" for infantry) and therefore it is conceivable that these buttons were actually worn as part of an officer's official uniform although strict adherence to military regulations and the military and social stigma of wearing non-regulation uniforms suggests that this is unlikely. It is also possible that the dragoon button originated from the uniform of a dragoon officer attached to Company C, 1st United States Dragoons who were stated at Fort Yamhill

between 1856 and 1857 as it is known from period journals that soldiers and officers often traveled between posts as part of their duties and for pleasure (Barth 1959; Nelson and Onstad 1965).

The origin of the artillery officer buttons remains unanswered but perhaps they were souvenirs, mementos or trophies but the large number (n=5) recovered from FHH3 and the fact that they were found at two of the officers' quarters makes this interpretation unlikely. Another possible interpretation is that these buttons were brought to the post on an outdated military uniform item (i.e., frock or great coat) by a commissioned officer during the volunteer period (c. 1861-1865). Three of the buttons bare backmarks dating between 1840 and 1850 while the other three bare marks dating between 1845 and 1869 so it is possible that the buttons arrived at the post on an outdated military uniform coat dating from the Mexican-American War (c. 1846-1848).

Seven general service (Tice's GEN215) were also recovered from both posts including one from FYH3, three recovered from FHH1 and three recovered from FHH2. These general service buttons were worn exclusively by enlisted men after 1854 and therefore would not have been part of a commissioned officer's uniform while they served at the post. It is extremely unlikely (if not impossible) that these buttons were worn by commissioned officers as doing so would have been considered extremely unprofessional and below them socially. The most likely interpretation is that the buttons were worn by enlisted men and were lost within the officers' quarters while they were employed as an officer's servant.

Military Insignia. All of the military insignia identified in the assemblages were recovered from the captains' quarters at Fort Yamhill and Fort Hoskins including one company letter "G" recovered from FYH1 and one infantry hunting horn insignia and one regimental number "6 or 9" recovered from FHH1. By the 1850s neither the regimental number nor the company letter was regulation hat insignia for commissioned officers (USWD 1851, 1857 and 1861) therefore their appearance on an officer's uniform would have been purely by choice rather than a requirement and could be interpreted as an outward display of pride in his

membership within that particular military group (i.e., corps, regiment or company). Perhaps for commissioned officers it was less important to display their status as “officers” and more important to display their membership of a particular military group such as corps, regiment or company as military regulations suggest (USWD 1857; 1861; 1863).

Military Arms and Ammunition Artifacts. Another pattern of interest in the military artifact group is the type of arms and ammunition recovered from each of the officers’ quarters. Just two arms related artifacts were recovered, one “regulation” firearm from FHH1 and one “non-regulation” edge weapon recovered from FHH2 (Figure 8.48). The regulation firearm artifact recovered from FHH1 is a Colt revolver backstrap stamped with serial number “27226” which corresponds to at least six possible Colt revolver models (the M1849 Root, M1851 Navy, M1855 Sidehammer, M1860 Army, M1861 Navy or M1862 Police/Pocket) of three calibers (0.28, 0.36 and 0.44) all manufactured between 1852 and 1865. It is likely that the backstrap originated from the M1851 Navy, M1860 Army or M1861 Navy revolvers as these were the most common “regulation” sidearms used by Army officers during the 1850s and 1860s. The sidearm, or pistol, was not used as a tool for war but was also symbolized the commissioned officer’s rank as an officer, at least within the infantry and artillery regiments, as they were the only soldiers permitted to use and wear sidearms as regulation firearms (Cole 2007).

The only other arms related artifact recovered was a bayonet scabbard tip for the M1855 .58 caliber Springfield Musket. The bayonet was the regulation edge weapon issued to enlisted soldiers and was intended to be equipped with their long-arm either a musket or rifle-musket. As officers generally did not arm themselves with long-arms but instead with sidearms their edge weapon was either a sword or saber, depending on corps, not a bayonet. It is interesting that the only “regulation” sidearm in the assemblage was recovered from the officers’ quarters associated with the captains (FHH1) and the only non-regulation edge weapon was recovered from the quarters of a subaltern officer, likely a first lieutenant (FHH2).

Additionally, the ammunition or projectile assemblage displays several differences between each of the officers' quarters. At Fort Yamhill only one caliber projectile (.36) was recovered from FYH1, while two calibers (.31 and .36) were recovered from FYH2 and just one caliber (.36) was recovered from FYH3. A similar pattern, but with a wider range, in projectile calibers was observed at Fort Hoskins. Just two projectile calibers (.28 and .36) were recovered from FHH1, while three calibers (.31, .36 and .44) were recovered from FHH2 and three calibers (.28, .31 and .36) were recovered from FHH3. The wider range of projectile calibers recovered from the subaltern officers' quarters at both posts may suggest that a greater variety of sidearms were owned by those officers and possibly less standardization of sidearms within the grades.

Another interesting pattern in the data is the presence of up to date military technology at FYH1 and FHH1 and the apparent lack of such technology at the subaltern officers' quarters. Two conical bullets were identified in the military artifact assemblages including one .36 caliber conical bullet recovered from FYH1 and one .28 caliber conical bullet recovered from FHH1 (Figure 8.48). The first conical bullet "officially" used by the United States Military was the .58 caliber Minie Ball adopted in 1855 so the conical bullet was a recent development in military technology for these officers and therefore would have represented the most up to date and fashionable weaponry. The conical bullet was also far superior in range and accuracy than the traditional round ball projectile and as such was likely considered a status symbol for an officer who could afford to acquire the most up to date weaponry.

Military Accoutrement Artifacts. Only five military accoutrements were recovered from Fort Yamhill and Fort Hoskins including one canteen recovered from FYH3, one canteen and one cartridge box recovered from FHH1, one canteen recovered from FHH2 and one knap sack recovered from FHH3 (Figure 8.49). The canteens, all represented by spouts and stopper/stopper chains, would have been a common field equipment item for all soldiers, both enlisted and commissioned. But the cartridge box (represented by a buckle) and the knap sack (represented by a

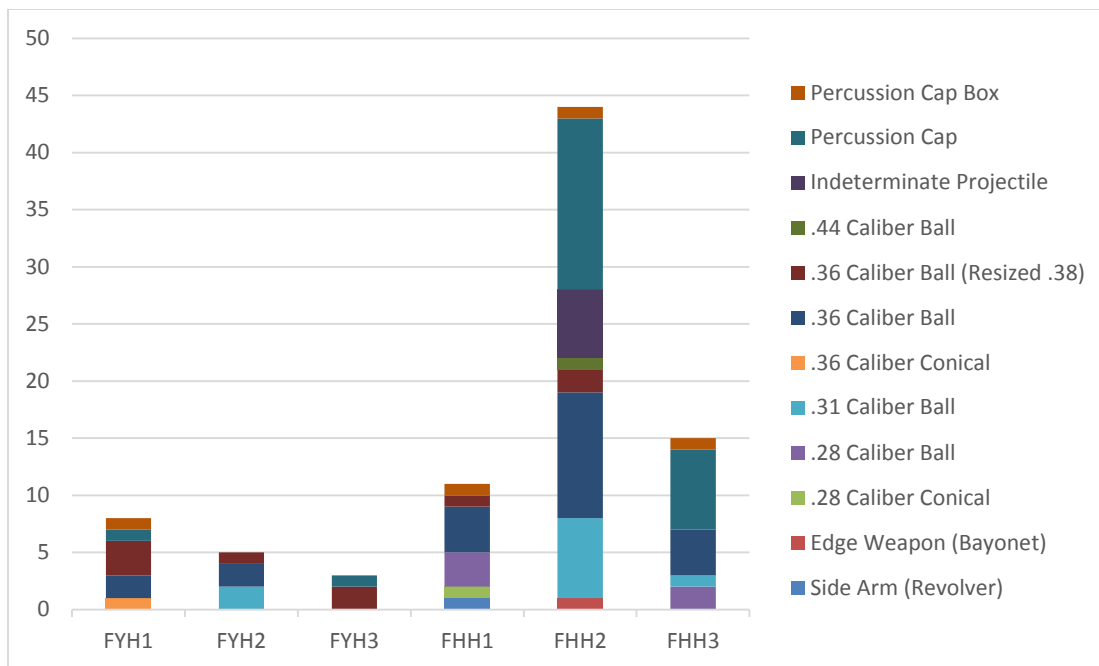


Figure 8.48 Military Arms and Ammunition Assemblages By Type and Category

triangle loop) would have been regulation for enlisted men only, and especially the cartridge box, would not have been “regulation” field items for commissioned officers. It is unclear why a commissioned officer would have possessed accoutrements prescribed for enlisted men but perhaps similar to the military buttons discussed above these items were souvenirs or possibly used as personal items outside the officer’s official duties.

Regulation and Non-Regulation Military Artifacts. All of the military artifacts recovered from Fort Yamhill and Fort Hoskins were also categorized as either “regulation” or “non-regulation” in reference to their intended use as prescribed in the United States Military Regulations (USWD 1851, 1857 and 1861). Overall, more regulation artifacts than non-regulation artifacts were recovered from each of the six commissioned officers quarters (Figure 8.50). But at both Fort Yamhill and Fort Hoskins the greatest number and highest proportion of non-regulation military artifacts were recovered from the captains’ quarters (FYH1 [n=3 or 27.3%] and FHH1 [n=10 or 38.5%]) than were recovered from the subaltern officers quarters (FYH2=0[0%], FYH3=1[16.7%], FHH2=4[8.3%], FHH3=6[28.6%]) at each post.

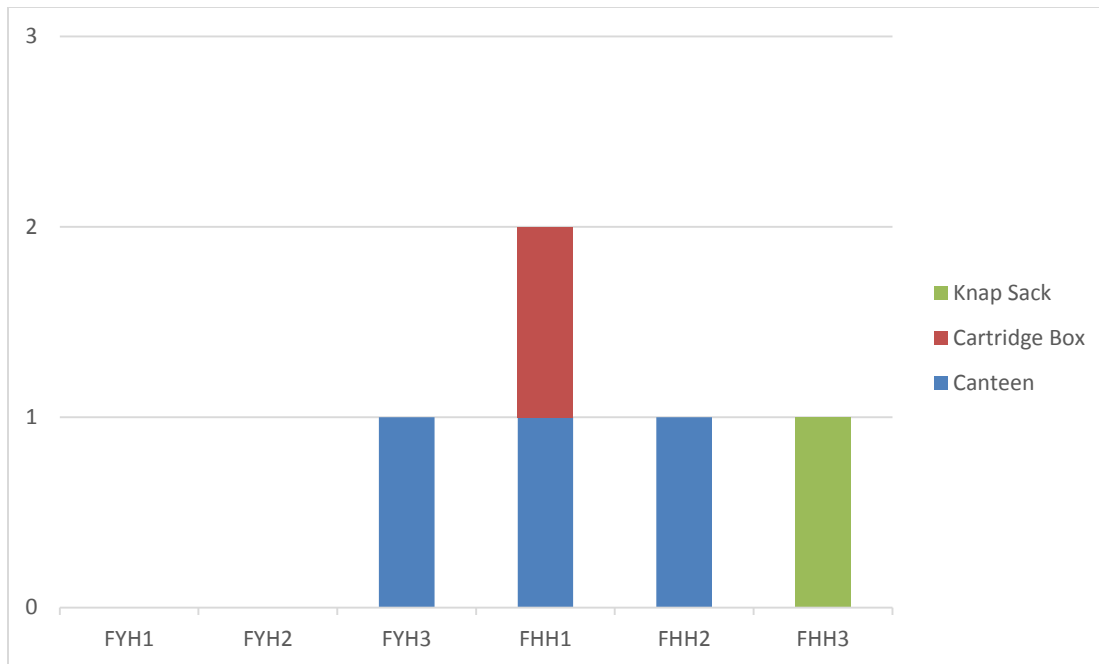


Figure 8.49 Military Accoutrement Assemblages By Type

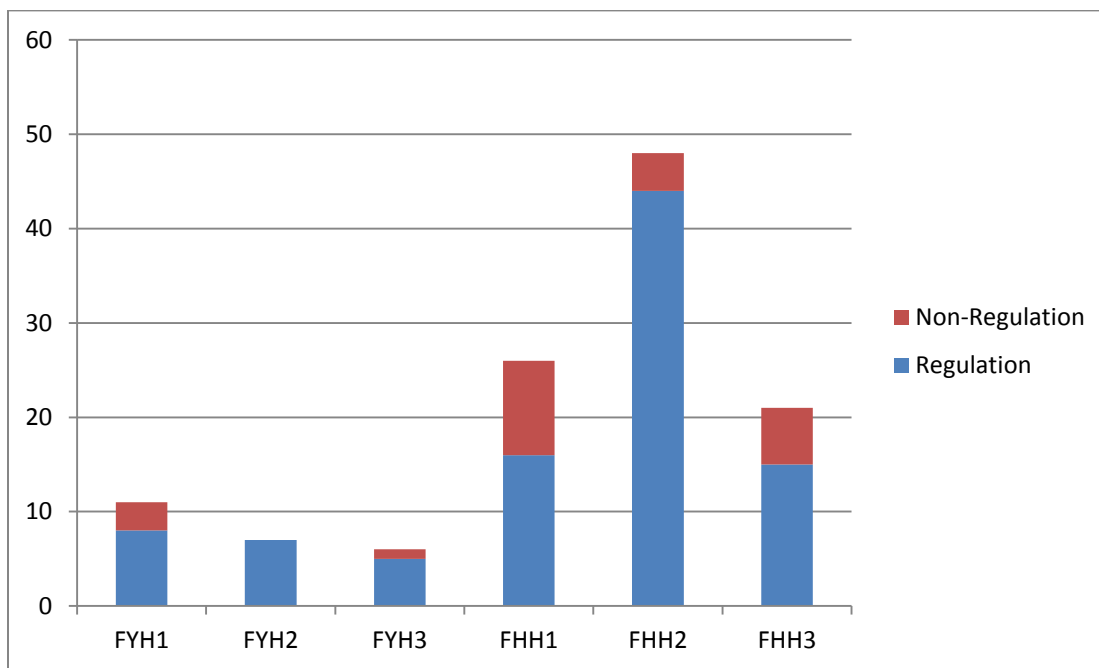


Figure 8.50 Regulation and Non-Regulation Military Artifact Assemblages

One possible interpretation of this pattern is that the captains, as the commanding officers of their companies and usually the posts, held the most authority at the post on a day-to-day basis and therefore it would have been their

prerogative to violate military regulation by acquiring and using non-regulation military artifacts such as uniform insignia, arms and accoutrements while the subaltern officers at the posts would have been subject to the approval of their superiors to do the same. Two other potential interpretations are 1) that many of the non-regulation artifacts were mementos, trophies or souvenirs from past military service; or 2) that the items were in fact used and worn by commissioned officers of the volunteer units stationed at each post (c. 1861-1866) as it was common knowledge that the volunteer army tended to be less professional, less disciplined and less regimented than the regular army. It is unlikely that these “non-regulation” items were used or worn by commissioned officers while on official military duty and therefore likely represent mementos, trophies or souvenirs from past military service.

Personal Artifacts. The personal artifact assemblages contain items that would have been owned and primarily used by an individual person such as the officer who lived in the house or one of his family members. At both Fort Yamhill and Fort Hoskins more personal artifacts were recovered from the captains’ quarters (FYH1=142, FHH1=205) than were recovered from the subaltern officers’ quarters (FYH2=101, FYH3=66, FHH2=183, FHH3=55) (Figure 8.51). Similarly, a greater variety of personal artifacts were recovered from the captains’ quarters (FYH1=50, FHH1=54) than were recovered from the subaltern officers’ quarters (FYH2=45, FYH3=35, FHH2=38, FHH3=30) and more high quality items were recovered from the captains’ quarters (FYH1=18, FHH1=9) than were recovered from the subaltern officers’ quarters (FYH2=2, FYH3=4, FHH2=2, FHH3=2). The higher quantities, greater variety and higher quality of personal items recovered from the captains’ quarters suggest a higher economic status within the personal sphere and that the captains, and their families, placed much greater emphasis on the practice and expression of individuality.

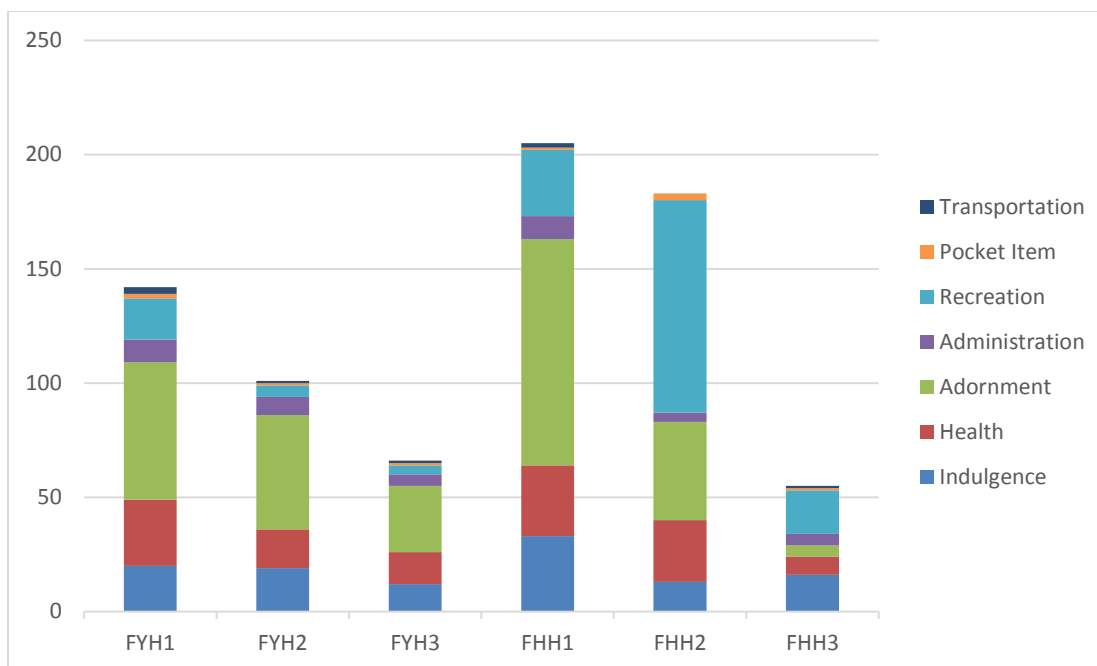


Figure 8.51 Personal Group Artifact Assemblages By Class

Indulgence Artifacts. The indulgence artifact assemblages contain items that were nonessential and consumed for their satisfaction or gratification rather than for subsistence such as alcoholic and non-alcoholic beverages and tobacco. At both Fort Yamhill and Fort Hoskins more indulgence artifacts were recovered from the captains' quarters (FYH1=20, FHH1=33) than were recovered from the subaltern officers' quarters (FYH2=19, FYH3=12, FHH2=14, FHH3=15) (Figure 8.52). In addition, a greater variety of indulgence items were recovered from the captains' quarters at Fort Hoskins (FHH1=20) but from a subaltern officers' quarters at Fort Yamhill (FYH2=12) than were recovered from the other commissioned officers' quarters (FYH1=11, FYH3=8, FHH2=7, FHH3=13). Lastly, a greater number of high quality items were recovered from the captains' quarters at both posts (FYH1=5, FHH1=5) than were recovered from the subaltern officers' quarters (FYH2=2, FYH3=2, FHH2=2, FHH3=1).

The higher quantities and greater number of high quality indulgence items recovered from the captains' quarters at both posts (FYH1, FHH1) suggests a higher economic status for these officers. The greater variety of indulgence artifacts recovered from the captains' quarters at Fort Hoskins (FYH1) also suggests this

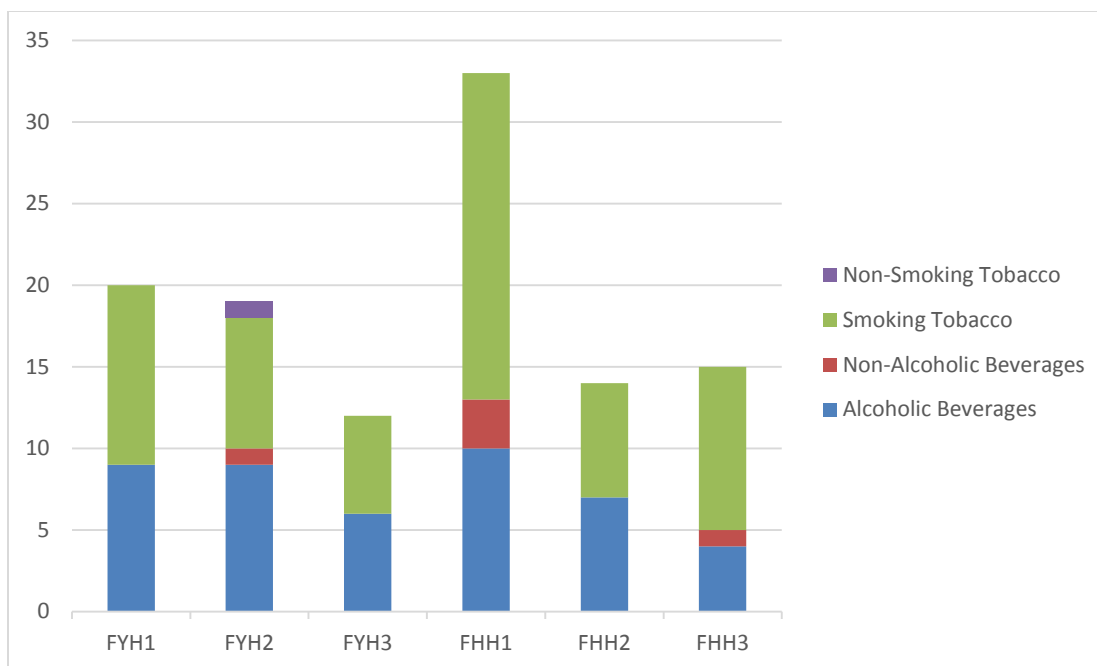


Figure 8.52 Indulgence Artifact Assemblages By Type

pattern at that post, but the greater variety of indulgence artifacts recovered from a subaltern officers' quarters (FYH2) at Fort Yamhill suggests a more complicated behavioral pattern and variation within the individual artifact types within the indulgence artifact class.

Alcoholic and Non-Alcoholic Beverage Bottles. The alcoholic and non-alcoholic beverage bottle assemblages contain artifacts, just as the name implies, the glass bottles that contained alcoholic beverages such as champagne, wine, brandy, whiskey, ale and porter and non-alcoholic carbonated beverages (Figure 8.53). Roughly equal quantities of alcoholic beverage bottles were recovered from all of the commissioned officers' quarters (FYH1=9, FYH2=9, FYH3=6, FHH1=10, FHH2=7, FHH3=4) and the diversity of alcoholic beverages varied little as well (FYH1=3, FYH2=2, FYH3=3, FHH1=3, FHH2=2), FHH3=3). But, the overall quality did vary, although only slightly, by commissioned officers' quarters at each post (FYH1=5, FYH2=2, FYH3=3, FHH1=4, FHH2=2, FHH3=1).

At both posts more champagne bottles were recovered from the captains' quarters (FYH1=4 or 44.4%; FHH1=4 or 40.0%) than were recovered from the subaltern officers quarters (FYH2=2 or 22.2%; FYH3=2 or 33.3%; FHH2=2 or

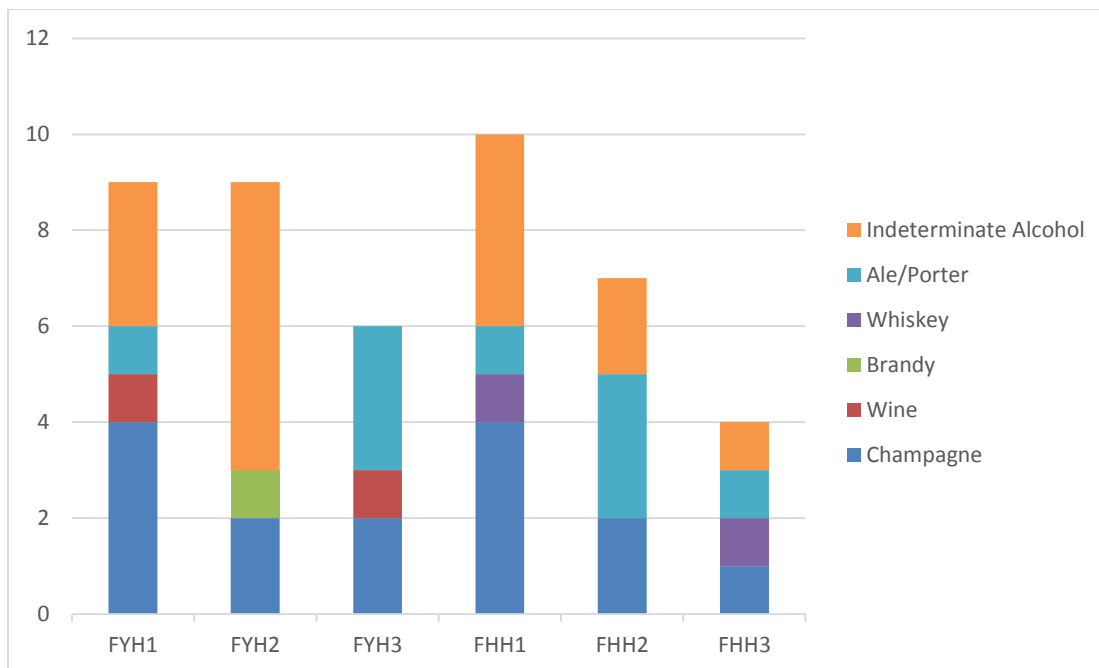


Figure 8.53 Alcoholic Beverage Bottle Assemblages By Category

28.5%; FHH3=1 or 25%). Champagne was a favored alcoholic beverage of commissioned officers, one that was more expensive than other alcoholic beverages and carried much more social cache (Adams 2009:119). This is indirect contrast to the distribution of ale/porter bottles recovered at both posts where far more were recovered from the subaltern officers' quarters (FYH3=3 or 50.0%; FHH2=3 or 42.8%; FHH3=1 or 25.0%) than were recovered from the captains' quarters (FYH1=1 or 11.1%; FHH1=1 or 10%). Ale and porter were beverages that were much cheaper and more commonly associated with the lower social and economic status groups during the 19th century (Hooker 1981:133; McBride et al. 2000:113). Wine, brandy and whiskey were all relatively equally distributed between all of the commissioned officers' quarters at both posts.

The non-alcoholic beverage bottles also follow this pattern. While only five were recovered in total, three were recovered from the captains' quarters at Fort Hoskins (FHH1) alone and just one, each, from the subaltern officers' quarters at Fort Yamhill (FYH2) and Fort Hoskins (FHH3). In addition one of the bottles recovered from the captain's quarters (FHH1) at Fort Hoskins was a gasogene/siphon bottle, a relatively new and fashionable beverage device in the 1850s (Lindsey 2014; Odell

2004) likely making it rare and expensive. Carbonated beverages in general were not very common along the frontier, due in large part to their propensity to explode under the stress the carbonation during transportation, and therefore their presence and consumption would have been considered a luxury.

Tobacco Artifacts. The tobacco artifact assemblages contain items used in the consumption of tobacco, namely smoking pipes and spittoons. At both Fort Yamhill and Fort Hoskins a greater number of tobacco artifacts were recovered from the captains' quarters (FYH1=11, FHH1=20) than were recovered from the subaltern officers' quarters (FYH2=9, FYH3=6, FHH2=7, FHH3=10). A greater variety of artifact types was also recovered from the captains' quarters at Fort Hoskins (FHH1=15) but at Fort Yamhill (FYH2=9) more variety of artifacts were recovered from a subaltern officers' quarters at than were recovered from the other commissioned officers quarters (FYH1=8, FYH3=5, FHH2=5, FHH3=9). Only one high quality tobacco artifact was recovered from either post (FYH1=1).

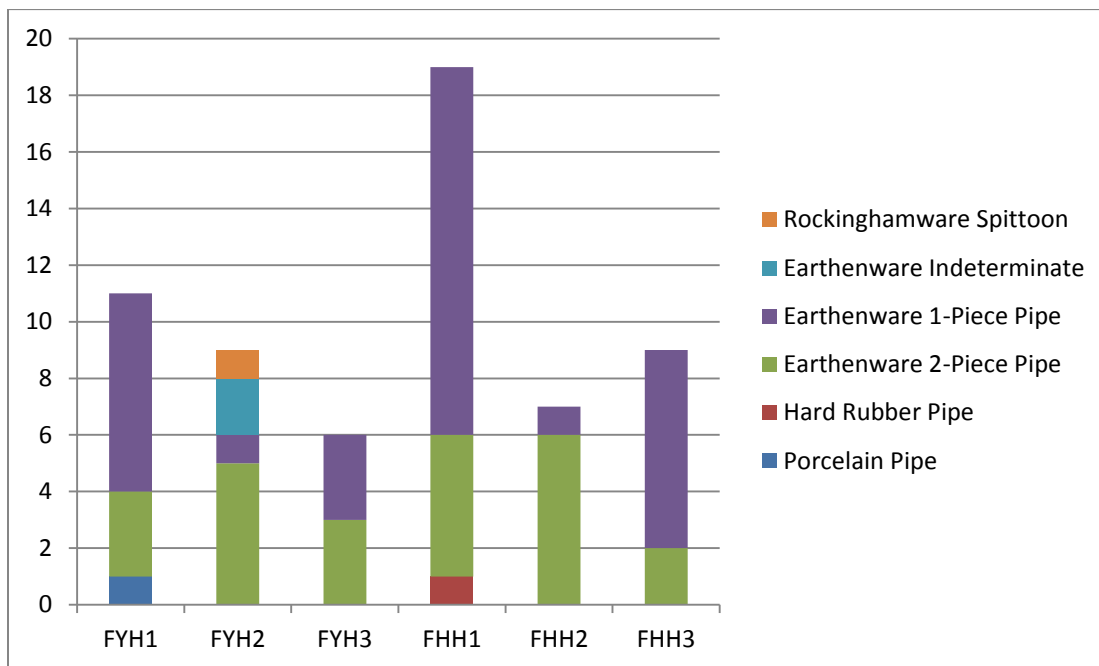


Figure 8.54 Tobacco Item Assemblages By Category

Beyond the differences in the overall quantities of tobacco artifacts recovered each of the commissioned officers quarters (Figure 8.54) few differences between the assemblages are present. All six assemblages are comprised of a relatively equal mix of pipes with two-piece and one-piece construction and decorative types and patterns are also equally distributed. The few differences that are present are represented by two tobacco pipes made of uncommon material and spittoon. One porcelain tobacco pipe was recovered from the captains' quarters at Fort Yamhill (FYH1). Being made of porcelain the pipe was likely more expensive than the more common earthenware pipes recovered from the other commissioned officers' quarters (Bradley 2000:121). Also, a single tobacco pipe made of hard rubber was recovered from the captains' quarters' at Fort Hoskins (FHH1). Although the relative cost of hard rubber tobacco pipes is unknown its relative rarity, as the only pipe of this type recovered, may reflect a higher social status. Lastly, a single chewing tobacco spittoon was recovered from a subaltern officers' quarters at Fort Yamhill (FYH2) may reflect lower social and economic status. The object itself was made of stoneware with a mottled Rockingham glaze intended to imitate more costly tortoise shell and Rockinghamware ceramics in general were cheap and favored by the middle class (Claney 2004:97). In addition chewing tobacco was more commonly associated with the lower classes as the upper classes tended to favor smoking tobacco either in pipes or as cigars (Burns 2007:125). Status differences in the tobacco assemblages appear to be subtle with only slight differences in the quantities, diversity and quality of items recovered.

Health Artifacts. The health artifact assemblages contain items that were used to treat illness and keep the body clean, maintained and for beatification such as medicine, cologne/perfume, cosmetic jars, combs, mirrors, toothbrushes, soap boxes, wash basins and chamber pots. At both Fort Yamhill and Fort Hoskins more health artifacts were recovered from the captains' quarters (FYH1=29, FHH1=31) than were recovered from the subaltern officers' quarters (FYH2=17, FYH3=14, FHH2=27, FHH3=8). A greater variety of artifact types was also recovered from the captain's quarters at Fort Hoskins than (FHH1=10) but a greater variety of artifact types was

recovered from a subaltern officer's quarters at Fort Yamhill (FYH2=10) than were recovered from the other commissioned officers' quarters (FYH1=9, FYH3=7, FHH2=8, FHH3=8). No high quality health artifacts were recovered from either post.

Medical Items. The medical artifact assemblages contain items that were used in the treatment of illness and injury such as various patent medicine bottles and medical implements. At both Fort Yamhill and Fort Hoskins more medical items were recovered from the captains' quarters (FYH1=18, FHH1=14) than were recovered from the subaltern officers' quarters (FYH2=11, FYH3=6, FHH2=10, FHH3=4) (Figure 8.55). Conversely, a greater diversity of medicines were recovered from the subaltern officers' quarters (FYH2=4, FHH3=3) than from the captains' quarters (FYH1=3, FHH1=2) or the other subaltern officers' quarters (FYH3=1, FHH2=2). No explicitly high quality medical artifacts were recovered from either post.

Only a few patterns are observed in the medical item assemblages. At both Fort Yamhill and Fort Hoskins more digestive medicines were recovered from the captains' quarters (FYH1=5, FHH1=2) than were recovered from the subaltern officers quarters (FHH3=1), general/cure-all medicines were only recovered from the captains' quarters at both posts, and at Fort Yamhill more pain killers were recovered from the captains' quarters (FYH1=3) than were recovered from the subaltern officers' quarters (FYH2=1, FYH3=0). Lastly, medical devices (irrigating syringes) were only recovered from the captains' quarters at both posts (FYH1=1, FHH1=2). One "higher quality" or more expensive medicine was recovered from either posts, a Henry's Calcined Magnesia bottle recovered from the captain's quarters at Fort Yamhill (FYH1). Although the exact cost is unknown "Henry's" calcined magnesia was manufactured and imported from England and because of high import taxes was considered very expensive compared to the cheaper domestic alternative "Husband's" calcined magnesia produced in Philadelphia (Fike 1987:141). Although the sample size is small the relatively unequal distribution of medical items suggests that captains' were self medicating with more, and possibly more expensive, patent

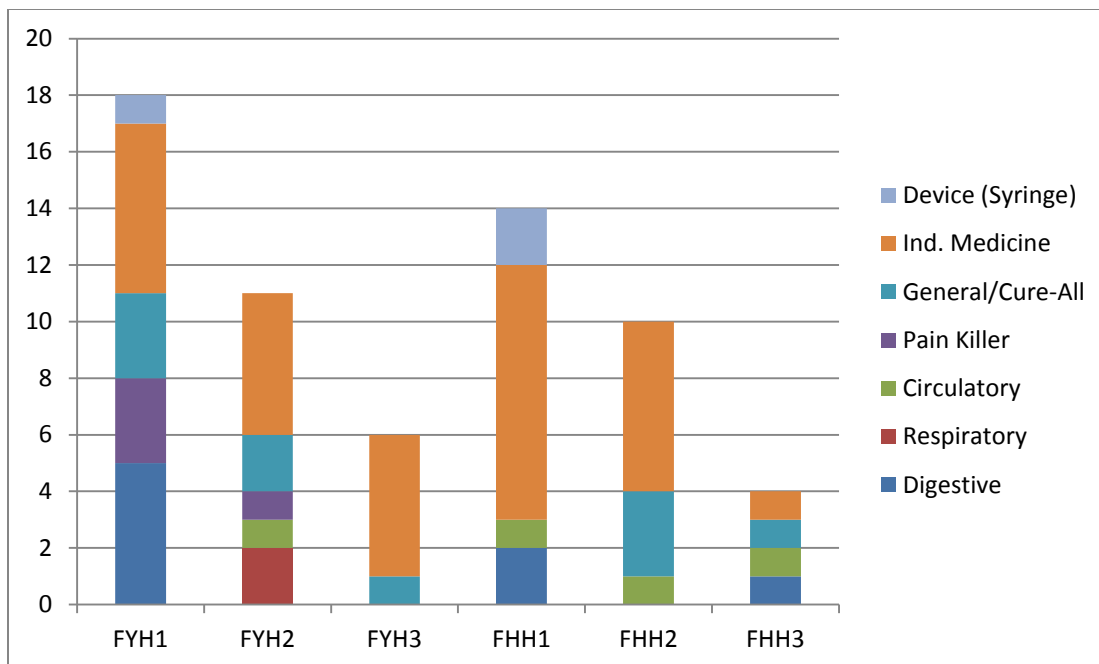


Figure 8.55 Medical Item Assemblages By Category

medicines than their subaltern officers which would have incurred a large financial cost to acquire.

Grooming Items. The grooming item assemblages contain objects that were used in the cleaning and beautification of the body such as cologne/perfume, hair dye, cosmetics, combs, mirrors, toothbrushes, soap boxes and wash basins (Figure 8.56). At Fort Yamhill more grooming items were recovered from the captains' quarters (FYH1=11) than were recovered from the subaltern officers' quarters (FYH2=6, FYH3=8) while at Fort Hoskins the greatest number of grooming items were recovered from both the captains' quarters (FHH1=17) and a subaltern officers' quarters (FHH2=17, although 13 of these are represented by bone toothpicks) than the other subaltern officers' quarters (FHH3=4). At Fort Yamhill little diversity in the grooming items were observed (FYH1=5, FYH2=5, FYH3=3) but greater diversity in the grooming assemblages recovered at Fort Hoskins was observed (FHH1=7, FHH2=5, FHH3=4). No high quality grooming items were recovered from either post.

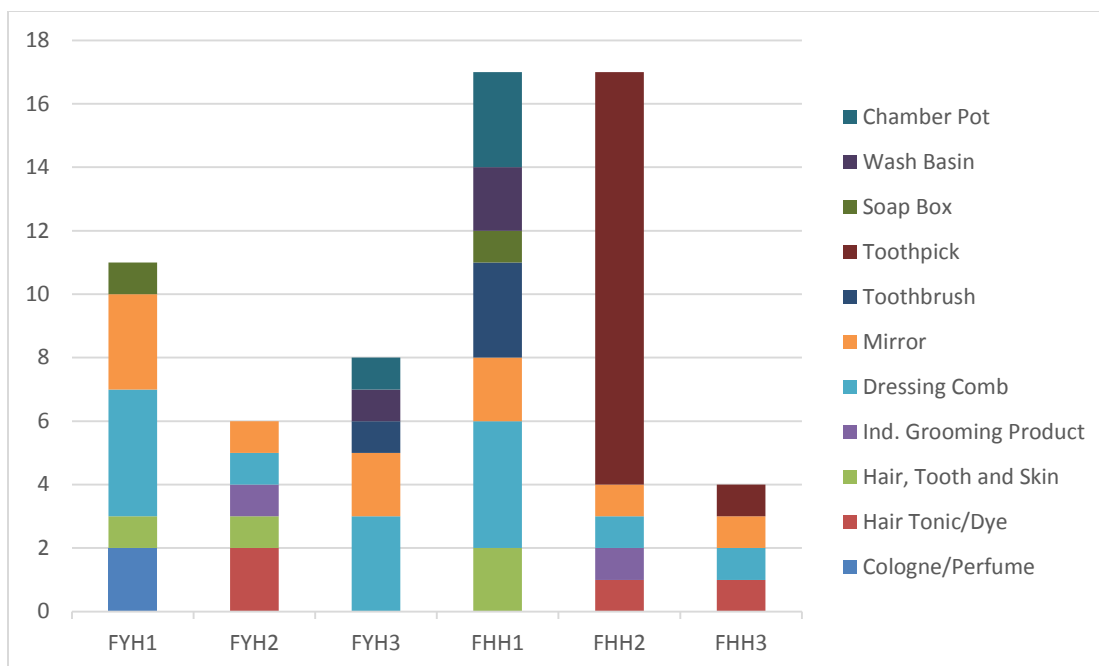


Figure 8.56 Grooming Item Assemblages By Category

Most grooming items (i.e., cosmetics, combs, mirrors and tooth brushes) are distributed relatively evenly amongst the commissioned officers' quarters at both posts and do not appear to reflect inequalities in status. Only a few items appear to have unequal distribution that may reflect status differences: cologne/perfume bottles and toiletries (soap boxes, wash basins and chamber pots). At both posts the only perfume/cologne bottles were recovered from the captains' quarters at Fort Yamhill (FYH1=2). Considered to be of high economic value (Riordan 1985:140) the greater number of perfume/cologne bottles may reflect a higher economic status of those officers. Ceramic toiletries (i.e., soap boxes, wash basins and chamber pots) were also unequally distributed at both posts. Soap boxes were only recovered from the captains' at both posts (FYH1=1, FHH1=1) while washbasins (FYH3=1, FHH1=2) and chamber pots (FYH3=1, FHH1=3) were recovered from both captains' quarters and subaltern officers quarters. Perhaps soap boxes were considered unnecessary specialty or luxury items therefore were only purchases and used by those with highest economic means. Although more toothpicks were recovered from the subaltern officers' quarters (FHH1=0, FHH2=13, FHH3=1) at Fort Hoskins it is

unlikely they reflect any difference in social or economic status between the officers as they were likely common and/or inexpensive.

Adornment Artifacts. The adornment artifact assemblages contain objects that were worn to distinguish, embellish the beauty or enhance the status of the wearer such as accessories, buttons, buckles and jewelry. At both Fort Yamhill and Fort Hoskins more adornment artifacts were recovered from the captains' quarters (FYH1=60, FHH1=99) than were recovered from the subaltern officers' quarters (FYH2=50, FYH3=29, FHH2=43, FHH3=5) (Figure 8.57). Little diversity in adornment types was observed in the adornment assemblage recovered from Fort Yamhill (FYH1=5, FYH2=5, FYH3=5) or Fort Hoskins (FHH1=4, FHH2=4, FHH3=2). At Fort Yamhill more high quality adornment artifacts were recovered from the captains' quarters (FYH1=8) than were recovered from the subaltern officers' quarters (FYH2=0, FYH3=1) while a relative equal number of high quality adornment artifacts were recovered from the commissioned officers' quarters at Fort Hoskins (FHH1=1, FHH2=0, FHH3=1).

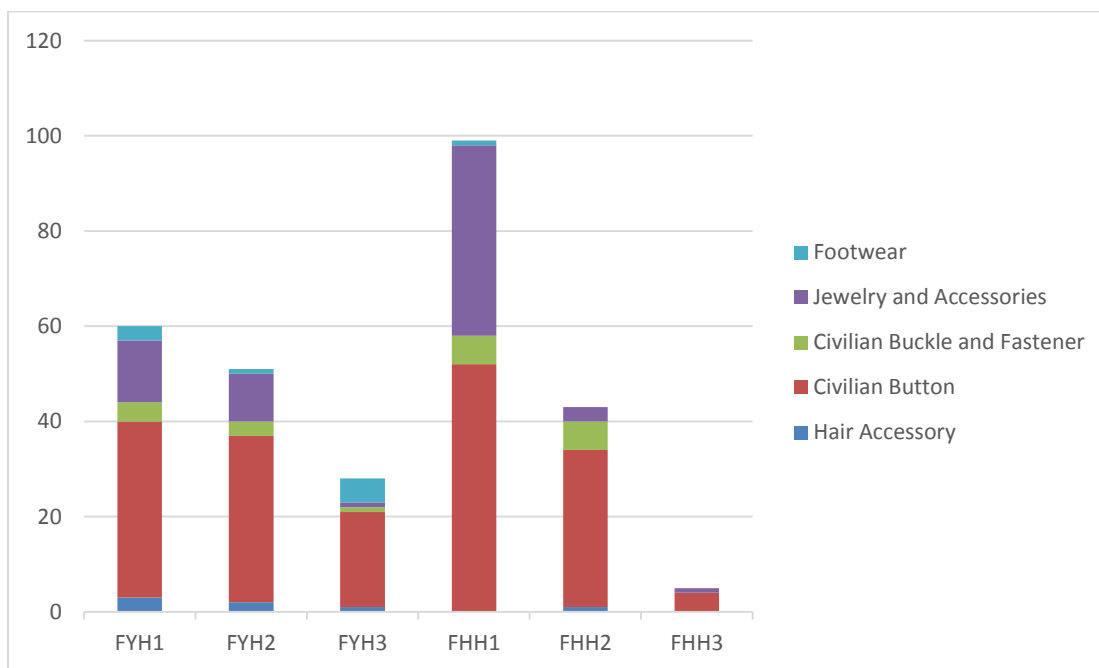


Figure 8.57 Personal Adornment Assemblages By Type

Beyond difference in total quantity of artifacts recovered little variation is observed within the adornment assemblage at the class level although some patterns do appear. All six assemblages are dominated by civilian buttons although they comprise larger portions of the adornment assemblages recovered from the subaltern officers' quarters than for the captains' quarters at both forts (FYH1=37[61.7%], FYH2=35[70.0%], FYH3=20[69.0%], FHH1=52[52.5%], FHH2=33[76.7%], FHH3=4[80.0%]). This is not surprising as buttons were a far more common adornment item for nearly all clothing types and most garments had several buttons. A lower percentage of buttons recovered from the captains' quarters at both posts (and the higher percentage of buttons from the subaltern officers' quarters) at each posts suggests that the captains had greater quantities of less common non-clothing items (i.e., hair accessories, jewelry, etc.) which may reflect higher status assemblages.

At both Fort Yamhill and Fort Hoskins the hair accessory and jewelry assemblages comprised the second largest share of adornment artifacts recovered from the captains' quarters (FYH1=13[21.7%], FHH1=40[40.4%]) and two of the subaltern officers' quarters (FYH2=10[20.0%] and FHH3=1[20.0%]). Jewelry items then might be the next most important adornment item for displaying status. While the majority of buttons (i.e., all six assemblages were dominated by plain white prosser buttons with little value as status symbols) reflect their primary function as a clothing fasteners, jewelry items were largely used for social display of status as well as retaining their functional use (i.e., hair pins used to hold hair "up"). Jewelry items then might be a fruitful artifact type used for the expression of status (White 2005:81). The remaining portions of the adornment assemblages are comprised of varying quantities (and percentages) of civilian buckles, clothing fasteners and footwear items.

Hair Accessories and Jewelry. Hair accessories and jewelry were used almost exclusively for personal presentation and adornment with almost no real functional use. As such these items were intended to be physical displays of status, either social or economic, and were often made of rare or expensive materials (White 2005). At

both Fort Yamhill and Fort Hoskins more hair accessories and jewelry were recovered from the captains' quarters (FYH1=16, FHH1=40) than were recovered from the subaltern officers' quarters (FYH2=12, FYH3=3, FHH2=4, FHH3=1) (Figure 8.58).

Glass beads comprised the largest percentage of nearly all of the assemblages (FYH1=7[43.8%], FYH2=7[58.3%], FYH3=1[33.3%], FHH1=40[100%], FHH2=1[25%], FHH3=0). Because several beads could be, and likely were, part of the same piece of jewelry or personal adornment item it is likely that these numbers are over representative the actual presence of these items, that being said most of the beads recovered are unique in size, color and/or shape and therefore may have come from different items or garments. Considering this, more beaded "items" are represented in the assemblages recovered from the captains' quarters at both posts than were recovered from the subaltern officers' quarters suggesting more ornate and likely more expensive garments and/or items.

Pendants (FYH1=4, FYH2=1, FHH3=1) and hair accessories (FYH1=3, FYH2=2, FYH3=1, FHH2=1) were also more common in the assemblages recovered

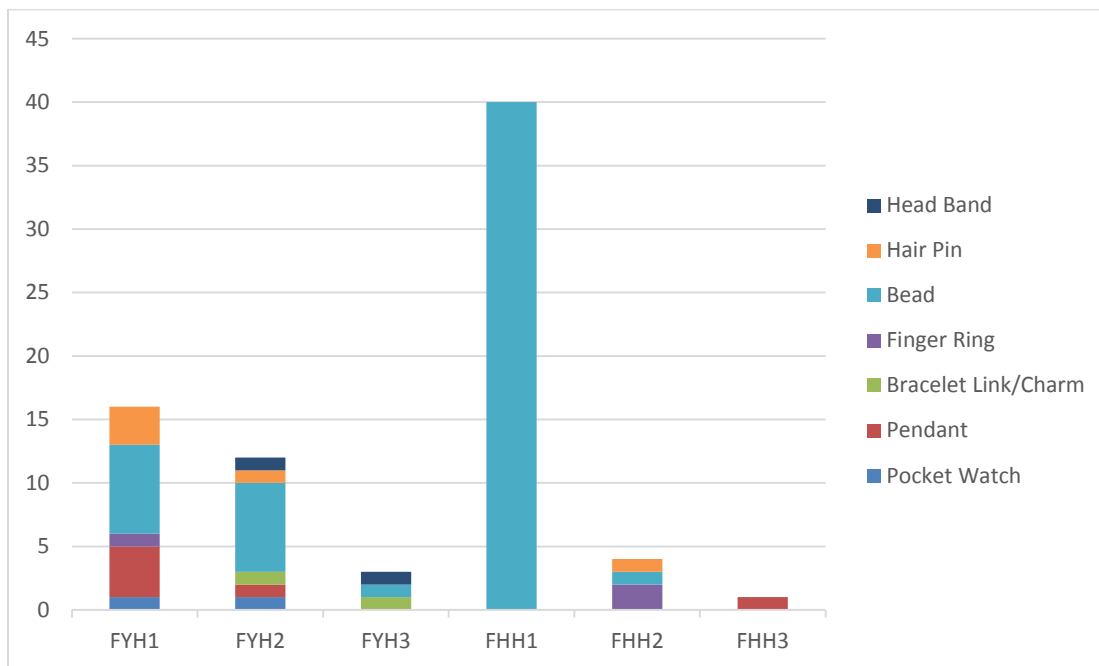


Figure 8.58 Hair Accessory and Jewelry Assemblages By Category

from the captains' quarters at both posts. The pendants, especially, likely represent higher status assemblages given that the four pendants recovered from the captains' quarters at Fort Yamhill were all made of glass (three tear drops and one cut-glass cranberry pendant [possibly in the form of a Greek Cross]) while the only other pendant recovered at Fort Yamhill (FYH2) was an 1836 sliver or silver United States dime pieced to be strung. The single pendant recovered from FHH3 was a gold locket and was likely very expensive as similar "gold lockets" cost as much as \$4.50 each in 1856 (Derks 2005). All of the hair accessories are made of carved hard rubber and vary little except in the quantities recovered with slightly more items being recovered from the captains' quarters (FYH1=3) than were recovered from the subaltern officers' quarters (FYH2=2, FYH3=1) at Fort Yamhill and only one hair accessory being recovered at Fort Hoskins (FHH2=1).

The remaining portions of the assemblages are comprised of a few of pocket watches (FYH1=1, FYH2=1) and bracelet links/charms (FYH2=1, FYH3=1) and for which little meaningful variation in quantity, quality or variety appears to be present nor were any patterns observed that were consistent between the two posts.

Civilian Buttons and Clothing Fasteners. A wide range of civilian buttons and other clothing fasteners were recovered from both posts. At both Fort Yamhill and Fort Hoskins more buttons and clothing fasteners were recovered from the captains' quarters (FYH1=38, FHH1=54) than were recovered from the subaltern officers quarters (FYH2=37, FYH3=21, FHH2=37, FHH3=4) (Figure 8.59). As mentioned above civilian buttons comprise the largest portion of all of the assemblages, the bulk of which from all commissioned officers' quarters (except FHH3) were plain white prosser sew-through buttons commonly used a variety of shirts and undergarments (FYH1=19[51.3%], FYH2=15[42.8%], FYH3=10[30%], FHH1=30[57.7%], FHH2=12[36.4%], FHH3=0). Except for a few (gilded brass buttons) the remaining portions of the buttons assemblages is comprised of a wide range of button types, made from a myriad of materials and decorated in a variety of ways with little consistent patterns in quantity, quality or variety among the commissioned officers' quarters.

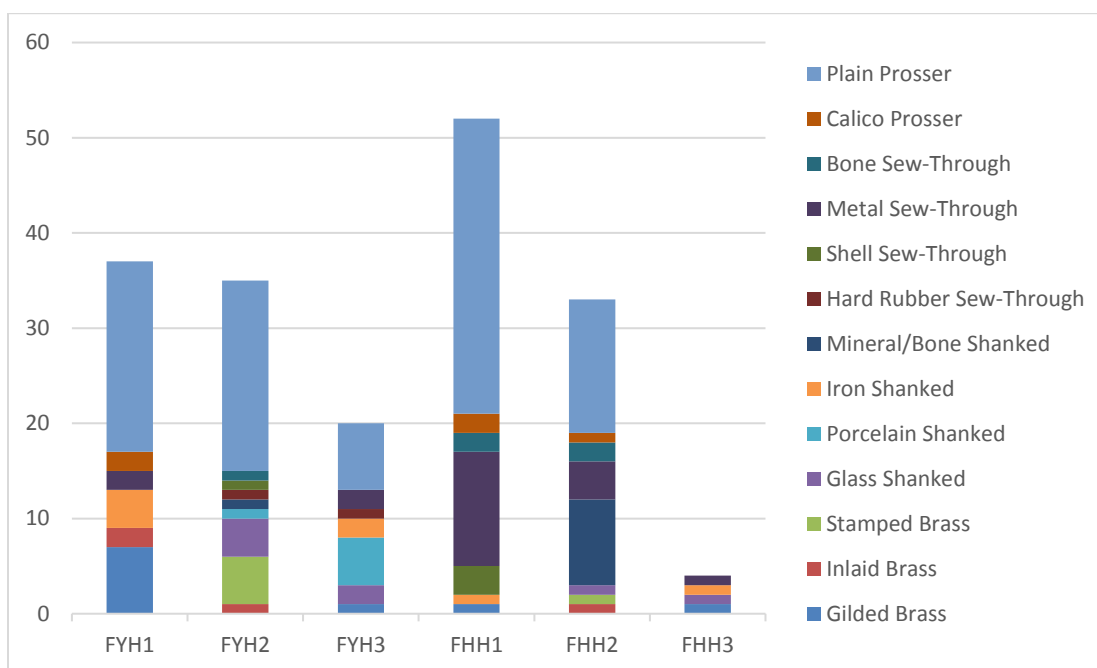


Figure 8.59 Civilian Button Assemblages By Category

At Fort Yamhill more gilded brass buttons were recovered from the captains' quarters (FYH1=7) than were recovered from the subaltern officers' quarters (FYH3=1). Five of the buttons (FYH1=4, FYH3=1) share the same design and the other three (FYH1) have varying designs. Since garments tended to have matching buttons these buttons likely represent at least four garments (FYH1=4, FYH3=1) with gilded buttons. At Fort Hoskins one gilded brass button was recovered from the captains' quarters (FHH1) and one from the subaltern officers' quarters (FHH3). Gilded buttons of these types were commonly used to close the front of a gentlemen's vest or the cuff of his sleeve (Luscomb 1967) and tended to be expensive as a pair of them in 1856 could cost as much as \$1.50 while more common "buttons" cost as little as \$0.10 per dozen (Derks and Smith 2005:406, 419).

Office Administration Artifacts. The office administration assemblage contains artifacts that were used in the day-to-day activities such as bookkeeping, report writing and correspondence. Although these items were most certainly used by the commissioned officers who owned them within the context of their military duties

it is likely he and his family would have used the same items for personal reasons and therefore I have included them within the personal artifact group rather than the military artifact group as others have done (Bowyer 1992:60-61). At both Fort Yamhill and Fort Hoskins more office administration artifacts were recovered from the captains' quarters (FYH1=10, FHH1=10) then were recovered from the subaltern officers quarters (FYH2=8, FYH3=5, FHH2=4, FHH3=5) (Figure 8.60). In addition, a greater diversity of office administration artifacts were recovered from the captains' quarters (FYH1=6, FHH1=5) than were recovered from the subaltern officers' quarters (FYH2=3, FYH3=4, FHH2=2, FHH3=3) and the only high quality artifacts were recovered from the captains' quarters at both posts (FYH1=1, FHH1=1).

Although the sample sizes are small the office administration assemblages recovered from the captains' quarters (FYH1, FHH1) at both posts differ from those recovered from the subaltern officers' quarters (FYH2, FYH3, FHH2, FHH3) and two artifact types reflect this: ink pots/individual ink bottles and pen nibs. At Fort Yamhill common individual ink bottles were recovered from of the commissioned officers' quarters (FYH1=4, FYH2=1, FYH3=1), but the assemblage recovered from

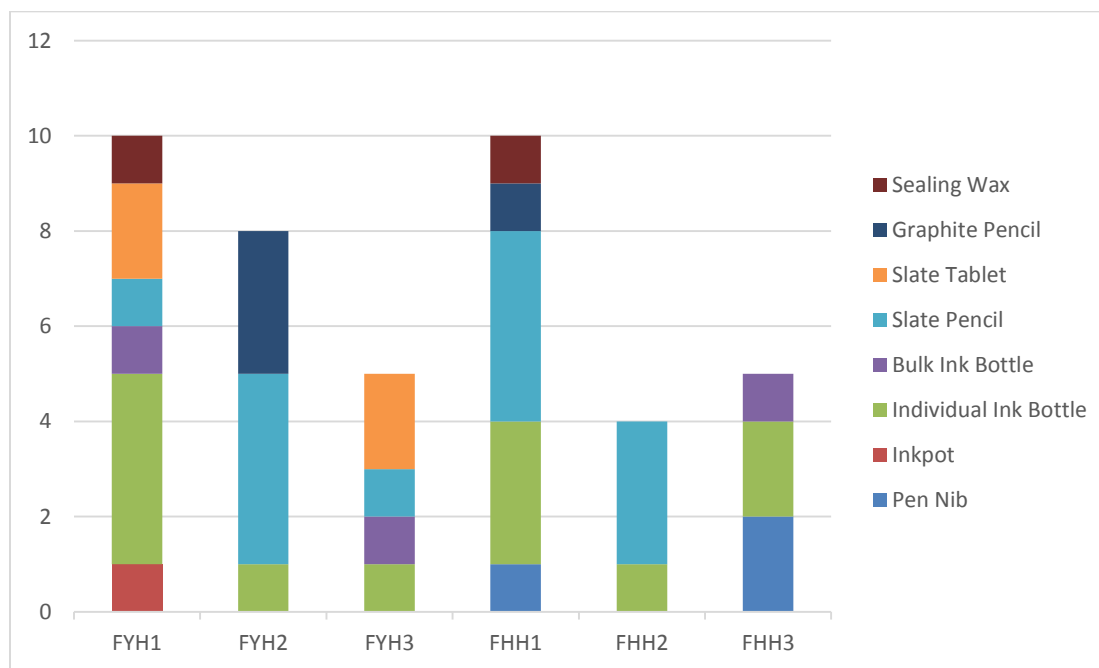


Figure 8.60 Office Administration Assemblages By Type

the captains' quarters (FYH1) also contained a porcelain Parisian pump-style inkpot. Although the exact cost of the inkpot is unknown it most certainly would have cost considerably more than the more common glass and stoneware individual ink bottles recovered from the subaltern officers' quarters. Being a specialty item, made of porcelain and imported from France would have clearly made the inkpot a status symbol within the office/parlor of the commissioned officers' home.

At Fort Hoskins a gold plated (iridium-tipped) nib was recovered from the captains' quarters (FHH1). During the 19th century gold pens were extremely expensive, for example one price list from 1865 lists the cost of a "Morton's Gold, No. 5 Pen" as \$6.25 (Derks 2004:33) or more than half the monthly salary of an enlisted private. The presence of the gold pen (nib) recovered from FHH1 is in direct contrast to the iron pen nibs recovered from the subaltern offices' quarters (FHH3) for which no price lists are known but certainly would have been far less expensive. Both the porcelain ink pot recovered from the captains' quarters at Fort Yamhill (FYH1) and the gold pen recovered from the captains' quarters at Fort Hoskins (FHH1) would have been expensive items and therefore were likely considered to be high status objects that reflected the higher social, economic and military status of the captains who owned and used them.

Higher quantities of items, greater variety of item types and more high quality items characterize the office administration assemblages recovered from the captains' quarters (FYH1, FHH1) at both posts. Clearly, this pattern indicates a higher economic status of the occupants and many of these items were expensive (i.e., porcelain ink pot, gold pen, etc.). In addition, if these items were used during official duties, which is likely, then they were also associated with the commissioned officers' military status and authority and therefore reflected the higher military status and authority of the captains over their subaltern officers.

Recreation Artifacts. The recreational artifact assemblages contains items that were associated with activities that were done for enjoyment and/or relaxation by all members of the household including the officers, their wives and children such as playing games, making and listening to music, hunting and fishing. At Fort Yamhill

more recreational items were recovered from the captains' quarters (FYH1=18) than were recovered from the subaltern officers' quarters (FYH2=5, FYH3=4), but at Fort Hoskins far more recreational items were recovered from the subaltern officers' quarters (FHH2=93) than were recovered from the captains' quarters (FHH1=29) and the other subaltern officers' quarters (FHH3=19) (Figure 8.61). In addition a greater diversity of recreational artifact types were recovered from the captains' quarters at both posts (FYH1=8, FHH1=11) than were recovered from the subaltern officers' quarters (FYH2=4, FYH3=4, FHH2=8, FHH3=5). Lastly, the only high quality recreational items were recovered from the captains' quarters at both posts (FYH1=2, FHH3=3).

At Fort Yamhill the higher quantities of recreational items recovered from the captains' quarters (FYH1) and the greater variety and more high quality items recovered from the captains' quarters at both posts (FYH1, FHH1) suggests higher social and economic status of the captains who occupied those quarters while the higher quantities recreational items recovered from the subaltern officer's quarters (FHH2) at Fort Hoskins may suggest a higher social and economic status of those

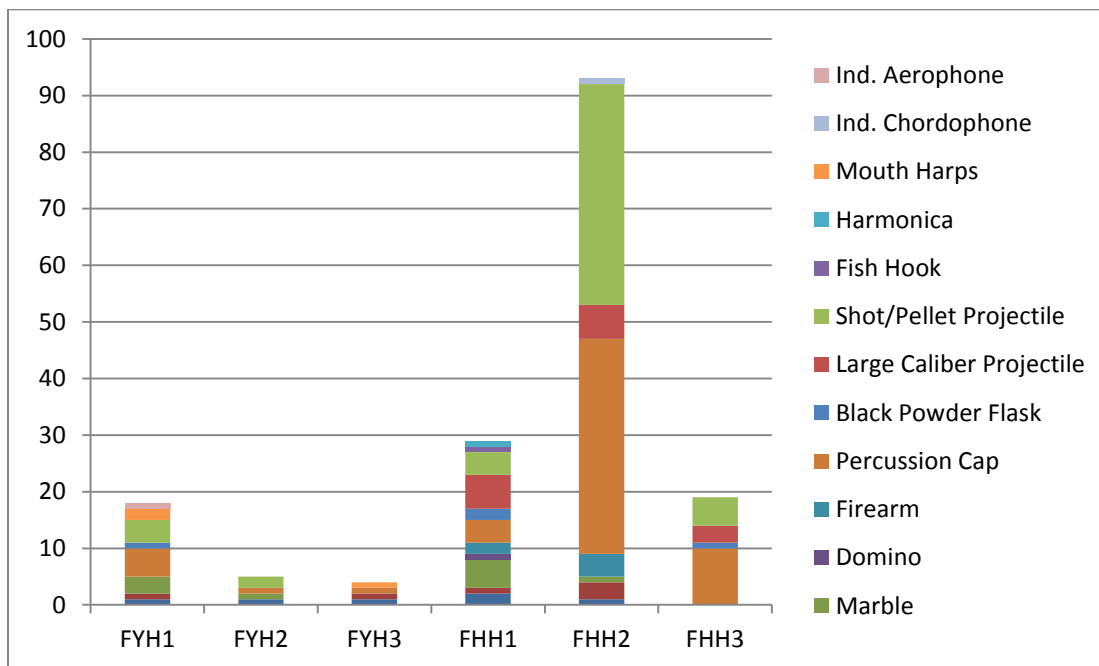


Figure 8.61 Recreational Artifact Assemblages By Category

officers. The much higher quantities of recreation items recovered from the subaltern officers quarters (FHH2) is largely a function of the unusually high numbers of just two artifact types, longarm percussion caps (n=38) and shot/pellet projectiles (n=39), which together comprise 82.8% of the total recreation item assemblage recovered from FHH2. These unusually high numbers of these artifacts could represent purposeful behavior (i.e., greater emphasis on hunting) or the unintentional loss of a large number of items at one time (i.e., spillage from a broken bag or tipped container) although the latter is unlikely given that the 77 items were recovered relatively evenly from 24 excavation units spread across the excavations of Fort Hoskins House 2 (FHH2).

Toys, Games and Musical Instruments. The toys and games assemblages contain items that would have been used for entertainment by all members, but especially the children, of the household including ceramic toy tea sets, dolls, gaming pieces, harmonicas, mouth harps, chordophones and aerophones. At both Fort Yamhill and Fort Hoskins more toys, games and musical instruments were recovered from the captains' quarters (FYH1=8, FHH1=10) than were recovered from the subaltern officers' quarters (FYH2=2, FYH3=3, FHH2=6, FHH3=0) (Figure 8.61). In addition, a greater variety of toys, gaming pieces and musical instruments were recovered from the captains' quarters (FYH1=5, FHH1=5) than from the subaltern officers' quarters (FYH2=2, FYH3=3, FHH2=4, FHH3=0) at each post.

Beyond difference in total quantity and variation of items recovered little meaningful difference is observed within the toys, games and musical instrument assemblages with the exception of the marble assemblages recovered from each post. At both Fort Yamhill and Fort Hoskins more marbles were recovered from the captains' quarters (FYH1=3, FHH1=5) than were recovered from the subaltern officers' quarters (FYH2=1, FHH2=1) at each post. In addition the quality of the marbles varies considerably between the officers' quarters. At Fort Yamhill the marble assemblage recovered from the captains' quarters (FYH1) is comprised of two glass marbles and one glazed porcelain marble while the assemblage recovered from the subaltern officers' quarters (FYH2) is comprised of a single glazed porcelain

marble. A similar pattern is observed at Fort Hoskins where the marble assemblage recovered from the captains' quarters (FHH1) is comprised of three glass marbles and two unglazed porcelain marbles while the assemblage recovered from the subaltern officers' quarters (FHH2) is comprised of a single Bennington-type crockery marble. During the 19th century glass marbles were the most expensive marble type available, followed by porcelain (glazed and unglazed) and lastly by "crockery" marbles (Baumann 1970:30, 66). The greater quantities of marbles and the higher quality (i.e., cost) of those marbles clearly indicates that higher status marble assemblages were recovered from the captains' quarters (FYH1, FHH1) than were recovered from the subaltern officers' quarters (FYH2, FYH3, FHH2, FHH3).

Hunting and Fishing Implements. The hunting and fishing assemblages contain items that were used in the practice of pursuing, tracking, trapping or killing wild game and fish. At Fort Yamhill the hunting and fishing assemblage recovered from the commissioned officers' quarters vary little with all of the assemblages consisting of exclusively of longarm percussion caps (FYH1=6, FYH2=1, FYH3=1) and shot/pellet projectiles (FYH1=4, FYH2=2) with no firearms, large caliber projectiles or fishing implements recovered at that post (Figure 8.62). Given the rather small sample size and homogeneity between the different assemblages it is unlikely that the hunting and fishing implements at Fort Yamhill reflect any real difference in status between the commissioned officers.

This may not be true at Fort Hoskins, where more hunting and fishing implements were recovered the subaltern officers' quarters (FHH2=87, FHH3=19) than were recovered from the captain's quarters (FHH1=18). In addition to containing more hunting items over all the assemblages recovered from the subaltern officers' quarters also contains more items within each of the artifact categories: hunting firearms (FHH1=2, FHH2=4), firearm ignition system items (i.e., percussion caps and cap boxes) (FHH1=6, FHH2=38, FHH3=11), large caliber projectiles (FHH1=6, FHH2=6, FHH3=3) and shot/pellet projectiles (FHH1=4, FHH2=39, FHH3=5).

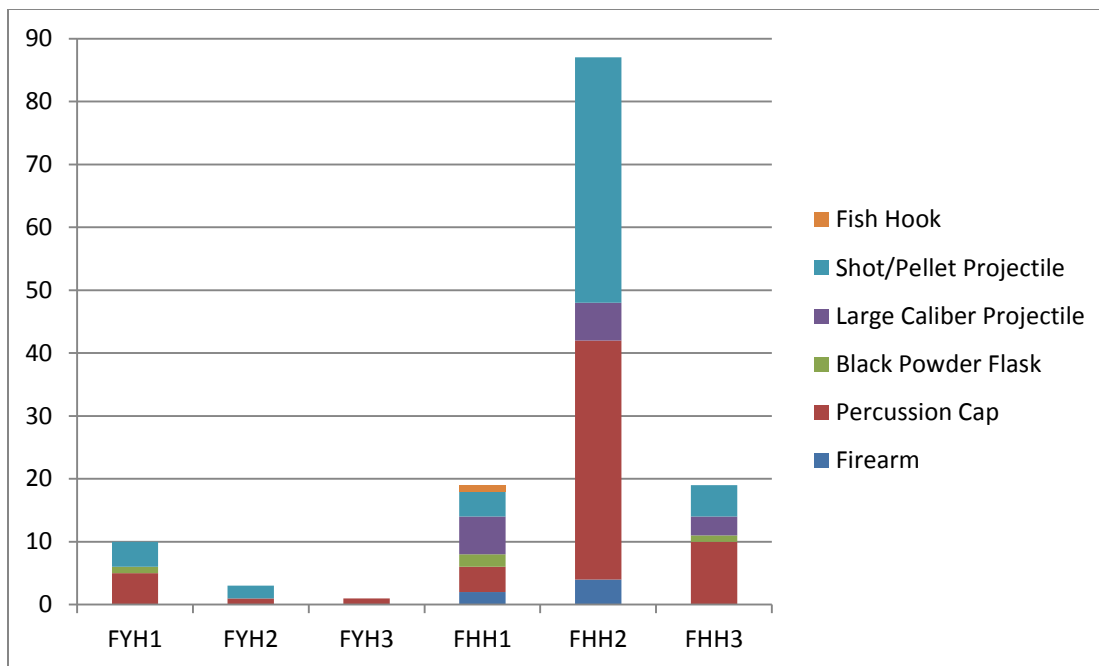


Figure 8.62 Hunting and Fishing Assemblages By Category

The much higher quantity of hunting artifact recovered from the subaltern officers' quarters (FHH2, FHH3) at Fort Hoskins suggests a much greater emphasis on the behavior. Perhaps hunting was more favored by the subaltern officers as a way to supplement their diet with "free meat" from subsistence hunting. This interpretation is supported by the higher quantities of deer, elk, geese and galliform fowl (i.e., turkey, quail, pheasant, grouse, etc.) represented in the faunal assemblages recovered from the subaltern officers' quarters at both Fort Yamhill and Fort Hoskins. Given this interpretation then hunting was conducted by commissioned officers for very different reasons. For captains it appears that their higher salaries allowed them to approach hunting as purely a recreational activity rather than as a subsistence activity, an interpretation that is supported by their higher expenditures on subsistence food purchases from the Commissary. In contrast, the subaltern officers not only approach hunting as a recreational activity but also as a method of subsistence using their quarries to supplement their insufficient subsistence article purchases.

Pocket Items. The pocket item and transportation assemblages contain items were typically owned and used by single individual or household member and were

small enough to fit in one's pocket and includes spectacles, pocket/pen knives and coinage. Very few pocket items were recovered from both Fort Yamhill (n=4) and Fort Hoskins (n=5) with little variation in the quantity, quality or variety of items differing between the commissioned officers quarters. The one exception is the unequal distribution of pocket/pen knives at Fort Yamhill where twice as many items were recovered from the captain's quarters (FYH1=2) than the subaltern officers' quarters (FYH2=1, FYH3=0). Since the sample sizes are so small this pattern slight and tenuous but as pocket/pen knives tended to have high economic value (Riordan 1985:140) the pattern may reflect differences in status.

Transportation Artifacts. The transportation assemblages contain items that were used during the process of moving people and goods from one place to another such as luggage and horse furniture. Very few transportation items were recovered from Fort Yamhill (FYH1=3, FYH2=1, FYH3=1) and Fort Hoskins (FHH1=2, FHH2=0, FHH3=1). At Fort Yamhill a carpet bag, horse bit and horseshoe were recovered from the captains' quarters (FYH1) while only horseshoe nails were recovered from the subaltern officers' quarters. At Fort Hoskins a saddle girth buckle and crotal/sleigh bell was recovered from the captains' quarters (FHH1) while a single stirrup was recovered from the subaltern officers quarters (FHH3). Although the luggage item (a carpet bag) recovered from the captains' quarters at Fort Yamhill (FYH1) is interesting overall the sample sizes are just too small and diverse to make any meaningful comparisons.

Summary

Clearly the material cultural assemblages recovered from Fort Yamhill and Fort Hoskins display variation in the quantity, quality and variety of artifacts recovered from each of the commissioned officers' quarters. The variations within these material cultural assemblages reflect the differences in the social, economic and military statuses of the officers who inhabited these houses. Overall the captains' quarters (FYH1, FHH1) at both posts contained the artifact assemblages with the highest social, economic and military statuses as these assemblages tended to have

the greatest quantity of artifacts, most diversity of artifact types and categories and had the largest number of high quality (cost) artifacts reflecting these higher statuses. While the quantity, quality and variety of artifacts within the assemblages recovered from the captains' quarters dominated most of the artifact groups, classes, types and categories the recovery of several high status artifacts from the subaltern officers' quarters at both posts demonstrates that although they rarely possessed assemblages with higher status than their commanding officers they did participate in the material expression of status through consumption behaviors, either conspicuously or not.

The above analysis also shows that some artifact classes (i.e., gustatory, indulgences, adornment, etc.), types (glassware, ceramicware, food remains, jewelry, toys, hunting, etc.) and various categories are better at reflecting these status inequalities than others. While the captains appear to have used most artifact groups, classes, types and categories to reflect their status positions the subaltern officers at both posts appear to have been more selective, either by choice or necessity, using only a few artifact classes (i.e., foodstuffs, recreational items) and types (i.e., faunal remains, hunting implements) to reflect their status positions.

In addition many of the differences within the artifact assemblages were subtle with variations in the quantity, quality and variety of some artifact groups, classes, types and categories varying only slightly but consistently between the commissioned officers of different military grades. This may suggest that for at least the commissioned officers at Fort Yamhill and Fort Hoskins, and possibly for company grade officers in general, that their material culture assemblages were more similar than they were different.

CHAPTER 9: SUMMARY AND CONCLUSIONS

In this chapter I will present a summary the research findings of this project beginning with a discussion of social status and inequality between the commissioned officers at both Fort Yamhill and Fort Hoskins as reflected by their military grade, rank and economic position. Next, I will discuss the various manifestations of economic, social and military status and inequality between the commissioned officers within the material culture (i.e., built environment and artifacts) and the historical documents (subsistence account purchasing records) recovered from both posts. Lastly, I will conclude with a discussion of the limitations of this research project and recommendations for further study.

Summary

Max Weber (1946, 2010, 2015) theorized that within a stratified society a person's social position or *stratum* is gradational, multi-dimensional and comprised of three independent yet coinfluencing positions (class, status and party) defined by a person's relative access to various assets (income/wealth, prestige and power, respectively). As members of a hierarchical stratified society (both within the military and the larger American society) the relative status positions of commissioned officers at both Fort Yamhill and Fort Hoskins were determined by their military, economic and social positions within the subculture of the United States Army.

As members in the United States Army commissioned officers defined themselves, and others, in relation to their level of relative power or authority within the military hierarchy which codified and reinforced inequality between members through military law and regulation. This inequality was further reinforced through unequal compensation (i.e, differential military salaries and emoluments) determined by grade and rank which contributed to economic inequality within the army. This economic inequality was then used to create and reinforce social inequality through consumerist behaviors such as conspicuous consumption and conspicuous leisure.

At both Fort Yamhill and Fort Hoskins commissioned officers with the grade of captain had higher economic, social and military status than their subaltern officers. For nearly every measure examined (military authority, income/wealth, material possessions and consumption behavior) captains reflected a higher status. With only a few exceptions captains tended to earn higher salaries, held more military authority, lived in the most desirable quarters, purchased more subsistence articles and consumed goods in greater quantities, of higher quality and of a greater variety than their subaltern officers at both Fort Yamhill and Fort Hoskins.

Captains, by the very nature of their grade, held the highest level of military authority at both posts and as a result they filled the military roles with the highest level of authority, least amount of actual work and the highest compensation. Captains were also on average the longest serving commissioned officers and therefore tended to have the highest military rank and were much more likely to receive higher length of service bonuses than the subaltern officers. Overall captains earned higher military salaries than their subaltern officers and tended to have greater values for their real and personal estates thus making them the wealthiest commissioned officers at both posts.

Commissioned officers with the grade of captain held the greatest military authority and used this authority to select the best quarters at each posts. Although house size and layout did not reflect variations in military status at either post (as no variation in the size or layout between the quarters is present) other factors such as the number and size of yards, number and size of outbuildings, presence of special architectural features (i.e., bay window) and the obstruction of and distance from the less desirable elements of the fort (i.e., barracks, stables, blacksmith, etc.) do appear to reflect status differences. At Fort Yamhill captains occupied the quarters (FYH1) which had the “best” placement (furthest distance from less desirable and lower status structures) and best views (least obstructed) of the post as well as containing the only unique house features (the bay window) recorded at either post. At Fort Hoskins captains also occupied the quarters (FHH1) which also had the “best” placement and views of the post as well the quarters with the most exterior space, both in terms of fenced yards and number and size of outbuildings. Although commissioned officers

did not construct their quarters and therefore they were limited on how domestic architecture and the built environment could be used to express status they were able to display status through their choice of the “best” or “most desirable” quarters and the commissioned officers, particularly the captains, at both posts appear to have done so.

The higher economic status of the captains at both posts also allowed them to purchase more material goods and goods of higher social and economic status. For nearly every artifact group, class, type and category the assemblages recovered from the captains quarters contained a greater number of artifacts, a greater variety of artifacts and artifact types and a greater number of high quality or expensive items. The only exceptions to this pattern are the houseware and military accoutrement artifacts recovered at Fort Yamhill, the military arms and ammunition, hair accessories and jewelry and hunting artifacts recovered from Fort Hoskins and the faunal remains and home maintenance artifacts recovered at Fort Yamhill and Fort Hoskins.

The high economic status of the captains is particularly visible in the gustatory artifact assemblages (i.e., glassware and ceramicware vessels) recovered from the captains’ quarters (FYH1, FHH1) at each post. The higher social and economic status of these officers is clearly reflected in the greater numbers of expensive items (i.e., porcelains, gilded and transfer-printed ceramicware and cut glassware) but also by the greater number of matched sets and the much wider range of dining vessel forms which suggests more the formal and genteel dining behavior associated with high status. This conclusion is also supported by the Miller (1980, 1991) CC Index analysis where the gustatory ceramic assemblage recovered from the captains’ quarters (FYH1, FHH1) at both posts yielded the highest index values for all vessel forms (teas, flatware and bowls).

The analysis of the foodstuffs (remains and containers) is more mixed. While assemblages recovered from the captains’ quarters at both posts (FYH1, FHH1) contain more food containers (food canisters, food bottles and condiment bottles) suggesting more formal and genteel dining while the faunal material recovered from the subaltern officers’ quarters at each post (FYH2, FYH3, FHH2, FHH3) tended to

be of a “higher status” and comprised higher quantities (and proportions) of the more expensive meats (pork) and high preference butcher cuts for all meats (pork, beef, venison). The exception is the distribution of luxury meats (i.e., chicken/chicken eggs, oysters, clams, etc.) which were recovered in greater quantities from the captains’ quarters (FYH1, FHH1) at both posts.

This ambiguity is also reflected in the subsistence article purchases at Fort Hoskins where the captain purchased far more in terms of quantity and cost of subsistence articles than either of his subaltern officers but tended to purchase lower costs goods in higher proportions than the subaltern officers. This is supported by the butchery cut preference index analysis where the faunal assemblages recovered from the subaltern officers’ quarters (FYH2, FYH3, FHH2, FHH3) yielded higher preference index values for all taxa than the assemblages recovered from the captains’ quarters (FYH1, FHH1) at both posts. This ambiguity may suggest that although captains were far superior economically overall and that the subaltern officers could not compete in terms of sheer volume of purchases they did participate and attempt to compete with their superior officers by consuming more expensive and desirable food stuffs.

The overall greater quantity and variety of subsistence article purchases by the captain suggests that he likely purchased and supplied the bulk of the essential subsistence articles (i.e., meat, bread, vegetables, non-edibles, etc.) for all of the commissioned officers at the post which would have allowed the subaltern officers to purchase more of the non-essential subsistence articles (i.e., sweeteners and whiskey) and to purchase high proportions of the more expensive subsistence articles (i.e., ham and pork over beef, superior whiskey over common whiskey, etc.) than their captains. This suggests that captains tended to display their status through the consumption of both quantity and quality of subsistence goods while their subaltern officers tended to display their status through the consumption of quality subsistence articles over the quantity of subsistence articles.

Military artifacts do not appear to reflect differences in military status between commissioned officers within the company grade officers (i.e., captain, first lieutenant, second lieutenant). This is likely due to the fact that all company grade

officers were prescribed generally the same military uniforms, arms and accoutrements (USWD 1857, 1861b, 1863). The only real variation within the uniforms between these officers was between officers of different military corps (i.e., artillery, infantry, dragoon, etc.), regiment (numbers) and sometimes company (letters) and these variations only existed between commissioned officers of different corps, regiments or companies not between commissioned officers within them. The only expression of grade or rank for company grade officers within their corps, regiment and/or company was through the use of epaulettes and shoulder straps. Although variations did exist in the size, layout and device present by grade both the epaulettes and shoulder straps were made of cloth which is unlikely preserve and be recovered from the archaeological record.

Although variations in military status does not appear to be reflected directly in the archaeological assemblages recovered at Fort Yamhill and Fort Hoskins (i.e., symbols of grade and rank) it may be reflected in the unequal distribution of “regulation” and “non-regulation” military artifacts recovered from each of the commissioned officers quarters at each post. At both Fort Yamhill and Fort Hoskins more “non-regulation” military items, and comprising a higher proportion of the military artifact assemblage, were recovered from the captains’ quarters than were recovered from the subaltern officers’ quarters at each post. It is possible that these “non-regulation” items (i.e., buttons, insignia, weapons and accoutrements) reflect the higher authority of the captains to flaunt military regulation or they may represent trophies, mementos or souvenirs opposed to being used and worn as “official” military items, either way the pattern is interesting and more research is needed.

While the artifact patterns observed in the domestic and military artifact groups are more consistent in their reflection of social, economic and military status (i.e., assemblages recovered from the captains’ quarters reflecting higher status than those recovered from the subaltern officers’ quarters) the personal artifact group are more mixed. At both posts the personal artifact group dominated the artifact assemblages recovered from the second subaltern officers’ quarters (FYH2 and FHH2) but not from the captains’ quarters (FYH1, FHH1) or from the other subaltern officers’ quarters (FYH3, FHH3). As previously discussed the reason for this pattern

is unknown but does warrant further investigation. Other patterns consistent between the two forts are of interest and will be discussed below.

The indulgence artifact assemblages recovered from both posts clearly display differences in status. At both Fort Yamhill and Fort Hoskins more higher status alcohols (i.e., champagne) were recovered from the captains' quarters (FYH1, FHH1) than were recovered from the subaltern officers' quarters (FYH2, FYH3, FHH2, FHH3) and more lower status alcohols (i.e., ales/porters) were recovered from the subaltern officers' quarters (FYH2, FYH3, FHH2, FHH3) that were recovered from the captains' quarters (FYH1, FHH1). Variations in the glassware drinking vessel assemblages recovered from each post also reflect these status differences. At both Fort Yamhill and Fort Hoskins and greater number and variety of glassware drinking vessels and vessel forms were recovered from the captains' quarters (FYH1, FHH1) at each post and several specialized vessel forms were only recovered from these contexts (i.e., cordials and ale glasses recovered from FYH1). The higher status alcohols consumed from a wider range of vessel forms, including specialized vessels, suggests that alcohol was consumed with more social cachet at the captains' quarters than within the other commissioned officers' quarters.

A similar pattern is observed in the tobacco artifact assemblages recovered from each of the commissioned officers' quarters. While one and two-piece earthenware tobacco pipes in a wide range of fabric colors and decorative styles were recovered from each of the commissioned officers' quarters tobacco pipes made of porcelain and hard rubber were only recovered from the captains' quarters (FYH1 and FHH1, respectively) and the only chewing tobacco item (a Rockingham ware spittoon) was recovered from a subaltern officers' quarters (FHH2). Given that the porcelain tobacco pipe (an possibly the hard rubber pipe as well) was likely more expensive than the more common earthenware tobacco pipes and that chewing tobacco was more commonly associated with the lower classes then the captains also appear to have consumed tobacco with more social cachet than their subaltern officers.

Other personal group artifact types reflect a similar pattern including medical items (devices and medicine bottles), grooming items (products and tools) and items

of personal adornment (hair accessories, jewelry, buckles and buttons). In general, the assemblages recovered from the captains' quarters (FYH1, FHH1) at both posts contained a greater number of items, greater variation in item types/categories and tended to have more high quality and/or expensive items, although in many cases the differences were slight with assemblages varying by only a few artifacts. The one exception to this is the number of gilded buttons recovered from each of the commissioned officers' quarters. At Fort Yamhill far more gilded buttons were recovered from the captains' quarters (n=7) than from any of the other commissioned officers' quarters at either post (FYH2=0, FYH3=1, FHH1=1, FHH2=0, FHH3=1). Given that gilded sleeve buttons could cost as much as 94 times (\$1.50 per pair versus \$0.10 per dozen [Derks and Smith 2005:406, 419]) more than common "sleeve buttons" clearly the button assemblage recovered from FYH1 reflects much higher economic status. These status differences likely are reflected in the variation observed in the other personal adornment artifacts (i.e., hair accessories and jewelry) but without comparable price records it was not possible to determine an association to a display of status.

The office administration artifact assemblage also reflects the above discussed patterns and warrant further discussion because of their association with the official military duties of the commissioned officers who used them. While Bowyer (1992) in his examination of expression of status and authority between the commissioned officers and enlisted men at Fort Hoskins classified office administration artifacts (i.e., pens, pencils, slate tablets, ink bottles, etc.) as military group artifacts and I have classified them as personal artifacts they were likely used within both functional contexts. As military items they would have symbolized the commissioned officers status as "administrators" responsible for the managerial oversight of the post and the porcelain ink pot (FYH1) and the gold pen (FHH1) recovered from the captains' quarters, specifically, would have reflected not only the military but also being uncommon and expensive would have reflected the social and economic status of the offices who owned them. As personal possessions (i.e., not procured and issued by the Army but instead privately purchased by the individual officers) these items also reflected the social and economic status of the officer, and his family, as private

citizens. These items were likely used by all literate members of the officers' household, especially their wives, for not only official duties but also for private correspondence, the day to day activities of running a household and also likely used as educational tools within the household (i.e., slate writing pencils and tablets used by the children to practice penmanship, arithmetic, etc.).

The recreational artifact assemblages recovered at both posts also display patterns that need further discussion. At both Fort Yamhill and Fort Hoskins the toy assemblages, specifically the marbles, recovered from each of the commissioned officers' quarters appear to reflect the status of their occupants. At both posts a greater number of marbles were recovered from the captains' quarters (FYH1, FHH1) than were recovered from the subaltern officers' quarters (FYH2, FYH3, FHH2, FHH3). In addition, the quality/cost of the marbles also varied by grade, with the higher quality/cost glass marbles being recovered from only the captains' quarters (FYH1, FHH1) and the lower quality/cheaper crockery marbles being recovered from only a subaltern officers' quarters (FHH2). Assuming that these marbles were owned by the officers' children (and not their fathers) then this pattern can be interpreted as reflecting social and economic inequality within the children of the commissioned officers that mirrored that of their fathers. Historical sources (Adams 2009:51) suggest that army wives assumed the social and economic status of their husbands and these patterns observed in the distribution of marbles at both posts suggests that his children may have also assumed the social and economic status of their fathers.

As discussed in Chapter 2 hunting and fishing were important leisure activities for commissioned officers as a way to express their social and economic statuses. Adams (2009:86) argued that hunting and fishing excursions were social and economic status displays not only intended to demonstrate an officers' belonging within the leisure culture of the socio-cultural elite but also as a display of competitive individualism and masculinity. To be a successful hunter was to make you a "man" and to be better at it than your fellow officers was to be a "better man". If this is true than subaltern officers at both Fort Yamhill and Fort Hoskins had higher social and economic status hunting and fishing assemblages than their captains.

At Fort Hoskins far more hunting and fishing artifacts, including firearms, were recovered from the first subaltern officer's quarters (FHH2) than were recovered from the captain's quarters (FHH1) or the second subaltern officer's quarters (FHH3). In addition, far more wild game faunal remains (i.e., deer, geese and unidentified galliform) were recovered from the subaltern officers' quarters (FHH2, FHH3) than were recovered from the captain's quarters (FHH1). Clearly at Fort Hoskins hunting and fishing were far more important to the subaltern officers than their captains. A similar pattern is observed at Fort Yamhill. Although more hunting and fishing items were recovered from the captain's quarters (FYH1) than from the subaltern officers' quarters (FYH2, FYH3) more wild game faunal remains (i.e., deer and elk) were recovered from the subaltern officer's quarters (FYH2) than were recovered from the captain's quarters (FYH1) or the other subaltern officer's quarters (FYH3). According to Adams (2009) then the subaltern officers at Fort Hoskins and possibly at Fort Yamhill had hunting and fishing assemblage and faunal remain assemblages associated with higher social and economic status.

An alternative interpretation of these patterns is that the higher quantities of hunting and fishing artifacts and the greater number of wild faunal remains represent a greater reliance on subsistence hunting which is a practice more commonly associated with the lower ranked and socially and economically inferior enlisted soldier. If the subaltern officers' at both posts were participating in subsistence hunting and fishing rather than trophy hunting and fishing then the greater numbers of these hunting and fishing items and wild faunal remains reflect lower status rather than higher status behaviors. This interpretation is also supported by the subsistence article purchases at Fort Hoskins. Given that neither of the subaltern officers at Fort Hoskins purchased enough meat (beef, pork or ham) from the Commissary of Subsistence to provide an adequate diet it is likely that these subaltern officers use subsistence hunting to supplement inadequate meat purchases. Perhaps subaltern officers use subsistence hunting as a cost saving measure in their acquisition of meat while hunting (subsistence or recreational) was more of a luxury for their captains.

Commissioned officers at both Fort Yamhill and Fort Hoskins clearly participated in economic behaviors such as conspicuous consumption and

conspicuous leisure to display their military, social and economic statuses. As the previous discussion illustrated because captains held higher military status and therefore were granted higher authority and were compensated with higher military salaries and emoluments they were able to express their higher military, social and economic statuses to a greater degree than their subaltern officers. Although subaltern officers were militarily, socially and economically inferior to their captains they did participate in the status displays of consumption, leisure and gentility, although to a lesser degree than their captains. Given that all of the artifact assemblages examined in this study were recovered from archaeological contexts associated with commissioned officers within the same grade group (i.e., company grade officers) it should not be surprising then that some of the differences between the material culture assemblages are subtle varying sometimes by only one or two artifacts. Although captains, first lieutenants and second lieutenants were clearly ranked and were militarily, socially and economically unequal the differences were not as great between these officers as between officers from other grades/grade groups (for example between enlisted men and company officers or between company officers and field officers or general officers). Since company grade officers were more similar economically than they were different (at least in terms of their base military salaries and emoluments) then it should be expected differences in the material expressions of the differences in status may be less pronounced than between members from other grade groups as appears to be the case for several artifact types and categories at both Fort Yamhill and Fort Hoskins.

Conclusions and Recommendations for Further Study

This project clearly demonstrated that variations in the military, social and economic status of company grade commissioned officers (i.e., captains, first lieutenants and second lieutenants) was expressed through the conspicuous consumption of goods and leisure activities. The analysis of historical documents such as *United States Army post returns*, census records and commissioned officer biographies demonstrate

that military authority and economic wealth correlated with a commissioned officer's military rank and grade. Ultimately a commissioned officers' grade and rank determined his level of military authority (i.e., power/political situation) and heavily influenced his income/wealth (i.e., economic situation) which he then used to construct, negotiate and reinforce his prestige/social position (i.e., status situation) within the United States Army and the larger society of 19th century America.

Higher graded and ranked commissioned officers used their greater level of military authority to choose the best military roles which reinforced their level of authority which invested them with command over lower ranked officers and soldiers and provided additional compensation such as increases in pay, emoluments and certain privileges such as their choice of military quarters. As a result of their higher levels of compensation (pay and emoluments) higher graded and ranked officers (i.e., captains) tended to have more economic power and therefore were able to exercise this power through the social consumptions behaviors conspicuous consumption and conspicuous leisure. At both Fort Yamhill and Fort Hoskins the higher graded officers (captains) tended to occupy the best quarters, purchase and consume a greater number of goods, a wider variety of goods and more high quality/expensive goods than their subaltern officers (i.e., first and second lieutenants) as a form of military, social and economic status display.

Although this project was successful in the examination of how commissioned officers used material culture to express their military authority, social status and economic position within the army and 19th century American society several limitations were encountered. These limitations include: 1) incomplete biographies and military records of the commissioned officers who served at Fort Yamhill and Fort Hoskins; 2) incomplete historical documentation on the subsistence article purchasing records at Fort Hoskins and the lack of comparable records from Fort Yamhill; 3) ambiguity on which houses were occupied by the subaltern officers at each post; and 4) a limited archaeological sample recovered from each of the commissioned officers' quarters from both forts.

Although extensive biographical research was conducted on each of the commissioned officers who served at Fort Yamhill and Fort Hoskins biographical

data such as the value of the real and personal estates, previous profession, marital status and number of dependents remained elusive. In addition several important military records were also not located for the commissioned officers including any pay-roll records from the Pay Department. If located these records should provide an exact figure for the monthly salary each officer earned from their commission and military duties. Instead, I estimated the mean monthly salaries of the commissioned officers at each post based on their assigned corps, grades, military roles and years of military service in accordance with military regulations determining pay rates.

Although detailed subsistence purchasing records were recovered and utilized in this project they were limited to only three commissioned officers who served at Fort Hoskins and were limited to a period of only 21 months between 1862 and 1864. More complete subsistence purchasing records from Fort Hoskins and any subsistence purchasing records from Fort Yamhill should provide additional information on the subsistence article purchasing behaviors of the commissioned officers. In addition, quartermaster records may also contain information on the purchasing behavior of commissioned officers at both posts such as any purchases of military clothing, equipment or supplies from the Quartermaster Department. The *Fort Hoskins Subsistence Account Book* did provide several entries for the purchasing some clothing items (i.e., blankets, trousers, flannel shirts, shoes, drawers, forage caps/hats and socks/stockings) but these entries were limited to purchases made for just two months in 1862. Lastly, any records of sale or purchasing records from the post sutler should provide illuminating data on the consumption and purchasing behaviors of the commissioned officers at both Fort Yamhill and Fort Hoskins. As a license merchant approved by the Secretary of War the post sutler was permitted to sell a variety of goods at his assigned post so long as they also provided access to required clothing, food, grooming and indulgence items and refrained from selling any prohibited items (Eichelberger 2010; USWD 1857).

Although it is known from historical documentation that the captains at Fort Yamhill occupied FYH1 (Eichelberger 2013; Olson and Dole 2003) and that the captains at Fort Hoskins occupied FHH1 (Bryant 2014) it is unknown which commissioned officers occupied each of the remaining officers' quarters at each post.

Given this ambiguity the analysis provided in this project was limited to comparison of the material culture assemblages recovered from the captains' quarters (FYH1, FYH2) in contrast to their subaltern officers (FYH2, FYH3, FHH2, FHH3) instead of in contrast to the individual subaltern officer grades (i.e., first lieutenants and second lieutenants) within each post. If historical records were to be located that could identify the specific occupants of the subaltern officers' quarters then a more detailed and nuanced analysis of status could be made between commissioned officers based on specific military grade (i.e., captain, first lieutenant and second lieutenant).

Several of the above mentioned limitations of this project are based on the lack of historical documentation (i.e., military pay records, subsistence purchasing records and other military records concerning the sutler store and/or historical documentation of who occupied each of the commissioned officers quarters). Some of these data gaps may be filled by historical documentation yet to be discovered in the National Archives in Washington D.C. or local, county or state archives and historical society archives which may warrant additional archival research at these, and other institutions.

The analysis presented in this project was based largely on incomplete and opportunistic archaeological excavations of the commissioned officers quarters at each post. Most importantly none of the commissioned officers' quarters examined in this project have been fully excavated and the above analysis was based on opportunistic samples recovered from each of the commissioned officers' quarters at each post. Much of the archaeological data recovered from Fort Hoskins was collected in the late 1970s with a research objective that was primarily focused on locating the commissioned officers quarters and recovering features and artifacts associated with those buildings (Brauner 1976; 1977; Bowyer 1992). Similarly much of the archaeological data recovered from Fort Yamhill was collected between 2005 and 2011 with similar research objectives to expose the extant building foundations and to recover any associated artifacts (Brauner et al. 2009; Eichelberger and Brauner 2011; Eichelberger 2014). None of these excavations were conducted with the explicit intent to examine the material expressions of status amongst the

commissioned officers or to compare material culture assemblages between commissioned officers.

As a result the number of excavations units and their placement vary between each of the commissioned officers quarters at each post. For example at Fort Yamhill more units were excavated at FYH1 and FYH3 than at FYH2 and the units excavated at FYH2 tended to be confined to the exposure of the building foundations while the units excavated at FYH1 and FYH3 included more areas away from the foundations of those buildings. Similarly at Fort Hoskins more units were excavated at FHH1 and FHH2 than were excavated at FHH3 and the units were also placed differently with the excavations at FHH1 primarily focused on the house and associated privy and dump, the excavations at FHH2 were primarily focused on the house and the associated privy and the excavations at FHH3 were primarily focused on the house and the associated dump. In order to remedy these discrepancies I would recommend that all six of the commissioned officers quarters used in this study be fully excavated so that any sampling errors would be eliminated.

In addition to these limitations several new research questions have been identified as a result of the analysis in this project including: 1) do the patterns observed in the samples recovered from the six commissioned officers' quarters remain consistent when each of the commissioned officers' quarters are fully excavated?; 2) are patterns observed in the material culture assemblages recovered from the first three commissioned officers' quarters (FYH1, FYH2, FYH3) observed in the other three commissioned officers' quarters (FYH4, FYH5, FYH6); 3) are the patterns observed at Fort Yamhill and Fort Hoskins observable at other United States Army posts in the Pacific Northwest, Department of the Pacific or Trans-Mississippi West?; 4) are these patterns consistent within the United States Army over time or did they vary depending of time period?; and 5) are the patterns observed between company grade officers (i.e., captains, first lieutenants and second lieutenants) observable between commissioned officers of other grade groups (i.e., between company grade officers, field grade officers and/or general officers) or amongst commissioned officers within the same grade group (i.e., within field grade officers or general officers)?

The results and discussion of this project should be considered only as an initial examination of the material expression of military authority, social status and economic class within commissioned officers at a 19th century United States Army post. As the previous discussion illustrates this project has several limitations including incomplete archival records and historical documentation and incomplete archaeological excavations at each post. Although this project has these limitations it remains a productive examination of the material expressions of status and has yielded results important to understanding the material expression of status within the 19th century United States Army. It is hoped that the results of this project can, and will be, reexamined and compared within the context of other examinations of the material expression of status of archaeological assemblages associated with commissioned officers within the same military grades (i.e., captains, first lieutenant and second lieutenants) and between different military grades (i.e., field grade or general grade officers) in order to examine how the material expressions of status may be expressed within and between these military grades. These results should also be reexamined and compared with artifact assemblages recovered at other mid-19th century military posts within the Pacific Northwest, the Trans-Mississippi West as well as within the United States Army overall in order to determine what patterns may be local, regional or characteristic of the Army as a whole.

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APPENDIX A: COMMISSION OFFICER BIOGRAPHICAL SKETCHES

In this appendix you will find a brief biographical sketch of the 62 commissioned officers who served at Fort Yamhill and Fort Hoskins between March 1856 and June 1866. Each biographical sketch includes a summary of the officer's military and personal status including his grade, assigned military unit, dates and duties while assigned to the post, date and place of his birth, his age while stationed at the post, date of his military commission, class grade and date of graduation from West Point Military Academy, number of years in the United States Army when assigned to the post, value of his real estate and personal estate as reported in the United States Federal Census Records of 1850 and 1860, his marital status, and the total number of dependents he supported including his wife and any children or wards. The biographical sketch also includes each officer's estimated monthly Army salary calculated using the methods described in Chapter 2 taking into account the officer's grade, unit, length of military service and extra duties. A detailed table containing a summary of each commissioned officer biographical sketch can be found at the end of each section in this appendix (Tables A.2 and A.4).

Fort Yamhill

In this appendix you will find a brief biographical sketch of the twenty-five commissioned officers who were assigned to Fort Yamhill (Table A.1). According to the *Fort Yamhill Post Returns* these twenty-five commissioned officers were assigned to the post between March 1856 and June of 1866 (FYPR 1856). Of the twenty-five officers assigned to the post only nineteen of these officers actually served or were present at the post including seven captains, six first lieutenants and six second lieutenants. The other six commissioned officers served on detached service elsewhere or were on leave during their assignments and never joined their company at Fort Yamhill. The officers who were present at Fort Yamhill served in four regular army regiments and four volunteer regiments including the 4th and 9th United States Infantry, 1st United States Dragoons, 2nd Oregon Mounted Volunteers, 4th California Volunteer Infantry, 1st Oregon Volunteer Infantry and the 1st Washington Territorial Volunteer Infantry.

Fort Yamhill Captains

Six officers served at Fort Yamhill when they held the grade of captain including Jacob Swain Rinearson, DeLancey Floyd-Jones, Andrew Jackson Smith, David Allen Russell, Lyman Samuel Scott and Charles Lafollette. All of the officers served as company commanders (CC) and as post commanders (PC). Three of the officers also served as the post adjutant (PA) while only one served as the assistant commissary of subsistence (ACS) and one served as the acting assistant quartermaster (AAQM). None of the captains at Fort Yamhill served as either the acting assistant commissary of subsistence (AACS), a regimental adjutant (RA) or as a regimental quartermaster (RQM). The average age for the captains was 35.1 years old and the average number

Table A.1 Commissioned Officers Assigned to Fort Yamhill From March 1856 to June 1866

Grade	Last Name	First Name	Company, Regiment	Dates Assigned to Post
Capt	Rinearson	Jacob S.	C, 2nd Ore. Mnt. Vol.	March 1856 - April 1856
	Floyd-Jones	DeLancey	F, 4th U.S. Inf.	July 1856 - August 1857
	Smith	Andrew J.	C, 1st U.S. Drag.	August 1856 - June 1857
	Russell	David A.	K, 4th U.S. Inf.	August 1857 - June 1861
	Archer	James J.	I, 9th U.S. Inf.	July 1861 - September 1861*
	Scott	Lyman S.	D, 4th Cal. Vol. Inf.	November 1861 - July 1865
	Lafollette	Charles E.	A, 1st Ore. Vol. Inf.	August 1865 - June 1866
1st Lt	Taylor	Oliver H. P.	C, 1st U.S. Drag.	August 1856 - June 1857
	Hodges	Henry C.	F, 4 th U.S. Inf.	July 1856 – August 1857*
	Forsythe	Benjamin D.	K, 4th U.S. Inf.	August 1857 – April 1861
	Reynolds	Charles A.	I, 9 th U.S. Inf.	July 1861 – September 1861*
	Owen	Philip A.	I, 9th U.S. Inf.	September 1861
	Garden	James	D, 4th Cal. Vol. Inf.	November 1861 - August 1863
	Lee	Orlando H.	D, 4 th Cal. Vol. Inf.	December 1864 – March 1865*
	Forry	William R.	D, 4 th Cal. Vol. Inf.	April 1865 – July 1865*
	Catley	Henry	A, 1st Ore. Vol. Inf.	June 1865 - August 1865
	Shipley	William J.	A, 1st Ore. Vol. Inf.	August 1865 - July 1866
2nd Lt	Hazen	William B.	K, 4th U.S. Inf.	March 1856 - April 1857
	Wheeler Jr.	James	C, 1st U.S. Drag.	August 1856 - June 1857
	Sheridan	Philip H.	K, 4th U.S. Inf.	July 1856 - September 1861
	Garber	Hezekiah	F, 4 th U.S. Inf.	July 1857 – August 1857
	Camp	Elisha E.	I, 9 th U.S. Inf.	July 1861 – September 1861*
	Davison	James	D, 4th Cal. Vol. Inf.	November 1861 - December 1864
	Rathbun	James S.	D, 4th Cal. Vol. Inf.	November 1864 - July 1865
	Dunbar	William R.	A, 1st Ore. Vol. Inf.	August 1865 - June 1866

*Never Joined Company at Post

of years of experience serving in the either United States Regular and/or Volunteer Army was 6.8 years. Three of the six captains had attended the United States Military Academy at West Point, while the remaining three had all been commissioned into the regular or volunteer service from civilian life. The average estimated mean monthly salary for captains was \$155.69 and the average worth of their estates in 1850 is unknown and in 1860 it was \$1,867. Three of the captains were married and had children while serving at the post and the average number of dependents supported by the captains was 2.0 per officer (Table A.2).

Jacob Swain Rinearson

Born in Butler, Ohio in 1814, Jacob Swain Rinearson served two months as a captain at Fort Yamhill between March 1856 and April 1856 (Fagan 1885:293; FYPR 1856). Rinearson was commissioned as an officer of Company C, 2nd Oregon Mounted

Volunteers on October 10, 1855 and had served in the United States Army Volunteer Service for six months prior to his assignment to Fort Yamhill (Slavik n.d.). During his tenure at Fort Yamhill Captain Rinearson served as the post commander for two months (March 1856 and April 1856) and as the commander of Company C, 2nd Oregon Volunteers for the same two months (March 1856 and April 1856). Captain Rinearson was commissioned from the civilian sector and did not attend the United States Military Academy at West Point and does not appear to have had any previous military experience prior to being stationed at Fort Yamhill (Powell 1900; Thayer 2016). No United States Federal Census records for Captain Rinearson were located for the years of 1850 or 1860, therefore the value of his real and personal estates are unknown, and his biography makes no mention of him being married or that he had children or other wards during his assignment to the post (Fagan 1885:293). Captain Rinearson's estimated monthly Army salary was \$148.50.

DeLancey Floyd-Jones

Born in South Oyster Bay, New York on January 20, 1826, DeLancey Floyd-Jones served fourteen months as a captain at Fort Yamhill between July 1856 and August 1857 (FYPR 1856) (Figure A.1). The fort's Post Returns also list Captain Floyd-Jones as "on leave" for nine months between December 1856 and August 1857. Captain Floyd-Jones was commissioned as an officer of Company F, 4th United States Infantry on July 31, 1854 and had been serving in the United States Army Regular Service for over ten years prior to his assignment to Fort Yamhill (Powell 1900:312). During his fourteen month tenure at Fort Yamhill Captain Floyd-Jones served as the post commander for only two months (July 1856 and November 1856) and as the company commander of Company F, 4th United States Infantry for eleven months (July 1856 to May 1857) (FYPR 1856). Captain Floyd-Jones attended the United States Military Academy at West Point where he ranked 45th out of 59 cadets in the graduating class of 1846 (Powell 1900:312; Thayer 2016). No United States Federal Census records for Captain Floyd-Jones were located, therefore the value of his real and personal estates in 1850 are unknown and his biography indicates that he was widowed and had no children or other wards during his tenure at Fort Yamhill (Revenson 2016; Floyd-Jones 2008). Captain Floyd-Jones's estimated monthly Army salary at Fort Yamhill was \$154.35.



Figure A.1 Captain DeLancey Floyd-Jones After Promotion to Brevet Brigadier General, c. 1865 (Floyd-Jones 2006)

Andrew Jackson Smith

Born in Bucks County, Pennsylvania on April 28, 1815, Andrew Jackson (a.k.a. A.J. or Whiskey) Smith served eleven months as a captain at Fort Yamhill between August 1856 and June 1857 (FYPR 1856) (Figure A.2). The fort's Post Returns also list Captain Smith as "absent on detached service" for five months between February 1857 and June 1857. Smith was commissioned as an officer of Company C, 1st United States Dragoons on July 1, 1838 and had been serving in the United States Army Regular Service for over eighteen years prior to his assignment to Fort Yamhill (Powell 1900:592). During his eleven month tenure at Fort Yamhill Captain Smith served as the post commander for five months (August 1856-October 1856 and December 1856 - January 1857) and as the company commander of Company C, 1st United States Dragoons for thirteen months (May 1856 – May 1857) (FYPR 1856). Captain Smith attended the United States Military Academy at West Point where he ranked 36th out of 45 cadets in the graduating class of 1838 (Powell 1900:592; Thayer 2016). No United States Federal Census records for Captain Floyd-Jones were located, therefore the value of his real and personal estates in 1850 are unknown but his biography indicates that he was married to Anne Smith (m. 1844) and had two children, William (b. 1853) and Joseph (b. 1855) during his tenure at Fort Yamhill (Sesser 2014; Smith 2012). Captain Smith's estimated monthly Army salary was \$175.50.



Figure A.2 Captain Andrew Jackson Smith After Promotion to Brevet Major General, c. 1865 (Smith 2010)

David Allen Russell

Born in Salem, New York on December 10, 1820, David Allen Russell (a.k.a. D.A. Russell) served forty-seven months as a captain at Fort Yamhill between August 1857 – June 1861 (FYPR 1856) (Figure A.3). The fort’s Post Returns also list Captain Russell as “absent on detached service” for seven months six months between October 1857 and June 1861). Captain Russell was commissioned as an officer of Company K, 4th United States Dragoons on September 21, 1846 and had been serving in the United States Army Regular Service for over eleven years prior to his assignment to Fort Yamhill (Powell 1900:567). During his forty-seven month tenure at Fort Yamhill Captain Russell served as the post commander for forty-one months (August 1857 – September 1857, November 1857, January 1858 – February 1858, April 1858, June 1858 – October 1858, December 1858 – August 1860 and October 1860 – May 1861) and as the company commander of Company K, 4th United States Infantry for fifty-one months (June 1857 – August 1861). Captain Russell also served as the post adjutant for twenty-six months (August 1857 – December 1858 and December 1860 – August 1861) (FYPR 1856). Captain Russell attended the United States Military Academy at West Point where he ranked 38th out of 42 cadets in the graduating class of 1845 (Powell 1900:567; Thayer 2016). No United States Federal Census records for the year 1850 were located but United States Federal Census



Figure A.3 Captain David Allen Russell After Promotion to Brigadier General c. 1862 (Russell 2008)

recorded for the year 1860 reported that Captain Russell owned real estate valued at \$770 and a personal estate valued at \$3,230 (USCB 1860a). Samuel Simpson, son of the post sutler in the late 1850s and early 1860s, wrote that Captain Russell and Second Lieutenant Philip H. Sheridan purchased grazing land near the fort and stocked them with cattle which were sold to the Army (Simpson 1899:18). Captain Russell was also reported as unmarried and with no children or other wards in the *United States Federal Census of 1860*. Captain Smith's estimated monthly Army salary was \$162.03.

Lyman Samuel Scott

Born in Litchfield, Connecticut on October 1, 1832, Lyman Samuel Scott served forty-five months as a captain at Fort Yamhill between November 1861 and July 1865 (FYPR 1856) (Figure A.4). The fort's Post Returns list Captain Scott as "absent on detached service" for only one month, March 1865. Captain Scott was commissioned as an officer of Company D, 4th California Volunteer Infantry on September 18, 1861 and had been serving in the United States Army Volunteer Service for only two months prior to his assignment to Fort Yamhill (USAGO 1867:338). During his forty-five month tenure at Fort Yamhill Captain Scott served as the post commander for thirty-one months (November 1861 – August 1863, October 1864 – February 1865, and April 1865 - July 1865) and as the company

commander of Company D, 4th California Volunteer Infantry for forty-five months (November 1861 – July 1865). Captain Scott also served as the post adjutant for twenty-three months (September 1863 – August 1864 and November 1864 – July 1865), as the assistant commissary of subsistence for six months (November 1864 – April 1864) and as the acting assistant quartermaster for six months (November 1864 – April 1865) (FYPR 1856). Captain Scott did not attend the United States Military Academy at West Point and had no previous military experience prior to his assignment to Fort Yamhill (Powell 1900; Thayer 2016). No United States Census records for the year 1850 were located but United States Census recorded for the year 1860 reported that Captain Scott was a miner by profession and owned real estate and a personal estate valued at \$0 (USCB 1860c). His biography reports that Captain Scott was married to Eliza J. Erwin (m. 1858) and he had three children while stationed at the post, Jenny May (b. 1861, d. 1863), a son recorded as “W” (b. 1862) and Grant (b. 1864) (Scott 2016). Both the death of the captain’s daughter Jenny May in 1863 and the birth of his two sons “W” in 1862 and Grant in 1864 were while Captain Scott was stationed at Fort Yamhill (Scott 2016). These events were also recorded in the diary of Corporal Royal A. Bensell (Barth 1959). In 1864 Captain Scott purchased the Sutler’s Store at Fort Hoskins for \$1,300 with First Lieutenant James Garden and two unnamed enlisted soldiers (Barth 1959). Captain Scott’s estimated monthly Army salary was \$146.72.



Figure A.4. Grave Marker of Captain Lyman S. Scott in Salem Pioneer Cemetery, Lot 679, Space 1 SW (Scott 2016)

Charles Edward Lafollette

Born on September 21, 1829 in Putnam County, Indiana Charles Edward Lafollette served eleven months as a captain at Fort Yamhill between July 1865 and June 1866 (FYPR 1856) (Figure A.5). The fort's Post Returns list Captain Lafollette as "absent on detached service" for nine months between September 1865 and May 1866. Captain Lafollette was commissioned as an officer of Company A, 1st Oregon Volunteer Infantry on December 15, 1864 and had been serving in the United States Army Volunteer Service for only eight months prior to his assignment to Fort Yamhill (USAGO 1867:377). During his eleven month tenure at Fort Yamhill Captain Lafollette served as the post commander for two months (August 1865 and June 1866) and as the company commander of Company A, 1st Oregon Volunteer Infantry for eleven months (August 1865 – September 1865 and November 1865 – June 1866). Captain Lafollette also served as the post adjutant for eleven months (August 1865 – June 1866) (FYPR 1856). Captain Lafollette did not attend the



Figure A.5 Captain Charles Edward Lafollette, c. 1898 (La Follette 1898)

United States Military Academy at West Point and had no previous military experience prior to his assignment to Fort Yamhill (Lang 1885:810; Powell 1900; Thayer 2016). No United States Federal Census records for the year 1850 were located but United States Federal Census recorded for the year 1860 reported that Captain Lafollette was an ambrotypist by profession and owned real estate valued at \$800 and a personal estate valued at \$800 (USCB 1860d). The same census records and a biography of Captain Scott reports that he was married to Mary Snodgrass (m. 1857) and had four children while stationed at the post: Edith (b. 1856), Olive (b. 1860), William (b. 1863) and Charles Byron (b. 1865) (Flora 2004; USCB 1860d; West 2009). Captain Scott's estimated monthly Army salary was \$148.50.

Fort Yamhill First Lieutenants

Six officers served at Fort Yamhill when they held the grade of first lieutenant including Oliver H. P. Taylor, Benjamin D. Forsythe, Philip A. Owen, James Garden, Henry Catley and William J. Shipley. Four of the first lieutenants served as post commanders (PC) while none of the first lieutenants served as company commanders (CC). Two first lieutenants served as the post adjutant (PA), two as an assistant commissary of subsistence (ACS), two as an acting assistant commissary of subsistence (AACS), one as a regimental quartermaster (RQM) and four as an acting assistant quartermaster (AAQM). The average age for the first lieutenants was 29.8 years old and the average number of years of experience serving in the either United States Regular and/or Volunteer Army was 4.4 years. Two of the six first lieutenants had attended the United States Military Academy at West Point, while the remaining four had all been commissioned into the volunteer service from civilian life. The average estimated mean monthly salary for first lieutenants was \$137.06 and the average worth of their estates in 1850 was \$0 and in 1860 it was \$133.33. Four of the first lieutenants were married and had children while serving at the post and the average number of dependents supported by the first lieutenants was 1.8 per officer (Table A.2).

Oliver Hazard Perry Taylor

Born in Newport, Rhode Island on September 14, 1825, Oliver Hazard Perry Taylor (a.k.a. O. H. P. Taylor) served eleven months as a first lieutenant (brevet captain) at Fort Yamhill between August 1856 and June 1857 (FYPR 1856) (Figure A.6). The fort's Post Returns also lists First Lieutenant Taylor as "absent" for only one month (June 1857). First Lieutenant Taylor was commissioned as an officer of Company C, 1st United States Dragoons on February 16, 1847 and had been serving in the United States Army Regular Service for over ten years prior to his assignment to Fort Yamhill (Powell 1900:623). During his eleven month tenure at Fort Yamhill First Lieutenant Taylor served as the post commander for four months (February 1857 – May 1857). First Lieutenant Taylor attended the United States Military Academy at West Point where he ranked 31st out of 59 cadets in the graduating class of 1846 (Powell 1900:312; Thayer 2016). United States Census recorded for the year 1850 reported that First Lieutenant Taylor owned no real estate and had a personal estate valued at \$0 (USCB 1850a). A biography of First Lieutenant Taylor reports that he was married to Kate Dewees (m. 1853) and had at least one child, Maria (b. 1853)



Figure A.6 First Lieutenant O. H. P. Taylor, Before 1858 (SLGMSD 2014)

while stationed at the post (SLGMSD 2014). First Lieutenant Taylor's estimated monthly Army salary was \$139.83.

Benjamin D. Forsythe

Born in Kentucky, in 1827 Benjamin D. Forsythe served fifty-five months as a first lieutenant at Fort Yamhill between August 1857 and March 1861 (FYPR 1856). The fort's Post Returns also lists First Lieutenant Forsythe as either "absent" or on "recruitment duty" for seventeen months (August 1857 – April 1858, June 1858 – September 1858, November 1858, February 1860, December 1860 and March 1861). First Lieutenant Forsythe was commissioned as an officer of Company K, 4th United States Infantry on October 8, 1848 and had been serving in the United States Army Regular Service for over ten years prior to his assignment to Fort Yamhill (Powell 1900:314). During his fifty-five month tenure at Fort Yamhill First Lieutenant Forsythe served as the post commander for only one month (September 1860) and as a post adjutant for twenty-three months (January 1859 – November 1860). First Lieutenant Forsythe attended the United States Military Academy at West Point where he ranked 13th out of 38 cadets in the graduating class of 1848 (Powell 1900:314; Thayer 2016). No United States Federal Census records for First Lieutenant Forsythe were located, therefore the value of his real and personal estates in 1850 are unknown. Little else is known of First Lieutenant Forsythe and even the circumstances of his death are unknown. On February 2, 1861 it was reported in the

New York Times that the young Army officer was found dead in his bed at the Delaware House in Port Jervis, New York while on a “sick leave of absence” (*New York Times* 1861; Thayer 2016). The brief obituary makes no mention of First Lieutenant being survived by a wife or children. First Lieutenant Forsythe’s estimated monthly Army salary was \$141.61.

Philip A. Owen

Born in Tennessee in 1833, Philip A. Owen served only one month as a first lieutenant at Fort Yamhill in September 1861 (FYPR 1856). First Lieutenant Owen was commissioned as an officer of Company I, 9th United States Infantry on March 3, 1855 and had been serving in the United States Army Regular Service for over six years prior to his assignment to Fort Yamhill (Powell 1900:515; Thayer 2016). During his single month at Fort Yamhill First Lieutenant Owen served as the post commander, acting assistant commissary of subsistence and acting assistant quartermaster in September 1861. First Lieutenant Owen did not attend the United States Military Academy at West Point and had no prior military experience before his commission as a second lieutenant in 1855 (Powell 1900:515; Thayer 2016). The United States Federal Census records for the years 1850 and 1860 reported that First Lieutenant Owen owned no real estate and had a personal estate valued at \$0 (USCB 1850b; USCB 1860e). The United States Federal Census for the year 1860 also lists First Lieutenant Owen’s wife, Margaret [Elisa] (m. 1857) and his daughter, Margaret (b. 1857) as present at the garrison (Brown 1909:73; USCB 1860e). First Lieutenant Owen’s estimated monthly Army salary was \$134.16.

James Garden

Born in Nova Scotia, Canada in 1829, James Garden served twenty-two months as a first lieutenant at Fort Yamhill between November 1861 and August 1863 (FYPR 1856). First Lieutenant Garden was commissioned as an officer of Company D, 4th California Volunteer Infantry on September 18, 1861 and had been serving in the United States Army Volunteer Service for only three months prior to his assignment to Fort Yamhill (Barth 1959:217; USAGO 1867:338). During his twenty-two months at Fort Yamhill First Lieutenant Garden served as the post adjutant (November 1861 – August 1863), an acting assistant commissary of subsistence (November 1861 – December 1861) and an acting assistant quartermaster (November 1861 – December 1861). First Lieutenant Garden did not attend the United States Military Academy at West Point and had no prior military experience before his commission as a first lieutenant in 1861 (Powell 1900:515; Thayer 2016). The United States Federal Census records for the year 1860 listed First Lieutenant Garden as a miner prior to his commission and reported that he owned no real estate and had a personal estate valued at \$300 (USCB 1860f). In 1864 First Lieutenant Garden purchased the Sutler’s Store at Fort Hoskins for \$1,300 with Captain Scott and two unnamed enlisted soldiers (Barth 1959). First Lieutenant Garden does not appear to have been married or had any children or wards and none were mentioned in the *1860 United States Federal Census* nor were any such persons mentioned by Corporal Royal A. Bensell in his diary, of which First Lieutenant Garden was an antagonistic and prominent subject (Barth 1959). First Lieutenant Garden was also the only

commissioned officer forced to resign his post at Fort Yamhill as a result of disciplinary action. Much to the silent applause of the men serving under his supervision on January 2, 1864 First Lieutenant Garden was arrested for “conduct unbecoming an officer” and a month later he was forced to resign his commission due to his “intemperate habits and misconduct” (Barth 1959:122-124). First Lieutenant Garden’s estimated monthly Army salary at Fort Yamhill was \$129.10.

Henry Catley

Born in Worthington, Ohio on September 6, 1834, Henry Catley served only three months as a first lieutenant at Fort Yamhill between May 1865 and July 1865 (FYPR 1856) (Figure A.7). First Lieutenant Catley was commissioned as an officer of Company A, 1st Oregon Volunteer Infantry on January 2, 1865 and had been serving in the United States Army Volunteer Service for only five months prior to his assignment to Fort Yamhill (Henry 1873:59; USAGO 1867:377). During his three months at Fort Yamhill First Lieutenant Catley served an assistant commissary of subsistence (May 1865 – July 1865), acting assistant quartermaster (May 1865 – July 1865) and as the regimental quartermaster for the 1st Oregon Volunteer Infantry (May 1865 – July 1865). In this last capacity First Lieutenant Catley may have been stationed at Fort Vancouver, the regimental headquarters, but the lieutenant is listed as “present” in the *Fort Yamhill Post Returns* (FYPR 1856). First Lieutenant Catley did not attend the United States Military Academy at West Point but had nine years of military experience as an enlisted soldier in Company K, 9th United States Infantry



Figure A.7 Grave Marker of First Lieutenant Henry Catley. Oakwood Cemetery, Syracuse New York. Section 36, Plot 120 (Diane LM 2012)

(Powell 1900:236-237; Thayer 2016). No United States Census records were located for First Lieutenant Catley so the value of his realestate and personal estate are unknown. Biographies of First Lieutenant Catley report that he married to Mary Ann Mathews (m. unknown) and had at least two children, W. E. (b. 1862) and Richard H. (b. 1864) (Catley 2016). First Lieutenant Catley served at both Fort Yamhill and Fort Hoskins.. First Lieutenant Catley’s estimated monthly Army salary at Fort Yamhill was \$141.83.

William J. Shipley

Born in Missouri on August 12, 1838, William J. Shipley served twelve months as a first lieutenant at Fort Yamhill between July 1865 and June 1866 (FYPR 1856) (Figure A.8). The fort’s *Post Returns* also lists First Lieutenant Shipley as “absent” for only one month (July 1865). First Lieutenant Shipley was commissioned as an officer of Company A, 1st Oregon Volunteer Infantry on December 15, 1864 and had been serving in the United States Army Volunteer Service for only nine months prior to his assignment to Fort Yamhill (USAGO 1867:377). During his twelve months at Fort Yamhill First Lieutenant Shipley served eight months as the post commander (September 1865, November 1865-December 1865, January 1866-May 1866), nine months as the assistant commissary of subsistence (August 1865-September 1865 and December 1865 – June 1866) and ten months as the acting assistant quartermaster (August 1865 – September 1865 and November 1865 – June 1866). First Lieutenant



Figure A.8 Grave Marker of First Lieutenant William J. Shipley. River View Cemetery, Section 09, Lot 22, Grave 8, Portland, Oregon (FriendsofRiverView 2013)

Catley did not attend the United States Military Academy at West Point and had no prior military experience before his commission as a first lieutenant in 1864 (Powell 1900:515; Thayer 2016). The United States Federal Census records for the year 1860 listed First Lieutenant Shipley as a “farm laborer” with no real estate and a personal estate valued at \$100 (USCB 1860g). First Lieutenant Shipley is listed as unmarried and without children or wards in the *United States Federal Census of 1860* but by 1864 he was married to Anna M. and they had their only child, Ellen May (b. 1864) (FriendsofRiverView 2013; Shipley 2016). First Lieutenant Shipley’s estimated monthly Army salary was \$130.62.

Fort Yamhill Second Lieutenants

Seven officers served at Fort Yamhill when they held the grade of second lieutenant including William B. Hazen, Philip H. Sheridan, Hezekiah Garber, James Wheeler Jr., James Davison, James S. Rathbun and William R. Dunbar. Four of the second lieutenants served as post commanders (PC) while none of the second lieutenants served as company commanders (CC). Only one second lieutenant served as a post adjutant (PA). Two of the second lieutenants served as an assistant commissary of subsistence (ACS), four as an acting assistant commissary of subsistence (AACS) and four as an acting assistant quartermaster (AAQM). The average age for the second lieutenants was 28.2 years old and the average number of years of experience serving in the either United States Regular and/or Volunteer Army was 0.9 years. Four of the seven second lieutenants had attended the United States Military Academy at West Point, while the remaining three had all been commissioned into the volunteer service from civilian life. The average estimated mean monthly salary for second lieutenants was \$120.58 and the average worth of their estates in 1850 and 1860 was \$0. Four of the second lieutenants were married, one had a mistress and two had children while serving at the post and the average number of dependents supported by the second lieutenants was 1.0 per officer (Table A.2).

William Babcock Hazen

Born in West Hartford, Vermont on September 27, 1830, William Babcock Hazen served fourteen months as a second lieutenant at Fort Yamhill between March 1856 and April 1857 (FYPR 1856) (Figure A.9). Second Lieutenant Hazen was commissioned as an officer of Company K, 4th United States Infantry on September 4, 1855 and had been serving in the United States Army Regular Service for only seven months prior to his assignment to Fort Yamhill (Powell 1900:366). During his fourteen month tenure at Fort Yamhill Second Lieutenant Hazen served two months as the post commander (May 1856 – June 1856), thirteen months as the acting assistant commissary of subsistence (March 1856 – March 1857) and thirteen months as the acting assistant quartermaster (March 1856 – March 1857) (FYPR 1856). As the first acting assistant quartermaster of the post Second Lieutenant Hazen was responsible for the initial construction of the fort buildings including the officers’ quarters in 1856 (Hazen 1885:430; Olson and Dole 2003; Olson 2007; Sheridan 1888:91). Second Lieutenant Hazen attended the United States Military Academy at West Point where he ranked 28th out of 34 cadets in the graduating class of 1855 (Powell 1900:366; Thayer 2016). The United States Federal Census records for the



Figure A.9 Second Lieutenant William Babcock Hazen, After Promotion to Major General, c. 1865 (Schneyders 2001)

year 1850 listed Second Lieutenant Hazen as a “farmer” with no real estate and a personal estate valued at \$0 (USCB 1850d). Biographies report that Second Lieutenant Hazen was unmarried and without children or wards while stationed at the post (Schneyders 2001). Second Lieutenant Hazen’s estimated monthly Army salary was \$119.68.

Philip Henry Sheridan

Born in Albany, New York on March 6, 1831, Philip Henry Sheridan served sixty-three months as a second lieutenant at Fort Yamhill between July 1856 and September 1861 (FYPR 1856) (Figure A.10). The fort’s *Post Returns* also lists Second Lieutenant Sheridan as “absent on detached service” for eleven months (July 1856 – May 1857). Second Lieutenant Sheridan was commissioned as an officer of Company K, 4th United States Infantry on November 22, 1854 and had been serving in the United States Army Regular Service for three years prior to his assignment to Fort Yamhill (Powell 1900:584). During his sixty-three month tenure at Fort Yamhill Second Lieutenant Sheridan served nine months as the post commander (June 1857 – July 1857, October 1857, December 1857, March 1858, November 1858 and June 1861 – August 1861), seven months as the assistant commissary of subsistence (November 1860 – May 1861), forty-one months as the acting assistant commissary of subsistence (August 1857 – October 1857 and June 1861 – August 1861) and

forty-eight months as the acting assistant quartermaster (August 1857 – August 1861) (FYPR 1856). Second Lieutenant Sheridan replaced Second Lieutenant Hazen as the acting assistant quartermaster of the post and was responsible for completing the construction of the fort buildings including the remodel of officers' quarters in 1857 (Eichelberger 2014:23; Olson and Dole 2003; Olson 2007; Sheridan 1888:91). Second Lieutenant Sheridan attended the United States Military Academy at West Point where he ranked 34th out of 52 cadets in the graduating class of 1853 (Powell 1900:584; Thayer 2016). The United States Federal Census records for the year 1850 lists Second Lieutenant Sheridan as a "cadet" at the United States Military Academy at Cornwall, New York with real estate or personal estate reported (USCB 1850e). Second Lieutenant Sheridan was stationed at Fort Yamhill when the next United States Federal Census was enumerated in 1860 (USCB 1860b), and while most of the soldiers stationed at the post were included in that census Second Lieutenant Sheridan was not and a statewide survey of the United States Federal Census records for that year failed to locate any record of Second Lieutenant Sheridan. Samuel Simpson, son of the post sutler in the late 1850s and early 1860s, wrote that Second Lieutenant Sheridan and Captain David A. Russell purchased grazing land near the fort and stocked them with cattle which were sold to the Army (Simpson 1899:18). Second Lieutenant Sheridan did not officially marry and have children until 1875, but when

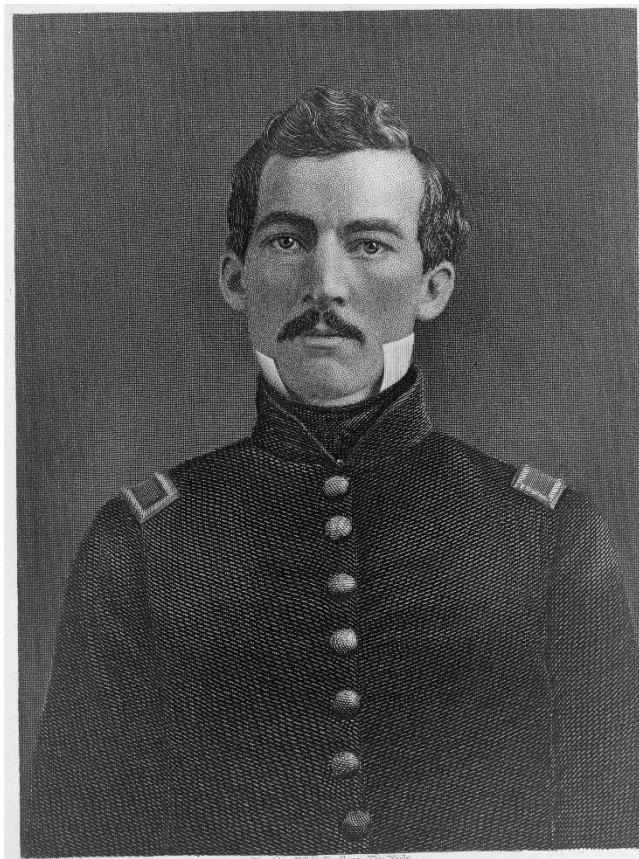


Figure A.10 Brevet Second Lieutenant Philip H. Sheridan, c. 1853 (Library of Congress 2016)

he was stationed at Fort Yamhill he is reported to have had, and supposedly lived with, an Indian mistress named Sidnayoh (a.k.a. Francis), the daughter of a Klickitat chief (Lockley 1916:368-369). Second Lieutenant Sheridan's estimated monthly Army salary was \$119.31.

Hezekiah Garber

Born in Illinois in 1830, Hezekiah Garber served only two months as a second lieutenant at Fort Yamhill between April 1857 and May 1857 (FYPR 1856) (Figure A.11). Second Lieutenant Garber was commissioned as an officer of Company F, 4th United States Infantry on July 31, 1854 and had been serving in the United States Army Regular Service for three years prior to his assignment to Fort Yamhill (Powell 1900:323). During his two month tenure Second Lieutenant Garber held no extra duty positions while serving at Fort Yamhill. Second Lieutenant Garber attended the United States Military Academy at West Point where he graduated dead last, ranked 43rd out of 43 cadets, in the graduating class of 1852 (Powell 1900:323; Thayer 2016). The United States Federal Census records for the year 1850 lists Second Lieutenant Garber as a "cadet" at the United States Military Academy at Cornwall, New York with real estate or personal estate reported (USCB 1850i). Second Lieutenant Garber served at both Fort Yamhill and Fort Hoskins but was officially



Figure A.11 Grave Marker of Second Lieutenant Garber, Kings Valley Cemetery, Benton County, Oregon (Noyes 2004)

assigned to Fort Hoskins where he died of unknown causes on October 12, 1859. Second Lieutenant Garber's estimated monthly Army salary was \$113.50.

James Wheeler Jr.

Born in New York in 1830, James Wheeler Jr. (not to be confused with Joseph "Fighting Joe" Wheeler who never served at Fort Yamhill) served seventeen months as a second lieutenant at Fort Yamhill from August 1856 – March 1857 (FYPR 1856). The fort's *Post Returns* also lists Second Lieutenant Wheeler as "absent on detached service" for two months (March 1857 and June 1857). Second Lieutenant Wheeler was commissioned as an officer of Company C, 1st United States Dragoons on September 8, 1855 and had been serving in the United States Army Regular Service for only six months prior to his assignment to Fort Yamhill (Powell 1900:667). During his seventeen month tenure at Fort Yamhill Second Lieutenant Wheeler served seventeen months as the post adjutant (March 1856 – July 1857), four months as the acting assistant commissary of subsistence (April 1857 – July 1857) and four months as the acting assistant quartermaster (April 1857 – July 1857 (FYPR 1856). Second Lieutenant Wheeler attended the United States Military Academy at West Point where he ranked 18th out of 34 cadets in the graduating class of 1855 (Powell 1900:667; Thayer 2016). No United States Federal Census records for Second Lieutenant Wheeler were located for the year 1850 or 1860 and therefore the value of his real estate and personal estates during those years are unknown. No records concerning the marital status or number of dependents he supported could be located. Second Lieutenant Wheeler's estimated monthly Army salary was \$130.06.

James Davison

Born in Derry, Ireland in 1827, James Davison served twenty-six months as a second lieutenant before being promoted and serving an additional eleven months as a first lieutenant at Fort Yamhill between December 1861 and December 1864 (FYPR 1856) (Figure A.12). The fort's *Post Returns* also lists Second/First Lieutenant Davison as "absent" for two months (November 1861 and December 1864). Second Lieutenant Davison was commissioned as a second lieutenant in Company D, 4th California Volunteer Infantry on September 18, 1861 and had been serving in the United States Army Volunteer Service for only three months prior to his assignment to Fort Yamhill (Barth 1959; No Author 1891:590; USAGO 1867:338). Second Lieutenant Davison was later promoted to first lieutenant in February 1864 following the resignation of First Lieutenant James Garden (Barth 1959:124). During his thirty-eight month tenure at Fort Yamhill Second Lieutenant Davison served thirteen months as the post commander (September 1863 – September 1864), fourteen months as the acting assistant commissary of subsistence (January 1862 – February 1863), twenty months as the assistant commissary of subsistence (March 1863 – October 1864) and thirty-seven months as the acting assistant quartermaster (January 1862 – October 1864). Second Lieutenant Davison did not attend the United States Military Academy at West Point but he was a two year veteran of the Mexican American War (1846-1848) serving and earning a pension with Company G, 2nd Ohio Volunteer Infantry (No Author 1891:590; Powell 1900; Thayer 2016). The United States Federal Census records for the year 1850 lists Second Lieutenant Davison as a



Figure A.12 Grave Marker of Second Lieutenant Davison, Chico Cemetery, Chico, California, Section 8, B Lot 72, Space 4(Adriana 2010)

“laborer for the P.G. Railroad” in Westmoreland County, Pennsylvania with no real estate or personal estate reported (USCB 1850f). No United States Federal Census records for Second Lieutenant Davison were located for the year 1860 and therefore the value of his real estate and personal estates just before his commission are unknown. Biographies of Second Lieutenant Davison reports that he was married to Miss A. M. Waldron (m. 1857) but had no children while stationed at the post (Adriana 2010; Bard 2015; No Author 1891:590). Second Lieutenant Davison’s estimated monthly Army salary was \$122.96.

James Simon Rathbun

Born in Otego, New York on January 11, 1831, James Simon Rathbun served thirty-two months as a first sergeant before being promoted and serving an additional ten months as a second lieutenant at Fort Yamhill between November 1864 – July 1865 (FYPR 1856) (Figure A.13). The fort’s *Post Returns* also lists Second Lieutenant Rathbun as “absent” for nine months (November 1864 – February 1865 and April 1865 – July 1865). Second Lieutenant Rathbun was commissioned as a second lieutenant in Company D, 4th California Volunteer Infantry in June 1864 to fill the vacancy left by Second Lieutenant James Davison who was promoted to first lieutenant after the resignation of First Lieutenant James Garden (Barth 1959:122-124). Prior to his promotion Second Lieutenant Rathbun served as a sergeant in the



Figure A.13 Grave Marker of Second Lieutenant Rathbun, Lone Fir Pioneer Cemetery, Portland, Oregon, Section 35, Lot 181, Grave 2S (VDR 2010)

same company for thirty-four months, two of which were prior to his assignment to Fort Yamhill (Barth 1959; No Author 1891:590). During his ten month tenure as a second lieutenant at Fort Yamhill Lieutenant Rathbun served one month as the post commander (March 1865), but otherwise does not appear to have had any other extra duties. Second Lieutenant Rathbun did not attend the United States Military Academy at West Point but instead was “promoted from the Army” as discussed above (Barth 1959:122-124; Thayer 2016). No United States Federal Census records for Second Lieutenant Rathbun were located for the year 1850 but in 1860 he is reported as a “merchant” with real estate and personal estate valued at \$0 (USCB 1860i). Biographies of Second Lieutenant Rathbun report that he was married to Miss Louvinin Maria Osborn (m. 1863) and had one child, May Irene (b. 1864) while stationed at the post (VDR 2010). Second Lieutenant Rathbun’s estimated monthly Army salary at Fort Yamhill was \$113.50.

William Rice Dunbar

Born in Illinois on April 7, 1839 William Rice Dunbar served eleven months as a second lieutenant at Fort Yamhill between August 1865 and June 1866 (FYPR 1856) (Figure A.14). The fort’s *Post Returns* also lists Second Lieutenant Rathbun as “absent” for nine months between August 1865 and May 1866. Second Lieutenant Dunbar was commissioned as an officer of Company A, 1st Oregon Volunteer Infantry

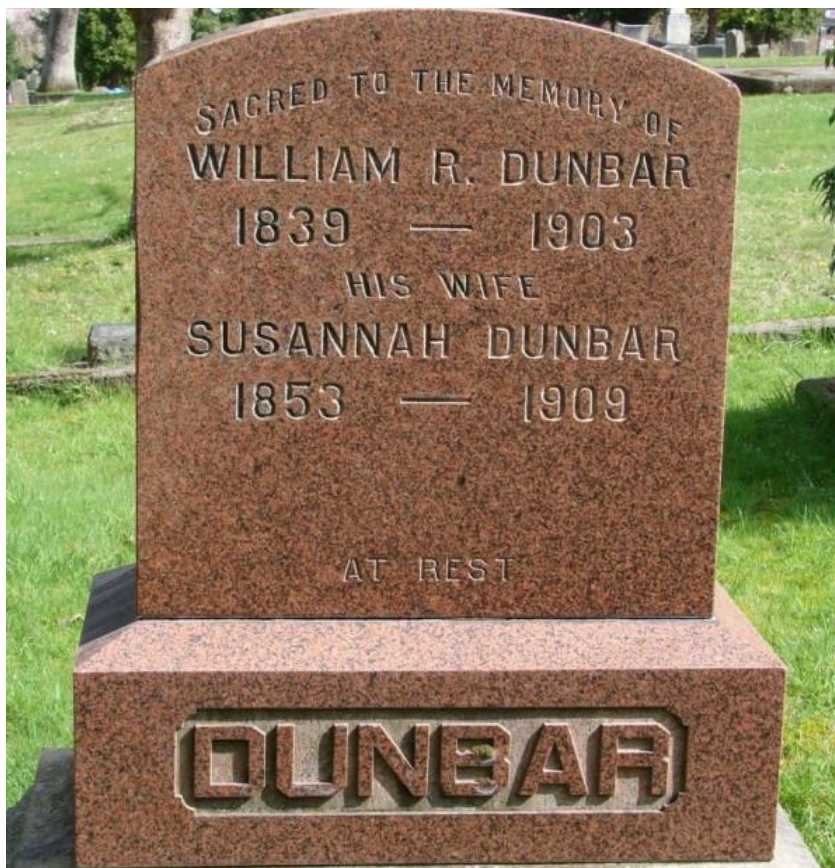


Figure A.14 Grave Marker of Second Lieutenant Dunbar and His Second Wife Susannah, Salem Pioneer Cemetery, Salem, Oregon (Robin 2005)

on December 15, 1864 and had been serving in the United States Army Volunteer Service for only six months prior to his assignment to Fort Yamhill (USAGO 1867:377). During his twelve month tenure as a second lieutenant at Fort Yamhill Lieutenant Dunbar does not appear to have had any extra duties. Second Lieutenant Rathbun did not attend the United States Military Academy at West Point and had no prior military experience before his commission as a second lieutenant in 1864 (Powell 1900; Thayer 2016). No United States Federal Census records for Second Lieutenant Rathbun were located for the year 1850 but in 1860 he is reported as a “farmer” with real estate and personal estate valued at \$0 (USCB 1860j). Biographies of Second Lieutenant Dunbar report that he was married to Miss Eliza Ann Small (m. 1861) and had one child, William C. (b. 1864) while stationed at the post (Robin 2005; USCB 1870a). Second Lieutenant Dunbar’s estimated monthly Army salary was \$113.50.

Officers Assigned to Fort Yamhill but Who “Never Joined Company at Post”

Six commissioned officers were assigned to Fort Yamhill but “never joined company at post” as they were serving various duties on detached service or were on leave (Table A.1). These officers included Captain James J. Archer, First Lieutenants Henry C. Hodges, Charles A. Reynolds, Orlando H. Lee and William R. Forrey

[Forry] and Second Lieutenant Elisha E. Camp (FYPR 1856). Captain James J. Archer was attached to Company I, 9th United States Infantry and was assigned to the post for three months from July 1861 and September 1861 but “never joined company at post”. First Lieutenant Henry C. Hodges was attached to Company F, 4th United States Infantry and was assigned to the post for thirteen months from July 1856 until July 1857 but was serving as the regimental adjutant for the 4th United States Infantry and was stationed at the regimental headquarters at Fort Vancouver, Washington Territory . First Lieutenant Charles A. Reynolds was attached to Company I, 9th United States Infantry and was assigned to the post for only two months in July and August of 1861 but was on detached service during both months and “never joined company at post”. First Lieutenant Orland H. Lee was attached to Company D, 4th California Volunteer Infantry and assigned to the post also for only two months in March and April of 1865 but was serving as the acting regimental adjutant for the 4th California Volunteer Infantry as was stationed at the regimental headquarters at Fort Vancouver, Washington Territory. First Lieutenant William R. Forrey [Forry] was attached to Company D, 4th California Volunteer Infantry and was assigned to the post for only four months between April 1865 and July of 1865 but was on detached service and “never joined company at post”. Second Lieutenant Elisha E. Camp was attached to Company I, 9th United States Infantry and was assigned to the post for only two months in July and August of 1861 but was on detached served and “never joined company at post”.

Table A.2 Summary of Demographic Data for Commissioned Officers at Fort Yamhill

Commissioned Officer		Months at Post	Months Assigned Extra Duties							Years in Service	Est. Mean Monthly Salary (\$)	Age	USMA Cadet	Worth of Estate in:		# of Dep.
Last Name	Grade		PC	CC	PA	ACS	AAC S	RQM	AAQ M					1850	1860	
Rinearson	Capt	2	2	2	-	-	-	-	-	0.50	148.50	42	No	Unk	N/A	0
Floyd-Jones	Capt	14	2	11	-	-	-	-	-	9.75	154.35	30	Yes	Unk	N/A	0
Smith	Capt	11	5	11	-	-	-	-	-	18.08	175.50	41	Yes	Unk	N/A	3
Russell	Capt	47	41	47	26	-	-	-	-	11.75	162.03	31	Yes	Unk	4,000	0
Scott	Capt	45	31	45	23	6	-	-	6	0.25	146.72	31	No	Unk	0	4
Lafollette	Capt	11	2	11	11	-	-	-	-	0.75	148.50	36	No	Unk	1,600	5
Capt Total		130	83	127	60	6	0	0	6	41.08	-	211	3 of 6	Unk	5,600	12
Capt Mean		21.6	13.8	21.1	20	6	0	0	6	6.8	155.69	35.1	0.50	Unk	1,867	2
Taylor	1st Lt	11	4	-	-	-	-	-	-	9.58	139.83	32	Yes	0	N/A	2
Forsythe	1st Lt	45	1	-	23	-	-	-	-	8.83	141.61	30	Yes	Unk	Unk	0
Owen	1st Lt	1	1	-	-	-	1	-	1	6.58	134.16	28	No	0	0	2
Garden	1st Lt	22	-	-	22	-	2	-	2	0.25	129.10	32	No	Unk	300	0
Catley	1st Lt	3	-	-	-	3	-	3	3	0.41	141.83	31	No	N/A	Unk	3
Shipley	1st Lt	11	8	-	-	10	-	-	10	0.75	130.62	26	No	N/A	100	2
1st Lt Total		93	14	0	45	13	3	3	16	26.4	-	179	2 of 6	0	400	9
1st Lt Mean		15.5	3.5	0	22.5	6.5	1.5	3	4	4.4	137.06	29.8	0.33	0	133.3	1.5
Hazen	2nd Lt	14	2	-	-	-	13	-	13	0.58	119.68	26	Yes	0	N/A	0
Sheridan	2nd Lt	63	9	-	-	7	41	-	48	1.75	119.31	25	Yes	0	Unk	1
Garber	2nd Lt	2	-	-	-	-	-	-	-	2.80	113.50	27	Yes	0	N/A	0
Wheeler Jr.	2nd Lt	17	-	-	17	-	4	-	4	0.58	130.06	27	Yes	Unk	N/A	Unk
Davison	2nd Lt	38	13	-	-	20	14	-	34	0.33	122.96	34	No	0	Unk	1
Rathbun	2nd Lt	10	1	-	-	-	-	-	-	0.08	113.50	33	No	Unk	0	2
Dunbar	2nd Lt	11	-	-	-	-	-	-	-	0.75	113.50	26	No	N/A	0	2
2nd Lt Total		155	25	0	17	27	72	0	99	6.87	-	198	4 of 7	0	0	6
2nd Lt Mean		22.1	6.2	0	17	13.5	18	0	24.7	0.9	120.58	28.2	0.57	0	0	1

Fort Hoskins

In this appendix you will find a brief biographical sketch of the thirty-seven commissioned officers who were assigned to Fort Hoskins (Table A.3). According to the *Fort Hoskins Post Returns* these thirty-seven commissioned officers were assigned to the post between July 1856 and July 1865 (FHPR 1856). Of the thirty-seven officers assigned to the post only twenty-eight of these officers actually served or were present at the post including nine captains, eight first lieutenants and eleven second lieutenants. The other nine commissioned officers served on detached service elsewhere or were on leave during their assignments and never joined their company at Fort Hoskins. The officers who were present at Fort Hoskins served in two regular army regiments and four volunteer regiments including the 4th and 9th United States Infantry, 2nd and 4th California Volunteer Infantry, 1st Oregon Volunteer Infantry and the 1st Washington Territorial Volunteer Infantry.

Fort Hoskins Captains

Nine commissioned officers served at Fort Hoskins when they held the grade of captain including Christopher Colon Augur, Frederick Tracey Dent, DeLancey Floyd-Jones, John C. Schmidt, Frederick Seidenstricker, Lyman Samuel Scott, Ephraim Knowlton Palmer, Abner W. Waters and George Byron Currey. All of the officers served as company commanders (CC) while only eight of the officers served as post commanders (PC). Five of the officers served as the post adjutant (PA) while two served as the assistant commissary of subsistence (ACS) and two served as the acting assistant quartermaster (AAQM). None of the captains at Fort Hoskins served as either an acting assistant commissary of subsistence (AACS) or as a regimental quartermaster (RQM). The average age for the captains was 36.6 years old and the average number of years of experience serving in the either United States Regular and/or Volunteer Army was 3.7 years. Three of the nine captains had attended the United States Military Academy at West Point, while the remaining six had all been commissioned into the regular or volunteer service from civilian life. The average estimated mean monthly salary for captains was \$159.99 and the average worth of their estates in 1850 was \$0 and in 1860 was \$1,100. Eight of the captains were married and seven had children while serving at the post. The average number of dependents supported by the captains was 3.4 per officer (Table A.4).

Christopher Colon Augur

Born in Kendall, New York on July 10, 1821 Christopher Colon Augur served sixty-one months as a captain at Fort Hoskins between July 1856 and June 1861 (FHPR 1856) (Figure A.15). The fort's Post Returns also list Captain Augur as "absent on detached service" for two months, July 1857 and September 1860. Captain Augur was commissioned as an officer of Company G, 4th United States Infantry on September 12, 1845 and had been serving in the United States Army Regular Service for over ten years prior to his assignment to Fort Hoskins (Powell 1900:168). During his sixty-one month tenure at Fort Hoskins Captain Augur served as the post commander for fifty-eight months (July 1856 – June 1857, August 1857 – August).

Table A.3 Commissioned Officers Assigned to Fort Hoskins From July 1856 to March 1865

Grade	Last Name	First Name	Company, Regiment	Dates Assigned to Post
Capt	Augur	Christopher C.	G, 4 th U.S. Inf.	July 1856 - July 1861
	Dent	Frederick T.	B, 9 th U.S. Inf.	June 1861 - October 1861
	Floyd-Jones	DeLancey	F, 4 th U.S. Inf.	June 1857 - June 1861
	Schmidt	John C.	B, 2 nd Cal. Vol. Inf.	October 1861 - June 1862
	Seidenstricker	Frederick	D, 1 st Wash. Terr. Vol. Inf.	July 1862 - March 1863
	Scott	Lyman S.	D, 4 th Cal. Vol. Inf.	September 1863 - October 1864
	Palmer	Ephraim K.	B, 1 st Ore. Vol. Inf.	December 1864 - March 1865
	Waters	Abner W.	F, 1 st Ore. Vol. Inf.	January 1865 - February 1865
	Currey	George B.	E, 1 st Ore. Vol. Cav.	January 1865 - February 1865
1st Lt	Macfeely	Robert	G, 4 th U.S. Inf.	July 1856 - July 1861*
	Hodges	Henry C.	F, 4 th U.S. Inf.	June 1857 - June 1861*
	Bonnycastle	John C.	F, 4 th U.S. Inf.	November 1859 - August 1860
	Woods	Charles R.	B, 9 th U.S. Inf.	June 1861 - July 1861*
	Hughes	William B.	B, 9 th U.S. Inf.	July 1861 - August 1861*
	Campbell	Thomas B.	B, 2 nd Cal. Vol. Inf.	October 1861 - June 1862
	Funk	Herman C.	D, 1 st Wash. Terr. Vol. Inf.	July 1862 - March 1863
	Garden	James	D, 4 th Cal. Vol. Inf.	April 1863 - February 1864
	Davison	James	D, 4 th Cal. Vol. Inf.	September 1863 - October 1864
	Walker	Cyrus H.	B, 1 st Ore. Vol. Inf.	December 1864 - March 1865
	Catley	Henry	B, 1 st Ore. Vol. Inf.	January 1865 - March 1865
	Randall	Darius B.	F, 1 st Ore. Vol. Inf.	January 1865 - March 1865
	2nd Lt	Sheridan	Philip H.	K, 4 th U.S. Inf.
Kautz		Augustus V.	G, 4 th U.S. Inf.	July 1856 - November 1856*
Cully		Mervin E.	G, 4 th U.S. Inf.	November 1856 - May 1857*
Gentry		William T.	G, 4 th U.S. Inf.	May 1857 - July 1861*
Garber		Hezekiah	F, 4 th U.S. Inf.	June 1857 - October 1859
McCall		James K.	F, 4 th U.S. Inf.	August 1860 - June 1861
Carlton		Caleb H.	F, 4 th U.S. Inf.	August 1860 - May 1861
Andrews		John N.	F, 4 th U.S. Inf.	December 1860 - June 1861
Quattlebaum		Paul J.	B, 9 th U.S. Inf.	June 1861 - August 1861*
Forney		Philip R.	B, 9 th U.S. Inf.	October 1861
Watson		Grove	B, 2 nd Cal. Vol. Inf.	November 1861 - June 1862
Herzer		Louis	D, 1 st Wash. Terr. Vol. Inf.	July 1862 - October 1864
Blake		John. G.	D, 4 th Cal. Vol. Inf.	March 1864 - July 1864*
Rathbun		James S.	D, 4 th Cal. Vol. Inf.	July 1864 - October 1864
Cullen		John W.	B, 1 st Ore. Vol. Inf.	December 1864 - March 1865
Balch		James A.	F, 1 st Ore. Vol. Inf.	January 1865 - March 1865

*Never Joined Company at Post

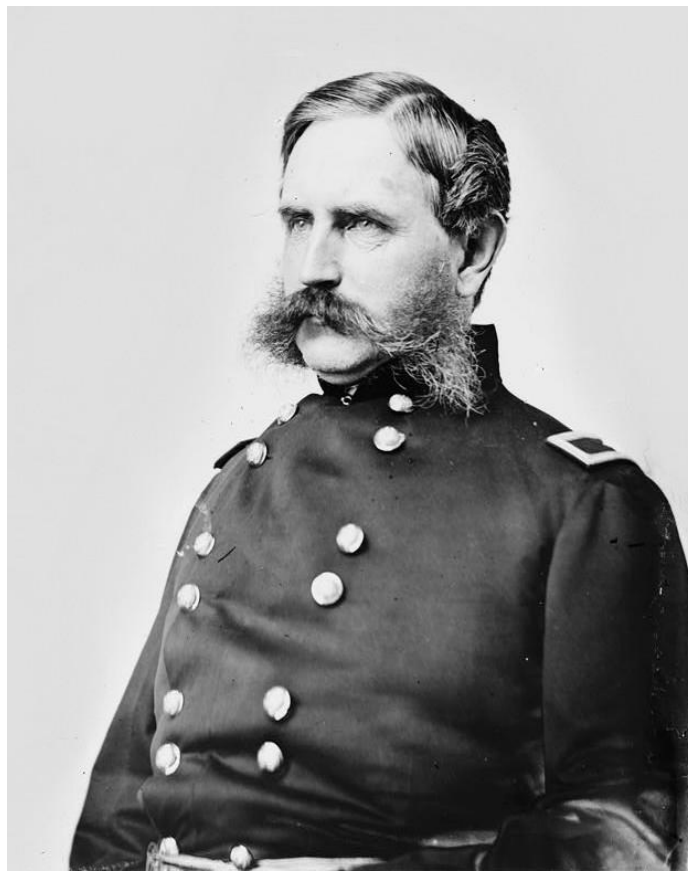


Figure A.15 Captain Christopher Colon Augur After Promotion to Brigadier General c. 1861 (Patterson 2013)

1860 and October 1860 – June 1861) and as the company commander of Company G, 4th United States Infantry for sixty months (July 1856 – May 1861) (FHPR 1856). Captain Augur also served as the post adjutant for fifty-one months (July 1856 – October 1859 and August 1860 – June 1861). Captain Augur attended the United States Military Academy at West Point where he ranked 16th out of 39 cadets in the graduating class of 1843 (Powell 1900:168; Thayer 2016). The United States Federal Census recorded for the years 1850 and 1860 reported that Captain Augur had a real estate and a personal estate valued at \$0 for both years (USCB 1850g; USCB 1860k). Biographies of Captain Augur indicated that he was married to Jane Elizabeth Arnold (m. 1844) and had at least seven children, Colon (b. 1847), Jacob Arnold (b. 1849), Jane Elizabeth (b. 1850), John Preston (b. 1852), Marie Ford (b. 1856), Walter Wheaton (b. 1858) and Ford Spencer (b. 1860) during his tenure at Fort Hoskins (Bryant 2014:154-156; Eicher and Eicher 2001; Stanton 2015a). Captain Augur's estimated monthly Army salary was \$173.69.

Frederick Tracy Dent

Born in White Haven, Missouri on December 17, 1820 Frederick Tracy Dent served seven months as a captain at Fort Hoskins from April 1857 to May 1857 and from June 1861 and October 1861 (FHPR 1856) (Figure A.16). The fort's Post Returns also list Captain Dent as "casually at post and transferred" for two months, April

1857-May 1857. Captain Dent was commissioned as an officer of Company B, 9th United States Infantry on March 30, 1846 and had been serving in the United States Army Regular Service for over ten years prior to his assignment to Fort Hoskins (Powell 1900:280). During his seven month tenure at Fort Hoskins Captain Dent served as the post commander for only four months (July 1861 – October 1861) and as the company commander of Company B, 9th United States Infantry for six months (April 1857, June 1861 – October 1861) (FHPR 1856). Captain Augur also served as the post adjutant for three months (July 1861 – September 1861), assistant commissary of subsistence for three months (July 1861 – September 1861) and acting assistant quartermaster for three months (July 1861 – September 1861). Captain Dent attended the United States Military Academy at West Point where he ranked 33rd out of 39 cadets in the graduating class of 1843 (Powell 1900:280; Thayer 2016). No United States Federal Census recorded for the year 1850 could be located but the United States Federal Census for the year 1860 reported that Captain Dent had a realestate and a personal estate valued at \$0 (USCB 1860). Biographies of Captain Dent indicated that he was married to Hellen Louise Lynd (m. 1852) and had at least three children, Margret Lynde (b. 1854), John Cromwell (b. 1857) and Sydney Hope (b. 1861) during his tenure at Fort Hoskins (Eicher and Eicher 2001; Findagrave.com 2001; Stanton 2015b). Captain Dent's estimated monthly Army salary was \$162.92.



Figure A.16 Captain Frederick Tracy Dent After Promotion to Brigadier General c. 1866 (Deavy 2002)

DeLancey Floyd-Jones

Captain DeLancey Floyd-Jones served at both Fort Yamhill and Fort Hoskins. Born in South Oyster Bay, New York on January 20, 1826, DeLancey Floyd-Jones served forty-one months as a captain at Fort Hoskins between June 1857 and June 1861 (FHPR 1856) (Figure A.1). The fort's Post Returns also list Captain Floyd-Jones as "on leave" for seven months between June 1857 and December 1857 and "on detached service" for thirty months between October 1858 and March 1861. Captain Floyd-Jones was commissioned as an officer of Company F, 4th United States Infantry on July 31, 1854 and had been serving in the United States Army Regular Service for over ten years prior to his assignment to Fort Hoskins (Powell 1900:312). During his forty-one month tenure at Fort Hoskins Captain Floyd-Jones never served as the post commander but did serve as the company commander of Company F, 4th United States Infantry for twenty-five months (June 1857 – December 1857, November 1858 - November 1859, August 1860 – October 1860 and April 1861 – May 1861) (FHPR 1856). Captain Floyd-Jones attended the United States Military Academy at West Point where he ranked 45th out of 59 cadets in the graduating class of 1846 (Powell 1900:312; Thayer 2016). No United States Federal Census records for Captain Floyd-Jones were located, therefore the value of his real and personal estates in 1850 are unknown and his biography indicates that he was widowed and had no children or other wards during his tenure at Fort Hoskins (Revenson 2016; Floyd-Jones 2008). Captain Floyd-Jones's estimated monthly Army salary at Fort Hoskins was \$152.59.

John Conrad Schmidt

Born in Ludwigsburger Landkreis Baden-Wurttemberg, Germany on September 28, 1819, John Conrad Schmidt served nine months as a captain at Fort Hoskins between October 1861 and June 1862 (FHPR 1856) (Figure A.17). Captain Schmidt was commissioned as an officer of Company B, 2nd California Volunteer Infantry on September 5, 1861 and had been serving in the United States Army Volunteer Service for less than one month prior to his assignment to Fort Hoskins (USAGO 1867:338). During his nine month tenure at Fort Hoskins Captain Schmidt served as the post commander for eight months (November 1861 – June 1862) and as the company commander of Company B, 2nd California Volunteer Infantry and the post adjutant for nine months (October 1861 – June 1862) (FHPR 1856). Captain Schmidt did not attend the United States Military Academy at West Point but did serve as an enlisted sailor in the United States Navy during the Mexican War (1846-1848) (Hendricks 2010; Powell 1900; Thayer 2016). No United States Census records for the year 1850 were located but United States Census recorded for the year 1860 reported that Captain Schmidt was a hair dresser living in San Francisco, California (Hendricks 2010). A biography of Captain Schmidt reports that he was married to Sophia Schmidt (m. unknown) and probably had four children, William Henry Smith (b. 1842), Fannie (b. 1858), Sarah M. (b. 1860) and Sally (b. 1862) during his tenure at Fort Hoskins (Hendricks 2010). Captain Schmidt's estimated monthly Army salary was \$148.50.



Figure A.17 Captain John Conrad Schmidt after Promotion to Major, c. 1864
(Hendricks 2010)

Johann Friedrich “Frederick” Seidenstricker

Born in Bad Durkheim Landkreis Rheinland-Pfalz, Germany on March 16, 1816, Johann Friedrich “Frederick” Seidenstricker served nine months as a captain at Fort Hoskins between July 1862 and March 1863 (FHPR 1856). Captain Seidenstricker was commissioned as an officer of Company D, 1st Washington Territorial Volunteer Infantry on April 11, 1862 and had been serving in the United States Army Volunteer Service for only four months prior to his assignment to Fort Hoskins (WNGSHS n.d.:72). During his nine month tenure at Fort Hoskins Captain Seidenstricker served as the post commander and as the company commander of Company D, 1st Washington Territorial Volunteer Infantry for nine months (July 1862 – March 1863) and as the post adjutant for eight months (August 1862 – March 1863) (FHPR 1856). Captain Schmidt did not attend the United States Military Academy at West Point but did gain some militia experience organizing “militia associations” in Pittsburgh, Pennsylvania in the mid-1850s and as a captain of the San Francisco Schuetzein Verien in 1859 (Powell 1900; Sagesteps 2016; Thayer 2016). No United States Census records for the year 1850 or 1860 were located for Captain Seidenstricker, but a biography states that was living in San Francisco, California and working as a “brewer” before commissioned as a captain in the 1st Washington Territorial Volunteer Infantry in 1862 (Sagesteps 2016). A United States Federal Census for the year 1870 listed Captain Seidenstricker as a “jailor” with real estate and a personal

estate valued at \$100 (USCB 1870b). Also according to his biography Captain Seidenstricker was married to Catherine Satter (m. early-1840s) and had three children, Charles J. (b. 1843), Albert (b. 1849) and M. David (b. 1856) during his tenure at Fort Hoskins (Sagesteps 2016). Captain Seidenstricker's estimated monthly Army salary was \$147.39.

Lyman Samuel Scott

Born in Litchfield, Connecticut on October 1, 1832, Lyman Samuel Scott served fourteen months as a captain at Fort Hoskins between April 1863 and October 1864 (FHPR 1856) (Figure A.4). The fort's Post Returns list Captain Scott as "absent on detached service" for only one month, December 1863. Captain Scott was commissioned as an officer of Company D, 4th California Volunteer Infantry on September 18, 1861 and had been serving in the United States Army Volunteer Service for almost two years prior to his assignment to Fort Hoskins (USAGO 1867:338). During his fourteen month tenure at Fort Hoskins Captain Scott served as the post commander for thirteen months (September 1863 – November 1863 and January 1864 – November 1864) and as the company commander of Company D, 4th California Volunteer Infantry for nineteen months (April 1863 – November 1864). Captain Scott also served as the post adjutant for nine months (April 1863 – December 1863), assistance commissary of subsistence and as the acting assistance quartermaster for eight months (January 1864 – August 1864) (FHPR 1856). Captain Scott did not attend the United States Military Academy at West Point and had no previous military experience prior to his assignment to Fort Hoskins (Powell 1900; Thayer 2016). No United States Census records for the year 1850 were located but United States Census recorded for the year 1860 reported that Captain Scott was a "miner" by profession and owned real estate and a personal estate valued at \$0 (USCB 1860c). His biography reports that Captain Scott was married to Eliza J. Erwin (m. 1858) and he had three children while stationed at the post, Jenny May (b. 1861, d. 1863), a son recorded as "W" (b. 1862) and Grant (b. 1864) (Scott 2016). Both the death of the captain's daughter Jenny May in 1863 and the birth of his two sons "W" in 1862 and Grant in 1864 were while Captain Scott was stationed at Fort Yamhill (Scott 2016) and recorded in the diary of Corporal Royal A. Bensell (Barth 1959). Captain Scott served at both Fort Yamhill and Fort Hoskins. In 1864 Captain Scott purchased the Sutler's Store at Fort Hoskins for \$1,300 with First Lieutenant James Garden and two unnamed enlisted soldiers (Barth 1959). Captain Scott's estimated monthly Army salary at Fort Hoskins was \$148.26.

Ephraim Knowlton Palmer

Born in Antwerp, New York on November 21, 1826, Ephraim Palmer served four months as a captain at Fort Hoskins between December 1864 and March 1865 (FHPR 1856) (Figure A.18). Captain Palmer was commissioned as an officer of Company B, 1st Oregon Volunteer Infantry on December 26, 1864 and had been serving in the United States Army Volunteer Service for less than a month prior to his assignment to Fort Hoskins (USAGO 1867:377). During his four month tenure at Fort Hoskins Captain Palmer served as the post commander for one month (December 1864) and as the company commander of Company B, 1st Oregon Volunteer Infantry for four



Figure A.18. Grave Marker of Captain Ephraim Palmer in US Soldiers' and Airmen's Home National Cemetery, Washington D. C. (IWPP 2006)

months (December 1864 – March 1865). Captain Palmer did not attend the United States Military Academy at West Point but the United States Federal Census for the year 1910 lists Palmer as a veteran of the Mexican War (Powell 1900; Thayer 2016; USCB 1910). No United States Federal Census records for Captain Palmer were located for the years of 1850 or 1860, therefore the value of his real and personal estates are unknown. His biography reports that Captain Palmer was married to Amanda Melvina McClellan (m. 1862) and had at least one child, Dilly (b. March 15, 1864, d. April 17, 1864) while stationed at the post (IWPP 2006; McClellan 2016; Oregon Secretary of State 2016a). Captain Palmer's estimated monthly Army salary at Fort Hoskins was \$138.50.

Abner Walter Waters

Born in Saybrook, Ohio on November 30, 1833, Abner Walter Waters served only two months as a captain at Fort Hoskins in January 1865 and February 1865 (FHPR 1856) (Figure A.19). Captain Waters was commissioned as an officer of Company F, 1st Oregon Volunteer Infantry on January 19, 1865 and had been serving in the United States Army Volunteer Service for less than a month prior to his assignment to Fort Hoskins (USAGO 1867:377). During his two month tenure at Fort Hoskins Captain Waters served as the company commander of Company F, 1st Oregon Volunteer Infantry for both months. Captain Waters did not attend the United States Military



Figure A.19 Grave Marker of Captain Abner W. Waters at Hillcrest Cemetery, Weiser, Idaho (Hanson 2008)

Academy at West Point and had no prior military experience (Powell 1900; Thayer 2016). The United States Federal Census recorded for the year 1860 reports that Captain Waters was a “farmer” and had real estate valued at \$3,000 and a personal estate valued at \$2,500 (USCB 1860m). Captain Waters was the widower of Mary A. McCully (d. 1863) and had three children, Winfield Scot (b. 1857), Mary C. (b. 1859) and Edward B. (b. 1862) while stationed at the post (Hanson 2008; USCB1860m). Captain Water’s estimated monthly Army salary at Fort Hoskins was \$138.50.

George Byron Currey

Born in Crawfordsville, Indiana on April 14, 1833, George Byron Currey served only two months as a captain at Fort Hoskins in January and February of 1865 (FHPR 1856) (Figure A.20). Captain Currey was commissioned as an officer of Company E, 1st Oregon Volunteer Cavalry on November 11, 1861 and had been serving in the United States Army Volunteer Service for three years prior to his assignment to Fort Hoskins (Shook 2015). During his two month tenure at Fort Hoskins Captain Currey served as the post commander, but held no other extra duty positions. Captain Currey did not attend the United States Military Academy at West Point but did have previous military experience serving as a captain with the Oregon territorial forces in the 1850s during the Rogue River Indian Wars in Oregon Territory (Powell 1900; Shook 2015; Thayer 2016). No United States Federal Census records for Captain

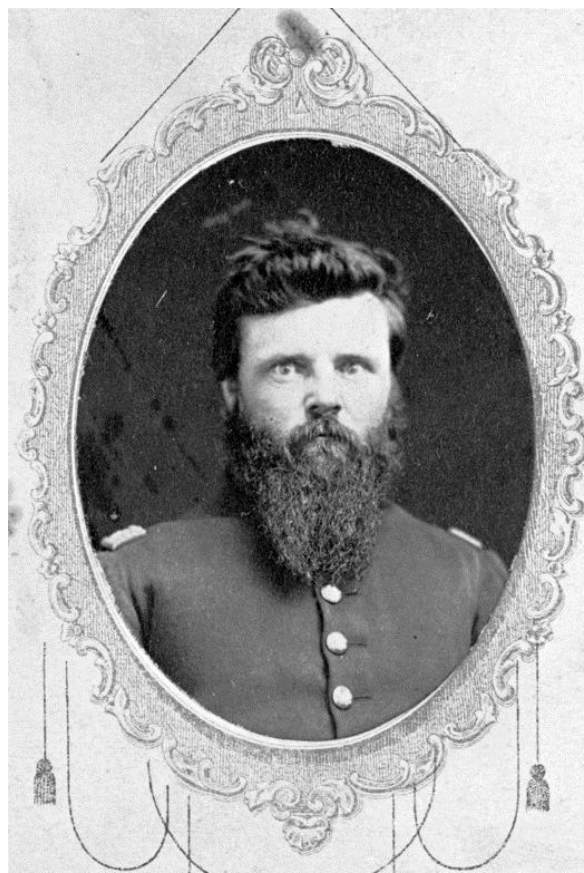


Figure A.20 Captain George Byron Currey, c. early-1860s (Shook 2015)

Currey were located for the year of 1860, therefore the value of his real and personal estates are unknown. Although the exact value of Captain Currey's real estate is unknown he did own some property as he filed donation land claim for 160 acres in Sections 18 and 19 of Township 16 South, Range 4 West in Lane County, Oregon on July 25, 1854 (Shook 2015). Biographical sketches of Captain Currey report that before he was commissioned he was a lawyer and that he was married to Jennie Clarissa Virginia Gaines (m. 1864) while stationed at the post (Asiaticus 2011; Nelson and Onstad 1965:218; Shook 2015). Captain Currey's estimated monthly Army salary at Fort Hoskins was \$138.50.

Fort Hoskins First Lieutenants

Eight officers served at Fort Hoskins when they held the grade of first lieutenant including John Charles Bonnycastle, Thomas B. Campbell, Herman E. Funk, James Garden, James Davison, Cyrus Hamlin Walker, Henry Catley and Darius Bullock Randall. Two of the first lieutenants served as post commanders (PC) while only one of the first lieutenants served as company commanders (CC). Three of the first lieutenants served as the post adjutant (PA), two as an assistant commissary of subsistence (ACS), three as an acting assistant commissary of subsistence (AACS), one as a regimental quartermaster (RQM) and five as an acting assistant quartermaster (AAQM). The average age for the first lieutenants was 30.2 years old and the average number of years of experience serving in the either United States

Regular and/or Volunteer Army was 1.7 years. Only one of the eight first lieutenants had attended the United States Military Academy at West Point, while the remaining seven had all been commissioned into the volunteer service from civilian life. The average estimated mean monthly salary for first lieutenants was \$131.67 and the average worth of their estates in 1850 was \$0 and in 1860 it was \$230.00. Three of the first lieutenants were married and only one had a child while serving at the post. The average number of dependents supported by the first lieutenants was 0.7 per officer (Table A.4).

John Charles Bonnycastle

Born in Charlottesville City, Virginia in 1826 John Charles Bonnycastle served ten months as a first lieutenant at Fort Hoskins between November 1859 and August 1860 (FHPR 1856) (Figure A.21). First Lieutenant Bonnycastle was commissioned as an officer of Company F, 4th United States Infantry on June 27, 1848 and had been serving in the United States Army Regular Service for over eleven years prior to his assignment to Fort Hoskins (Powell 1900:201). During his ten month tenure at Fort Hoskins First Lieutenant Bonnycastle served as the company commander and the post adjutant for nine months (November 1859 – July 1860). First Lieutenant Bonnycastle attended the United States Military Academy at West Point (1843-1846) but did not



Figure A.21 Grave Marker of First Lieutenant Bonnycastle, Cave Hill Cemetery, Louisville, Kentucky (Kolthammer 2014)

graduate, instead taking a commission as a 1st lieutenant and regimental adjutant in the California Volunteers in 1846 to serve in Mexican War (Powell 1900:201; Thayer 2016). After the Mexican War First Lieutenant Bonnycastle was commissioned into the regular service. United States Census recorded for the year 1850 reported that First Lieutenant Bonnycastle owned no real estate and had a personal estate valued at \$0 (USCB 1850h). Lieutenant Bonnycastle is absent from the United States Census taken at Fort Hoskins in 1860 (USCB 1860u). Biographies of First Lieutenant Bonnycastle report that he was married to Harriet Everett (m. 1857) and had two children, Adele Everett (b. 1858) and Mary Shaw (b. 1860) while stationed at the post (Kolthammer 2014). First Lieutenant Bonnycastle's estimated monthly Army salary was \$156.50.

Thomas B. Campbell

Born in New York in 1832 Thomas B. Campbell served nine months as a first lieutenant at Fort Hoskins between October 1861 and June 1862 (FHPR 1856). The fort's Post Returns list First Lieutenant Campbell as "absent on detached service" for only one month, May 1862. First Lieutenant Campbell was commissioned as an officer of Company B, 2nd California Volunteer Infantry on September 5, 1861 and had been serving in the United States Army Volunteer Service for only one month prior to his assignment to Fort Hoskins (Sacramento Daily Union 1861; WPA 1940:2). During his nine month tenure at Fort Hoskins First Lieutenant Campbell served nine months as the acting assistant commissary of subsistence and as the acting assistant quartermaster (November 1861 – June 1862). First Lieutenant Campbell did not attend the United States Military Academy at West Point and had no previous military experience (Powell 1900:201; Thayer 2016). United States Census records for the year 1860 listed First Lieutenant Campbell as a "miner" who owned no real estate and had a personal estate valued at \$0 (USCB 1860n). In the same census records no wife, children or wards were recorded. First Lieutenant Campbell's estimated monthly Army salary was \$125.16.

Herman E. Funk

Not much is known about Herman E. Funk beyond his commission in the 1st Washington Territorial Volunteers and his service records at Fort Hoskins. Herman E. Funk served nine months as a first lieutenant at Fort Hoskins between July 1862 and March 1863 (FHPR 1856). First Lieutenant Funk was commissioned as an officer of Company D, 1st Washington Territorial Volunteer Infantry on March 21, 1862 and had been serving in the United States Army Volunteer Service for only four months prior to his assignment to Fort Hoskins (WNGSHS n.d.:72). During his nine month tenure at Fort Hoskins First Lieutenant Funk served nine months as the acting assistant commissary of subsistence and as the acting assistant quartermaster (July 1862 – March 1863). First Lieutenant Funk did not attend the United States Military Academy at West Point and had no previous military experience (Powell 1900:201; Thayer 2016). No United States Census records nor were any biographies were located for First Lieutenant Funk so the value of his real estate and personal estate are unknown. But the types and quantities of subsistence stores purchased by First Lieutenant Funk while stationed at Fort Hoskins suggests that he was either

unmarried and without dependents or that if he was married they were not present at the post with him (FHSAB 1862). First Lieutenant Funk's estimated monthly Army salary was \$125.16.

James Garden

Born in Nova Scotia, Canada in 1829, James Garden served eleven months as a first lieutenant at Fort Hoskins between April 1863 and February 1864 (FHPR 1856). First Lieutenant Garden was commissioned as an officer of Company D, 4th California Volunteer Infantry on September 18, 1861 and had been serving in the United States Army Volunteer Service for almost two years prior to his assignment to Fort Hoskins (Barth 1959:217; USAGO 1867:338). During his eleven months at Fort Hoskins First Lieutenant Garden served six months as the post commander (April 1863 – August 1863 and December 1864), nine months as the post adjutant (January 1864 – September 1864), four months as the assistant commissary of subsistence (September 1863 – December 1863), five months as the acting assistant commissary of subsistence (April 1863 – August 1863) and nine months as the acting assistant quartermaster (April 1863 – December 1863). First Lieutenant Garden did not attend the United States Military Academy at West Point and had no prior military experience before his commission as a first lieutenant in 1861 (Powell 1900:515; Thayer 2016). The United States Federal Census records for the year 1860 listed First Lieutenant Garden as a “miner” prior to his commission and reported that he owned no real estate and had a personal estate valued at \$300 (USCB 1860f). In 1864 First Lieutenant Garden purchased the Sutler's Store at Fort Hoskins for \$1,300 with Captain Scott and two unnamed enlisted soldiers (Barth 1959). First Lieutenant does not appear to have been married or had any children or wards and none were mentioned in the *1860 United States Federal Census* nor were any such persons mentioned by Corporal Royal A. Bensell in his diary, of which First Lieutenant Garden was an antagonistic and prominent subject (Barth 1959). First Lieutenant Garden was also the only commissioned officer forced to resign his post at Fort Hoskins as a result of disciplinary action. Much to the silent applause of the men serving under his supervision on January 2, 1864 First Lieutenant Garden was arrested for “conduct unbecoming an officer” and a month later he was forced to resign his commission due to his “intemperate habits and misconduct” (Barth 1959:122-124). First Lieutenant Garden served at both Fort Yamhill and Fort Hoskins. First Lieutenant Garden's estimated monthly Army salary at Fort Hoskins was \$130.92.

James Davison

Born in Derry, Ireland in 1827, James Davison served five months as a second lieutenant before being promoted and serving an additional nine months as a first lieutenant at Fort Hoskins between September 1863 and November 1864 (FHPR 1856) (Figure A.12). The fort's *Post Returns* also lists First Lieutenant Davison as “absent” for thirteen months (September 1863 – September 1864). First Lieutenant Davison was commissioned as a second lieutenant in Company D, 4th California Volunteer Infantry on September 18, 1861 and had been serving in the United States Army Volunteer Service for two years prior to his assignment to Fort Hoskins (Barth

1959; No Author 1891:590; USAGO 1867:338). First Lieutenant Davison was originally assigned to Fort Hoskins as a second lieutenant and was later promoted to a first lieutenant in February 1864 following the resignation of First Lieutenant James Garden (Barth 1959:124). During his fourteen month tenure at Fort Hoskins First Lieutenant Davison served one month as the post adjutant, assistant commissary of subsistence and as the acting assistant quartermaster (October 1864). First Lieutenant Davison did not attend the United States Military Academy at West Point but he was a two year veteran of the Mexican American War (1846-1848) serving and earning a pension with Company G, 2nd Ohio Volunteer Infantry (No Author 1891:590; Powell 1900; Thayer 2016). The United States Federal Census records for the year 1850 lists Second Lieutenant Davison as a “laborer for the P.G. Railroad” in Westmoreland County, Pennsylvania with no real estate or personal estate reported (USCB 1850f). No United States Federal Census records for Second Lieutenant Davison were located for the year 1860 and therefore the value of his real estate and personal estates just before his commission are unknown. Biographies of Second Lieutenant Davison reports that he was married to Miss A. M. Waldron (m. 1857) but had no children while stationed at the post (Adriana 2010; Bard 2015; No Author 1891:590). First Lieutenant Davison served at both Fort Yamhill and Fort Hoskins. First Lieutenant Davison’s estimated monthly Army salary at Fort Hoskins was \$122.30.

Cyrus Hamlin Walker

Born at Waiilatpu (Whitman Mission) on December 7, 1838 Cyrus Hamlin Walker was the first Euro-American born in the Oregon Country. Walker served four months as a first lieutenant at Fort Hoskins between December 1864 – March 1865 (FHPR 1856) (Figure A.22). First Lieutenant Walker was commissioned as an officer of Company B, 1st California Volunteer Infantry on December 26, 1864 and had been serving in the United States Army Volunteer Service for less than one month prior to his assignment to Fort Hoskins (Nelson and Onstad 1965:40). During his four month tenure at Fort Hoskins First Lieutenant Walker served as the post commander for only one month (January 1865) and held no other extra duty positions. First Lieutenant Walker did not attend the United States Military Academy at West Point and had no prior military experience before his assignment to the post (Powell 1900; Thayer 2016). The United States Census recorded for the year 1860 reported that First Lieutenant Walker as a “farmer” who owned no real estate but had a personal estate valued at \$550 (USCB 1860o). Biographies of First Lieutenant Walker report that he was unmarried and had no children or wards while stationed at the post (Bollman 2008). First Lieutenant Walker’s estimated monthly Army salary was \$118.50.

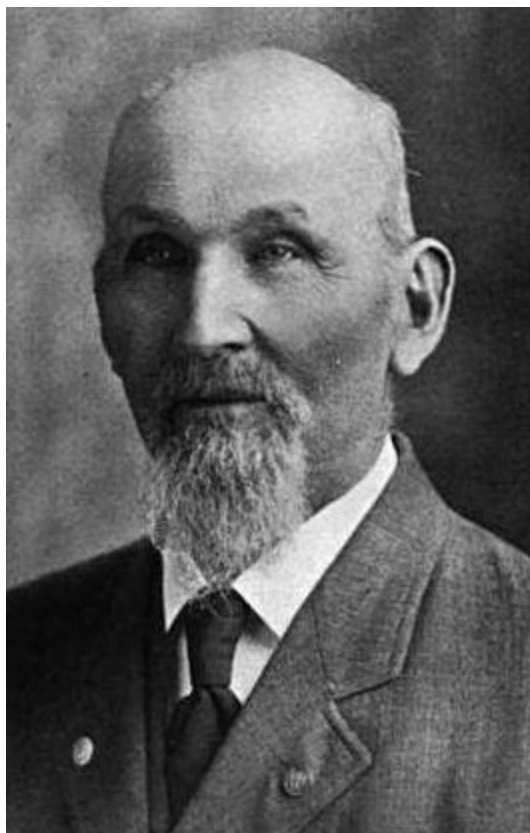


Figure A.22 First Lieutenant Cyrus Hamlin Walker (Bollman 2008)

Henry Catley

Born in Worthington, Ohio on September 6, 1834 Henry Catley served only three months as a first lieutenant at Fort Hoskins between January 1865 and March 1865 (FHPR 1856) (Figure A.7). First Lieutenant Catley was commissioned as an officer of Company A, 1st Oregon Volunteer Infantry on January 2, 1865 and had been serving in the United States Army Volunteer Service for less than one month prior to his assignment to Fort Hoskins (Henry 1873:59; USAGO 1867:377). During his three months at Fort Hoskins First Lieutenant Catley served as the assistant commissary of subsistence and acting assistant quartermaster (December 1864 – March 1865). First Lieutenant Catley did not attend the United States Military Academy at West Point but had nine years of military experience as an enlisted soldier in Company K, 9th United States Infantry (Powell 1900:236-237; Thayer 2016). No United States Census records were located for First Lieutenant Catley so the value of his real estate and personal estate are unknown. Biographies of First Lieutenant Catley report that he was married to Mary Ann Mathews (m. unknown) and had at least two children, W. E. (b. 1862) and Richard H. (b. 1864) (Catley 2016). First Lieutenant Catley served at both Fort Yamhill and Fort Hoskins. First Lieutenant Catley's estimated monthly Army salary at Fort Hoskins was \$138.49.

Darius Bullock Randall

Born on February 10, 1837 Darius Bullock Randall served only three months as a first lieutenant at Fort Hoskins between January 1865 and March 1865 (FHPR 1856) (Figure A.22). First Lieutenant Randall was commissioned as an officer of Company F, 1st Oregon Volunteer Infantry on January 18, 1865 and had been serving in the United States Army Volunteer Service for less than one month prior to his assignment to Fort Hoskins (USAGO 1867:377). During his three months at Fort Hoskins First Lieutenant Randall served held no extra duty positions. First Lieutenant Randall did not attend the United States Military Academy at West Point and had no prior military experience (Thayer 2016). The United States Federal Census records for the year 1860 lists First Lieutenant Randall as a “laborer” with a personal estate valued at \$300 (USCB 1860p). Biographies of First Lieutenant Randall report that he was married to Arabella Josephine Ankeny (m. 1865) but had no children while stationed at the post (Babylou4633 2002; Erb 2012; Myheritage.com). First Lieutenant Randall’s estimated monthly Army salary at Fort Hoskins was \$118.50.



Figure A.22 First Lieutenant Darius Bullock Randall c. mid-1860s (Ancestry.com)

Fort Hoskins Second Lieutenants

Eleven officers served at Fort Hoskins when they held the grade of second lieutenant including Philip Henry Sheridan, William Thomas Gentry, Hezekiah Garber, James K. McCall, Caleb Henry Carlton, John Newman Andrews, Grove Watson, Louis Herzer, James Simon Rathbun, John Winchell Cullen and James A. Balch. Two of the second lieutenants served as post commanders (PC) while only one of the second lieutenants served as company commanders (CC). Two of the second lieutenants served as a post adjutant (PA). Two of the second lieutenants served as an assistant commissary of subsistence (ACS), one as an acting assistant commissary of subsistence (AACS) and three as an acting assistant quartermaster (AAQM). None of the second lieutenants served as a regimental quartermaster (RQM). The average age for the second lieutenants was 29.3 years old and the average number of years of experience serving in the either United States Regular and/or Volunteer Army was 0.9 years. Five of the eleven second lieutenants had attended the United States Military Academy at West Point, while the remaining six had all been commissioned into the volunteer service from civilian life. The average estimated mean monthly salary for second lieutenants was \$116.01 and the average worth of their estates in 1850 was \$0 and in 1860 was \$606.20. Three of the second lieutenants were married and had children while serving at the post and the average number of dependents supported by the second lieutenants was 1.2 per officer (Table A.4).

Philip Henry Sheridan

Born in Albany, New York on March 6, 1831, Philip Henry Sheridan served eleven months as a second lieutenant at Fort Hoskins between July 1856 and May 1857 (FHPR 1856) (Figure A.10). The fort's *Post Returns* also lists Second Lieutenant Sheridan as "absent on detached service" for four months (December 1856, March 1857 – May 1857). Second Lieutenant Sheridan was commissioned as an officer of Company K, 4th United States Infantry on November 22, 1854 and had been serving in the United States Army Regular Service for twenty months prior to his assignment to Fort Hoskins (Powell 1900:584). During his eleven month tenure at Fort Hoskins Second Lieutenant Sheridan served eight months as the acting assistant commissary of subsistence and the acting assistant quartermaster of subsistence (July 1856 – February 1857) (FHPR 1856). Second Lieutenant Sheridan was primarily responsible for the construction of Fort Hoskins (Eichelberger 2014:23; Olson and Dole 2003; Olson 2007; Sheridan 1888:91). Second Lieutenant Sheridan attended the United States Military Academy at West Point where he ranked 34th out of 52 cadets in the graduating class of 1853 (Powell 1900:584; Thayer 2016). The United States Federal Census records for the year 1850 lists Second Lieutenant Sheridan as a "cadet" at the United States Military Academy at Cornwall, New York with real estate or personal estate reported (USCB 1850e). Second Lieutenant Sheridan was stationed at Fort Yamhill when the next United States Federal Census was enumerated in 1860 (USCB 1860b), and while most of the soldiers stationed at the post were included in that census Second Lieutenant Sheridan was not and a statewide survey of the United States Federal Census records for that year failed to locate any record of Second Lieutenant Sheridan. Samuel Simpson, son of the post sutler in the late 1850s and early 1860s, wrote that while stationed at Fort Yamhill Second Lieutenant Sheridan

and Captain David A. Russell purchased grazing land near the fort and stocked them with cattle which were sold to the Army (Simpson 1899:18). Second Lieutenant Sheridan did not officially marry and have children until 1875, but when he was stationed at Fort Yamhill he is reported to have had, and supposedly lived with, an Indian mistress named Sidnayoh (Francis), the daughter of a Klickitat chief (Lockley 1916:368-369). Second Lieutenant Sheridan's estimated monthly Army salary at Fort Hoskins was \$118.34.

William Thomas Gentry

Born in Indiana on July 11, 1832, William Thomas Gentry served fifty-one months as a second lieutenant at Fort Hoskins between May 1857 and July 1861 (FHPR 1856) (Figure A.23). The fort's *Post Returns* also lists Second Lieutenant Gentry as "absent on detached service" for only one month (November 1860). Second Lieutenant Gentry was commissioned as an officer of Company G, 4th United States Infantry on August 1, 1856 and had been serving in the United States Army Regular Service for ten months prior to his assignment to Fort Hoskins (Powell 1900:327). During his fifty-one month tenure at Fort Hoskins Second Lieutenant Gentry served two months as the post commander (July 1857, September 1860) fifty-one months as the assistant commissary of subsistence and the acting assistant quartermaster of subsistence



Figure A.23 Second Lieutenant William Thomas Gentry after Promotion to Captain, c. 1861 (Historical Data Systems 2016)

(March 1857 – June 1861) (FHPR 1856). Second Lieutenant Gentry attended the United States Military Academy at West Point where he ranked 36th out of 49 cadets in the graduating class of 1856 (Powell 1900:327; Thayer 2016). The United States Federal Census records for the year 1860 lists Second Lieutenant Gentry as an unmarried “2nd Lieutenant” with the United States Army holding a personal and real estate valued at \$0 (USCB 1860q). The United States Federal Census for 1870, biographies and the obituary of Second Lieutenant Gentry reported that he was unmarried and with no children while stationed at Fort Hoskins (AGUSMA 1886:25; USCB 1870c; USVAO 2000). The Second Lieutenant Gentry’s estimated monthly Army salary at Fort Hoskins was \$117.83.

Hezekiah Garber

Born in Illinois in 1830, Hezekiah Garber served twenty-one months as a second lieutenant at Fort Hoskins between June 1857 and October 1859 (FHPR 1856) (Figure A.11). Second Lieutenant Garber was commissioned as an officer of Company F, 4th United States Infantry on July 31, 1854 and had been serving in the United States Army Regular Service for three years prior to his assignment to Fort Hoskins (Powell 1900:323). During his twenty-one month tenure Second Lieutenant Garber held no extra duty positions while serving at Fort Hoskins but had a checkered service record while at the post. Because of an illicit affair with a local native woman, Pink Cloud in Sunset, he was transferred to Fort Vancouver for nine months between January and September 1858. Upon returning to Fort Hoskins Second Lieutenant Garber continued this relationship and was placed under arrest for three months between October and December 1858 and was suspended from grade, pay and emoluments for an additional six months (FYPR 1856; United States Senate 1884:15). Second Lieutenant Garber attended the United States Military Academy at West Point where he graduated dead last, ranked 43rd out of 43 cadets, in the graduating class of 1852 (Powell 1900:323; Thayer 2016). The United States Federal Census records for the year 1850 lists Second Lieutenant Garber as a “cadet” at the United States Military Academy at Cornwall, New York with no real estate or personal estate reported (USCB 1850i). Second Lieutenant Garber died of unknown causes on October 12, 1859 while stationed at Fort Hoskins. The exact cause of Second Lieutenant Garber’s death is unknown but the young lieutenant was admitted to the Fort Hoskins hospital at least four times between October 18, 1858 and October 7, 1859 (FHSB 1856). Second Lieutenant Garber suffered from a variety of diseases and injuries including a contusion (bruise), debilitas (general weakened and enfeebled condition) and two cases of gastritis (inflammation of the stomach lining). Second Lieutenant Garber was by far the sickest of the commissioned officer serving at either post and was the only commissioned officer to die at either post ultimately succumbing to his maladies four days after being admitted for his second case of gastritis. Second Lieutenant Garber was buried in the Kings Valley Cemetery located in Benton County, Oregon not far from the site of Fort Hoskins. Second Lieutenant Garber was unmarried and had no recorded children, although he did fall in love with a native woman by the name of Pink Cloud in Sunset and had an illicit affair with the woman while serving at the post (Schablitsky 1996:80-81). During the course of this love affair Second Lieutenant Garber housed the woman in his quarters against

military regulations. When his commanding officer, Captain Augur, discovered the relationship he ordered Second Lieutenant Garber to send the young woman back to the Siletz Reservation and when the lieutenant refused Captain Augur placed him under arrest. Second Lieutenant was charged under a general court martial and found guilty of “contempt and disobedience of orders” and sentenced “to be suspended from grade, pay and emoluments for a period of six months, to be confined to within a mile of the post of his company for the same period and to be reprimanded in general orders” (United States Senate 1884:15). Second Lieutenant Garber served at both Fort Hoskins and Fort Yamhill. Second Lieutenant Garber’s estimated monthly Army salary at Fort Hoskins was \$113.50.

James K. McCall

Born in Tennessee James K. McCall served only five months as a second lieutenant at Fort Hoskins between March 1859 and July 1859 (FHPR 1856). The fort’s *Post Returns* also lists Second Lieutenant McCall as “transferred” for July 1859. Second Lieutenant McCall was commissioned as an officer of Company E, 4th United States Infantry on June 27, 1856 and had been serving in the United States Army Regular Service for three years prior to his assignment to Fort Hoskins (Powell 1900:460). During his five month tenure Second Lieutenant McCall held no extra duty positions while serving at Fort Hoskins (FHPR 1856). Second Lieutenant McCall did not attend the United States Military Academy at West Point and also had no military experience prior to his commission (Thayer 2016). No United States Federal Census records for Second Lieutenant could be located and little biographical information was found, but what is known about Second Lieutenant McCall is that his resigned his commission on April 25, 1861 and was commissioned as a Major in the Confederate States Army (Estes 1912:79; Powell 1900:460). Second Lieutenant McCall was the only commissioned officer who served at either post that resigned his commission to join the Confederacy. Second Lieutenant McCall’s estimated monthly Army salary at Fort Hoskins was \$113.50.

Caleb Henry Carlton

Born in Cleveland, Ohio on September 1, 1836 Caleb Henry Carlton served eleven months as a second lieutenant at Fort Hoskins between August 1860 and June 1861 (FHPR 1856) (Figure A.24). The fort’s *Post Returns* also lists Second Lieutenant Carlton as “on detached service” for August and September 1860 and again on May 1861. Second Lieutenant Carlton was commissioned as an officer of Company F, 4th United States Infantry on October 12, 1859 and had been serving in the United States Army Regular Service for eleven months prior to his assignment to Fort Hoskins (Powell 1900:232). During his eleven month tenure Second Lieutenant Carlton served as the Company Commander for five months between November 1860 and March 1861 (FHPR 1856). Second Lieutenant Carlton attended the United States Military Academy at West Point where he ranked 18th out of 22 cadets, in the graduating class of 1859 (Powell 1900:232; Thayer 2016). No United States Federal Census records for Second Lieutenant Carlton could be located so the value of his personal and real estate are unknown. Biographical sketches of Second Lieutenant Carlton report that he was unmarried and without children while stationed at the post



Figure A.24 Second Lieutenant Caleb Henry Carlton, pre-May 1861 (Benson and Benson 2007)

(Library of Congress 2010). Second Lieutenant Carlton's estimated monthly Army salary at Fort Hoskins was \$118.04.

John Newman Andrews

Born in Wilmington, Delaware on September 16, 1838 John Newman Andrews served seven months as a second lieutenant at Fort Hoskins between December 1860 and June 1861 (FHPR 1856) (Figure A.25). The fort's *Post Returns* also lists Second Lieutenant Andrews as "transferred" for June 1861. Second Lieutenant Andrews was commissioned as an officer of Company F, 4th United States Infantry on July 1, 1860 and had been serving in the United States Army Regular Service for six months prior to his assignment to Fort Hoskins (Powell 1900:163). During his seven month tenure Second Lieutenant Andrews held no extra duty positions while serving at the post (FHPR 1856). Second Lieutenant Andrews attended the United States Military Academy at West Point where he ranked 33rd out of 41 cadets, in the graduating class of 1860 (Powell 1900:163; Thayer 2016). During the United States Federal Census of 1850 Second Lieutenant was a minor and the United States Federal Census of 1860 lists him as a "student" at the United States Military Academy at Cornwall, New York with no real estate or personal estate reported on either census (USCB 1860r). Biographical sketches of Second Lieutenant Andrews report that he was unmarried

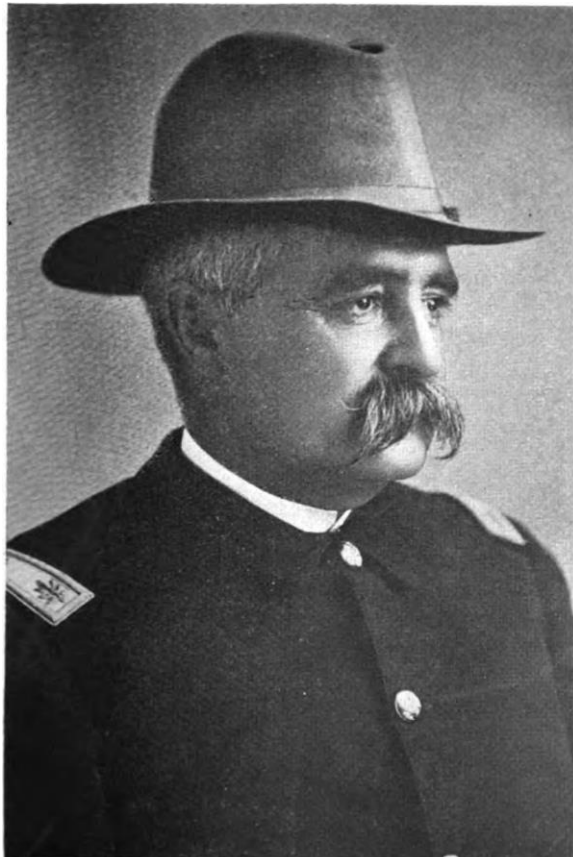


Figure A.25 Second Lieutenant John Newman Andrews after Promotion to Colonel, c. 1865 (AGUSMA 1901:128)

and without children while stationed at the post (AGUSMA 1901:143). Second Lieutenant Andrew's estimated monthly Army salary at Fort Hoskins was \$113.50.

Grove Watson

Born in 1828 Grove Watson served nine months as a second lieutenant at Fort Hoskins between October 1861 and June 1862 (FHPR 1856). The fort's *Post Returns* also lists Second Lieutenant Watson as on "detached service" for all but one month, October 1861, during this time. Second Lieutenant Watson was commissioned as an officer of Company B, 2nd California Volunteer Infantry on September 5, 1861 and had been serving in the United States Army Volunteer Service for only one month prior to his assignment to Fort Hoskins (Orton 1890:441). During his nine month tenure Second Lieutenant Watson held no extra duty positions while serving at the post (FHPR 1856). Second Lieutenant Watson did not attend the United States Military Academy at West Point nor did he have any previous military experience (Powell 1900; Thayer 2016). No United States Federal Census records for Second Lieutenant Watson could be located so the value of his personal and real estate are unknown. It is also unknown if Second Lieutenant Watson was married or had children while serving at the post. Second Lieutenant Watson's estimated monthly Army salary at Fort Hoskins was \$113.50.

Louis Herzer

Born in Germany in 1821 Louis Herzer served twenty-eight months as a second lieutenant at Fort Hoskins between July 1862 and October 1864 (FHPR 1856). The fort's *Post Returns* also lists Second Lieutenant Herzer as on "detached service at the Siletz Blockhouse" for all but one month, July 1862, during this time. Second Lieutenant Herzer was commissioned as an officer of Company D, 1st Washington Territorial Volunteer Infantry on February 19, 1862 and had been serving in the United States Army Volunteer Service for six month prior to his assignment to Fort Hoskins (WNGSHS n.d.:72). During his twenty-eight month tenure Second Lieutenant Herzer served as the post commander for one month (August 1863) and the post adjutant for another (July 1862) (FHPR 1856). Second Lieutenant Herzer did not attend the United States Military Academy at West Point nor did he have any previous military experience (Powell 1900; Thayer 2016). No United States Federal Census records for Second Lieutenant Herzer could be located so the value of his personal and realestate are unknown. It is also unknown if Second Lieutenant Herzer was married or had any children while serving at the post. Second Lieutenant Herzer's estimated monthly Army salary at Fort Hoskins was \$113.85. Second Lieutenant Herzer was a heavy drinker. In his diary Corporal Bensell wrote what on September 20, 1864 Second Lieutenant Herzer arrived at Fort Yamhill for Court Martial duty drunk and an analysis of the Fort Hoskins Subsistence Account Book indicates that 76.3 percent of Second Lieutenant Herzer's purchases from the fort's Commissary Department were for common and superior whiskey (FHSAB 1862).

James Simon Rathbun

Born in Otego, New York on January 11, 1831, James Simon Rathbun served four months as a second lieutenant at Fort Hoskins between July and October 1864 (FHPR 1856) (Figure A.13). The fort's *Post Returns* also lists Second Lieutenant Rathbun on "detached service" for two months (August 1864 and October 1864). Officer Rathbun was commissioned as a second lieutenant in Company D, 4th California Volunteer Infantry in June 1864 to fill the vacancy left by Second Lieutenant James Davison who was promoted to first lieutenant after the resignation of First Lieutenant James Garden (Barth 1959:122-124). Prior to his promotion Second Lieutenant Rathbun served as a sergeant in the same company for thirty-four months, all of which were prior to his assignment to Fort Hoskins (Barth 1959; No Author 1891:590). During his four month tenure at Fort Hoskins Second Lieutenant Rathbun served one month as the assistant commissary of subsistence and the acting assistant quartermaster in September 1864. Second Lieutenant Rathbun did not attended the United States Military Academy at West Point but instead was "promoted from the Army" as discussion above (Barth 1959:122-124; Thayer 2016). No United States Federal Census records for Second Lieutenant Rathbun were located for the year 1850 but in 1860 he is reported as a "merchant" with realestate and personal estate valued at \$0 (USCB 1860i). Biographies of Second Lieutenant Rathbun report that he was married to Miss Louvinin Maria Osborn (m. 1863) and had one child, May Irene (b. 1864) while stationed at the post (VDR 2010). Second Lieutenant Rathbun's estimated monthly Army salary at Fort Hoskins was \$116.83.

John Winchell Cullen

Born in La Porte, Indiana on June, 18, 1838, John Winchell Cullen served four months as a second lieutenant at Fort Hoskins between December 1864 and March 1865 (FHPR 1856) (Figure A.26). Second Lieutenant Cullen was commissioned as an officer in Company B, 1st Oregon Volunteer Infantry on December 26, 1864 and had been serving in the United States Army Volunteer Service for less than a month prior to his assignment to Fort Hoskins (USAGO 1867:377). During his four month tenure Second Lieutenant Cullen served as the post adjutant for four months between December 1864 and March 1865 (FHPR 1856). Second Lieutenant Cullen did not attend the United States Military Academy at West Point but he did gain some military experience as an enlisted soldier in the Yakima War (c. 1855-1857) before returning to civilian life in Portland, Oregon (Powell 1900; Thayer 2016; Wertz 2013). During the United States Federal Census of 1850 Second Lieutenant Cullen was a “minor” and the United States Federal Census of 1860 lists him as a “master saddler” with a real estate and a personal estate valued at \$1,800 (USCB 1860s). Second Lieutenant Cullen was married to Anna E. Hembree (m. 1859) and had three children, Caroline [Carrie] H. (b. 1860), Annie O. (b. 1862) and William D. (b. 1864) while serving at the post (Cullen 2016; Oregon Secretary of State 2016a; Save Our Seven 2011). Second Lieutenant Cullen’s estimated monthly Army salary at Fort Hoskins was \$123.50.



Figure A.26. Second Lieutenant John Winchell Cullen later in life (Snyder 2012)

James A. Balch

Born in Sullivan County, Indiana in 1826, James A. Balch served three months as a second lieutenant at Fort Hoskins between January and March 1865 (FHPR 1856) (Figure X). Second Lieutenant Balch was commissioned as an officer in Company F, 1st Oregon Volunteer Infantry on January 18, 1865 and had been serving in the United States Army Volunteer Service for less than a month prior to his assignment to Fort Hoskins (USAGO 1867:377). During his three month tenure Second Lieutenant Cullen held no extra duty positions (FHPR 1856). Second Lieutenant Balch did not attend the United States Military Academy at West Point and had no prior military experience (Powell 1900; Thayer 2016). The United States Federal Census of 1860 lists him as an “ambrotypist” with a real estate and a personal estate valued at \$1,231 (USCB 1860t). Second Lieutenant Balch was married to Harriet Snyder (m. 1860) and was the stepfather of two children, Allie Gallagher (b. 1855) and William Helm (b. 1858) as well as the biological father of another child, Frederick (b. 1862) while serving at the post (USCB 1860t; USCB 1870d; Oregon Secretary of State 2016c). When Second Lieutenant Balch enlisted with the 1st Oregon Volunteer Infantry the family did not move with Second Lieutenant Balch to the fort but instead remained in Lebanon, Oregon (Coon 1924:34). Second Lieutenant Balch’s estimated monthly Army salary at Fort Hoskins was \$113.50.

Officers Assigned to Fort Hoskins but Who “Never Joined Company at Post”

Nine commissioned officers were assigned to Fort Hoskins but “never joined company at post” as they were serving various duties on detached service or were on leave (Table A.3). These officers included First Lieutenants Robert Macfeely, Henry C. Hodges, Charles R. Woods, William B. Hughes and Second Lieutenants Augustus Valentine Kautz, Mervin E. Cully, Paul J. Quattlebaum, Philip R. Forney and John G. Blake (FHPR 1856). First Lieutenant Robert Macfeely was attached to Company G, 4th United States Infantry and was assigned to the post for sixty-one months from July 1856 to July 1861 but “never joined company at post” because he was serving as the regimental quartermaster and was stationed at Fort Vancouver, Washington Territory. First Lieutenant Henry C. Hodges was attached to Company F, 4th United States Infantry and was assigned to the post for forty-nine months between June 1857 and June 1861 but “never joined company at post” because he was serving as the regimental adjutant and was also stationed at Fort Vancouver, Washington Territory. First Lieutenant Charles R. Woods was attached to Company B, 9th United States Infantry and was assigned to the post for only two months, June and July 1861, but was on detached service and “never joined company at post”. First Lieutenant William B. Hughes was attached to Company B, 9th United States Infantry and was assigned to the post for only two months, July and August 1861, but was on detached service and “never joined company at post”. Second Lieutenant Augustus Valentine Kautz was attached to Company G, 4th United States Infantry and was assigned to the post for five months between July and November 1856, but was on detached service and “never joined company at post”. Second Lieutenant Mervin E. Cully was attached to Company G, 4th United States Infantry and was assigned to the post for seven months between November 1856 and May 1857, but was on detached service and “never joined company at post”. Second Lieutenant Paul J. Quattlebaum was

attached to Company B, 9th United States Infantry and was assigned to the post for only two months, June and July 1861, but was on detached service and “never joined company at post”. Second Lieutenant Philip R. Forney was attached to Company B, 9th United States Infantry and was assigned to the post for only one month, October 1861, but was on detached service and “never joined company at post”. Second Lieutenant John G. Blake was attached to Company D, 4th California Volunteer Infantry and was assigned to the post for five months between March and July 1864, but was on detached service and “never joined company at post”.

Table A.4 Summary of Demographic Data for Commissioned Officers at Fort Hoskins

Commissioned Officer		Months at Post	Months Assigned Extra Duties							Years in Service	Est. Mean Monthly Salary	Age	USMA	Worth of Estate in:		# of Dep.
Last Name	Grade		PC	CC	PA	ACS	AAC S	RQM	AAQ M					1850	1860	
Augur	Capt	61	58	60	51	-	-	-	-	10.9	173.69	35	Yes	0	0	8
Dent	Capt	7	4	6	3	3	-	-	3	10.2	162.92	41	Yes	Unk	0	4
Floyd-Jones	Capt	41	-	25	-	-	-	-	-	9.7	152.59	31	Yes	Unk	Unk	0
Schmidt	Capt	9	8	9	9	-	-	-	-	0.2	148.50	42	No	Unk	0	5
Seidenstricker	Capt	9	9	9	8	-	-	-	-	0.3	147.39	46	No	Unk	Unk	4
Scott	Capt	14	13	14	9	8	-	-	8	1.7	148.26	34	No	Unk	0	4
Palmer	Capt	4	1	4	-	-	-	-	-	0.1	138.50	37	No	Unk	Unk	2
Currey	Capt	2	2	2	-	-	-	-	-	0.1	138.50	32	No	N/A	Unk	1
Waters	Capt	2	-	3	-	-	-	-	-	0.1	138.50	32	No	N/A	5,500	3
Capt Total		149	95	132	80	11	0	0	11	33.3	-	330	3 of 9	0	5,500	31
Capt Mean		16.5	13.5	14.6	16	5.5	0	0	5.5	3.7	159.99	36.6	0.33	0	1,100	3.4
Bonnycastle	1st Lt	10	-	10	10	-	-	-	-	10.0	156.50	34	Yes	Unk	0	3
Campbell	1st Lt	9	-	-	-	-	9	-	9	0.2	125.16	29	No	Unk	0	0
Funk	1st Lt	9	-	-	-	-	9	-	9	0.4	125.16	28	No	Unk	Unk	0
Garden	1st Lt	11	6	-	9	-	5	-	9	0.7	130.92	32	No	Unk	300	0
Davison	1st Lt	14	-	-	1	4	-	-	1	2.1	118.50	36	No	0	Unk	1
Walker	1st Lt	4	4	-	-	-	-	-	-	0.1	118.50	26	No	N/A	550	0
Catley	1st Lt	3	-	-	-	3	-	2	3	0.1	138.49	30	No	N/A	Unk	Unk
Randall	1st Lt	3	-	-	-	-	-	-	-	0.2	118.50	27	No	N/A	300	1
1st Lt Total		63	10	10	20	7	23	2	31	13.8	-	242	1 of 8	0	1,150	5
1st Lt Mean		7.8	5	10	6.6	3.5	7.6	2	6.2	1.7	131.67	30.2	0.12	0	230	0.7

Table A.4 Summary of Demographic Data for Commissioned Officers at Fort Hoskins (Continued)

Commissioned Officer		Months at Post	Months Assigned Extra Duties							Years in Service	Est. Mean Monthly Salary	Age	USMA	Worth of Estate in:		# of Dep.
Last Name	Grade		PC	CC	PA	ACS	AACS	RQM	AAQM					1850	1860	
Sheridan	2nd Lt	11	-	-	-	-	8	-	8	1.7	118.34	25	Yes	0	Unk	0
Gentry	2nd Lt	51	2	-	-	51	-	-	51	0.8	117.83	24	Yes	N/A	0	0
Garber	2nd Lt	21	-	-	-	-	-	-	-	3.0	113.50	27	Yes	0	N/A	0
McCall	2nd Lt	5	-	-	-	-	-	-	-	2.8	113.50	Unk	No	Unk	Unk	Unk
Carlton	2nd Lt	11	-	5	-	-	-	-	-	0.9	118.04	23	Yes	N/A	Unk	0
Andrews	2nd Lt	7	-	-	-	-	-	-	-	0.5	113.50	22	Yes	N/A	0	0
Watson	2nd Lt	9	-	-	-	-	-	-	-	0.2	113.50	33	No	Unk	Unk	Unk
Herzer	2nd Lt	28	1	-	1	-	-	-	-	0.5	113.85	41	No	Unk	Unk	Unk
Rathbun	2nd Lt	4	-	-	-	1	-	-	1	0.1	116.83	33	No	Unk	0	2
Cullen	2nd Lt	4	-	-	4	-	-	-	-	0.1	123.50	26	No	N/A	1800	4
Balch	2nd Lt	3	-	-	-	-	-	-	-	0.2	113.50	39	No	0	1231	4
2nd Lt Total		154	3	5	5	52	8	0	60	10.8	-	293	5 of 11	0	3031	10
2nd Lt Mean		14	1.5	5	2.5	26	8	0	20	0.9	116.01	29.3	0.45	0	606.2	1.2

APPENDIX B: COMMISSIONED OFFICER ESTIMATED MEAN MONTHLY SALARY CALCULATIONS

In this appendix you will find the formula and the tables used to calculate the Estimated Mean Monthly Salary (EMMS) for the commissioned officers found in Chapter 4. The EMMS of each commissioned officer stationed at both posts was calculated as a means to estimate and compare each officer's estimated income as United States Army officers. The EMMS was calculated as a function of the variables discussed in Chapter 4 and include the pay ascribed to the officers' military grade and type of military unit, the type of extra duties the officer held and the length of their military service. A detailed description of the methods used to calculate these values is presented in Chapter 3. A narrative description of these variables for each commissioned officer can be found in the officer biographies presented in Appendix A and the formula and the data tables used to calculate the EMMS for each commissioned officer can be found below in this appendix.

Estimated Mean Monthly Salary (EMMS) Formula

The EMMS for each commissioned officer is a function of the officer's grade (captain, first lieutenant or second lieutenant), type of military unit (mounted or non-mounted), extra duties (i.e, company commander, post adjutant, commissary of subsistence, quartermaster etc.) and the bonus they received based on their length of military service:

$$\text{EMMS} = \text{Grade and Unit Pay} + \text{Extra Duty Pay} + \text{Tenure Pay}$$

Each of the variables (grade, military unit, extra duty and tenure pay) was multiplied by the number of months the officer held the specific grades, served with the specific type of unit, completed the extra duties and earned his tenure bonus. These values were then summed and the sum divided by the total number of months the officer served at the post thus providing the estimated average (or mean) salary the officer earned while serving at the post. The formula used was:

$$\text{EMMS} = ((R \times M_1) + (X_1 \times M_2) + (X_2 \times M_3) + (X_3 \times M_4) + (X_4 \times M_5) + (Y \times M_1))/M_1$$

Where:

E = Estimated Monthly Pay

R = Grade/Unit Pay Rate

M₁ = Number of Months Stationed at Post

M₂ = Number of Months Served Extra Duty 1

M₃ = Number of Months Served Extra Duty 2

M₄ = Number of Months Served Extra Duty 3

M₅ = Number of Months Served Extra Duty 4

X₁ = Extra Duty 1 Pay Rate

X₂ = Extra Duty 2 Pay Rate

X₃ = Extra Duty 3 Pay Rate

X₄ = Extra Duty 4 Pay Rate

Y = 9.00 for Every 5 Years of Military Service

The EMMS values calculated here are only *estimates* of what the officers likely earned based on their individual grades, units, duties and length of military service. Unfortunately no pay records for either post have been located to date and therefore none of the figures below have been confirmed.

Estimated Mean Monthly Salary (EMMS) Formula Calculation Tables

The following tables contain the Estimated Mean Monthly Salary calculations for each of the commissioned officers who served at either Fort Yamhill or Fort Hoskins. The commissioned officers who served at Fort Yamhill will be presented first (Tables B.1-B.3) followed by the commissioned officers who served at Fort Hoskins (Tables B.4-B.6).

Table B.1 Estimated Mean Monthly Salary for Captains Serving at Fort Yamhill

Officer	Duties	# of Months		Pay Rate		Product (\$)	
Rinearson, Jacob S.	Captain (Mounted)	2	x	138.50	=	277.00	
	Company Commander	2	x	10.00	=	20.00	
		Subtotals		2		-	297.00
		Mean		297.00 / 2 =		148.50	
Floyd-Jones, DeLancy	Captain (Non-Mounted)	14	x	128.50	=	1799.00	
	Company Commander	11	x	10.00	=	110.00	
	Tenure Bonus (9.75 Years)	14	x	18.00	=	252.00	
		Subtotals		14		-	2161.00
	Mean		2161.00 / 14 =		154.35		
Smith, Andrew J.	Captain (Mounted)	11	x	138.50	=	1523.50	
	Company Commander	11	x	10.00	=	110.00	
	Tenure Bonus (18.08 Years)	11	x	27.00	=	297.00	
		Subtotals		11		-	1930.50
	Mean		1930.50 / 11 =		175.50		
Russell, David A.	Captain (Non-Mounted)	47	x	128.50	=	6039.50	
	Company Commander	47	x	10.00	=	470.00	
	Post Adjutant	26	x	10.00	=	260.00	
	Tenure Bonus (11.75 Years)	47	x	18.00	=	846.00	
		Subtotals		47		-	7615.50
	Mean		7615.50 / 47 =		162.03		
Scott, Lyman S.	Captain (Non-Mounted)	45	x	128.50	=	5782.50	
	Company Commander	45	x	10.00	=	450.00	
	Post Adjutant	26	x	10.00	=	260.00	
	Assistant Commissary of Subsistence	6	x	10.00	=	60.00	
	Acting Assistant Quartermaster	6	x	8.33	=	49.98	
		Subtotals		45		-	6602.48
	Mean		6602.48 / 45 =		146.72		
Lafollette, Charles	Captain (Non-Mounted)	11	x	128.50	=	1413.50	
	Company Commander	11	x	10.00	=	110.00	
	Post Adjutant	11	x	10.00	=	110.00	
		Subtotals		11		-	1633.50
	Mean		1633.50 / 11 =		148.50		
All Captains		Subtotals		130		-	
		Mean		20239.98 / 130 =		155.69	

Table B.2 Estimated Monthly Salary for First Lieutenants Serving at Fort Yamhill

Officer	Duties	# of Months		Pay Rate		Product (\$)
Taylor, Oliver H. P.	First Lieutenant (Mounted)	11	x	121.83	=	1340.13
	Tenure Bonus (9.58 Years)	11	x	18.00	=	198.00
	Subtotals	11		-		1538.13
	Mean	1538.13 / 11 =		139.83		
Forsythe, Benjamin D.	First Lieutenant (Non-Mounted)	45	x	118.50	=	5332.50
	Post Adjutant	23	x	10.00	=	230.00
	Tenure Bonus (8.83 Years)	45	x	18.00	=	810.00
	Subtotals	45		-		6372.50
Mean	6372.50 / 45 =		141.61			
Owen, Philip A.	First Lieutenant (Non-Mounted)	1	x	118.50	=	118.50
	Acting Assistant Commissary of Subsistence	1	x	3.33	=	3.33
	Acting Assistant Quartermaster	1	x	3.33	=	3.33
	Tenure Bonus (6.58 Years)	1	x	9.00	=	9.00
Subtotals	1		-		134.16	
Mean	134.16 / 1 =		134.16			
Garden, James	First Lieutenant (Non-Mounted)	22	x	118.50	=	2607.00
	Post Adjutant	22	x	10.00	=	220.00
	Acting Assistant Commissary of Subsistence	2	x	3.33	=	6.66
	Acting Assistant Quartermaster	2	x	3.33	=	6.66
Subtotals	22		-		2840.32	
Mean	2840.32 / 22 =		129.10			
Shipley, William J.	First Lieutenant (Non-Mounted)	11	x	118.50	=	1303.50
	Assistant Commissary of Subsistence	10	x	10.00	=	100.00
	Acting Assistant Quartermaster	10	x	3.33	=	33.33
Subtotals	11		-		1436.83	
Mean	1436.83 / 11 =		130.62			
Catley, Henry	First Lieutenant (Non-Mounted)	3	x	118.50	=	355.50
	Assistant Commissary of Subsistence	3	x	10.00	=	30.00
	Regimental Quartermaster	3	x	10.00	=	30.00
	Acting Assistant Quartermaster	3	x	3.33	=	9.99
Subtotals	3		-		425.49	
Mean	425.49 / 3 =		141.83			
All First Lieutenants	Subtotals	93		-		
	Mean	12747.43 / 93 =		137.06		

Table B.3 Estimated Monthly Salary for Second Lieutenants Serving at Fort Yamhill

Officer	Duties	# of Months		Pay Rate		Product (\$)
Hazen, William B.	Second Lieutenant (Non-Mounted)	14	x	113.50	=	1589.00
	Acting Assistant Commissary of Subsistence	13	x	3.33	=	43.29
	Acting Assistant Quartermaster	13	x	3.33	=	43.29
	Subtotals	14		-		1675.58
	Mean	1675.58 / 14 =		119.68		
Garber, Hezekiah	Second Lieutenant (Non-Mounted)	2	x	113.50	=	227.00
	Subtotals	2		-		227.00
	Mean	227.00 / 2 =		113.50		
Sheridan, Philip H.	Second Lieutenant (Non-Mounted)	63	x	113.50	=	7150.50
	Assistant Commissary of Subsistence	7	x	10.00	=	70.00
	Acting Assistant Commissary of Subsistence	41	x	3.33	=	136.53
	Acting Assistant Quartermaster	48	x	3.33	=	159.84
	Subtotals	63		-		7516.87
	Mean	7516.87 / 63 =		119.31		
Wheeler Jr., James	Second Lieutenant (Mounted)	17	x	118.50	=	2014.50
	Post Adjutant	17	x	10.00	=	170.00
	Acting Assistant Commissary of Subsistence	4	x	3.33	=	13.32
	Acting Assistant Quartermaster	4	x	3.33	=	13.32
	Subtotals	17		-		2211.14
	Mean	2211.14 / 17 =		130.06		
Davison, James	Second Lieutenant (Non-Mounted)	38	x	113.50	=	4313.00
	Assistant Commissary of Subsistence	20	x	10.00	=	200.00
	Acting Assistant Commissary of Subsistence	14	x	3.33	=	46.62
	Acting Assistant Quartermaster	34	x	3.33	=	113.22
	Subtotals	38		-		4672.84
	Mean	4672.84 / 38 =		122.96		
Dunbar, William R.	Second Lieutenant (Non-Mounted)	11	x	113.50	=	1248.50
	Subtotals	11		-		1248.50
	Mean	1248.50 / 11 =		113.50		
Rathbun, James S.	Second Lieutenant (Non-Mounted)	10	x	113.50	=	1135.00
	Subtotals	10		-		1135.00
	Mean	1135.00 / 10 =		113.50		
All Second Lieutenants	Subtotals	151		-		18208.67
	Mean	18208.67 / 151 =		120.58		

Table B.4 Estimated Monthly Salary for Captains Serving at Fort Hoskins, 1 of 2

Officer	Duties	# of Months		Pay Rate		Product (\$)
Augur, Christopher C.	Captain (Non-Mounted)	61	X	128.50	=	7838.50
	Company Commander	60	X	10.00	=	600.00
	Post Adjutant	51	X	10.00	=	510.00
	Tenure Bonus (10.91 Years)	61	X	27.00	=	1647.00
	Subtotals	61		-		10595.50
	Mean	10595.50 / 61 =		173.69		
Dent, Frederick T.	Captain (Non-Mounted)	7	X	128.50	=	899.50
	Company Commander	6	X	10.00	=	60.00
	Assistant Commissary of Subsistence	3	X	10.00	=	30.00
	Acting Assistant Quartermaster	3	X	8.33	=	24.99
	Tenure Bonus (10.08 Years)	7	X	18.00	=	126.00
	Subtotals	7		-		1140.49
	Mean	1140.49 / 7 =		162.92		
Floyd-Jones, DeLancey	Captain (Non-Mounted)	41	X	128.50	=	5268.50
	Company Commander	25	X	10.00	=	250.00
	Tenure Bonus (10.58 Years)	41	X	18.00	=	738.00
	Subtotals	41		-		6256.50
	Mean	6256.50 / 41 =		152.59		
Schmidt, John C.	Captain (Non-Mounted)	9	X	128.50	=	1156.50
	Company Commander	9	X	10.00	=	90.00
	Post Adjutant	9	X	10.00	=	90.00
	Subtotals	9		-		1336.50
	Mean	1336.50 / 9 =		148.50		
Seidenstricker, Frederick	Captain (Non-Mounted)	9	X	128.50	=	1156.50
	Company Commander	9	X	10.00	=	90.00
	Post Adjutant	8	X	10.00	=	80.00
	Subtotals	9		-		1326.50
	Mean	1326.50 / 9 =		147.39		
Scott, Lyman S.	Captain (Non-Mounted)	14	X	128.50	=	1799.00
	Company Commander	14	X	10.00	=	140.00
	Post Adjutant	9	X	10.00	=	90.00
	Assistant Commissary of Subsistence	8	X	10.00	=	80.00
	Acting Assistant Quartermaster	8	X	8.33	=	66.64
	Subtotals	14		-		2075.64
	Mean	2075.64 / 14 =		148.26		

Table B.4 Estimated Monthly Salary for Captains Serving at Fort Hoskins, 2 of 2

Officer	Duties	# of Months		Pay Rate		Product (\$)
Palmer, Ephraim	Captain (Non-Mounted)	4	X	128.50	=	514.00
	Company Commander	4	X	10.00	=	40.00
	Subtotals	4		-		554.00
	Mean	554.00 / 4 =		138.50		
Currey, George B.	Captain (Non-Mounted)	2	X	128.50	=	257.00
	Company Commander	2	X	10.00	=	20.00
	Subtotals	2		-		277.00
	Mean	277.00 / 2 =		138.50		
Waters, Abner W.	Captain (Non-Mounted)	2	X	128.50	=	257.00
	Company Commander	2	X	10.00	=	20.00
	Subtotals	2		-		277.00
	Mean	277.00 / 2 =		138.50		
All Captains	Subtotals	149				22723.13
	Mean	23839.13 / 149 =		159.99		

Table B.5 Estimated Monthly Salary for First Lieutenants Serving at Fort Hoskins, 1 of 2

Officer	Duties	# of Months		Pay Rate		Product (\$)
Bonnycastle, John C.	First Lieutenant (Non-Mounted)	10	X	118.50	=	1185.00
	Post Adjutant	10	X	10.00	=	100.00
	Tenure Bonus (10.41 Years)	10	X	18.00	=	180.00
	Subtotals	10		-		1465.00
	Mean	1465.00 / 10 =		146.50		
Campbell, Thomas B.	First Lieutenant (Non-Mounted)	9	X	118.50	=	1066.50
	Acting Assistant Commissary of Subsistence	9	X	3.33	=	29.97
	Acting Assistant Quartermaster	9	X	3.33	=	29.97
	Subtotals	9		-		1126.44
	Mean	1126.44 / 9 =		125.16		
Funk, Herman	First Lieutenant (Non-Mounted)	9	X	118.50	=	1066.50
	Acting Assistant Commissary of Subsistence	9	X	3.33	=	29.97
	Acting Assistant Quartermaster	9	X	3.33	=	29.97
	Subtotals	9		-		1126.44
	Mean	1126.44 / 9 =		125.16		
Garden, James	First Lieutenant (Non-Mounted)	11	X	118.50	=	1303.50
	Post Adjutant	9	X	10.00	=	90.00
	Acting Assistant Commissary of Subsistence	5	X	3.33	=	16.65
	Acting Assistant Quartermaster	9	X	3.33	=	29.97
	Subtotals	11		-		1440.12
	Mean	1440.12 / 11 =		130.92		
Davison, James	First Lieutenant (Non-Mounted)	14	X	118.50	=	1659.00
	Post Adjutant	1	X	10.00	=	10.00
	Assistant Commissary of Subsistence	4	X	10.00	=	40.00
	Acting Assistant Quartermaster	1	X	3.33	=	3.33
	Subtotals	14		-		1712.33
	Mean	1712.33 / 14 =		122.30		
Walker, Cyrus H.	First Lieutenant (Non-Mounted)	4	X	118.50	=	474.00
	Subtotals	4		-		474.00
	Mean	474.00 / 4 =		118.50		
Catley, Henry	First Lieutenant (Non-Mounted)	3	X	118.50	=	355.50
	Regimental Quartermaster	2	X	10.00	=	20.00
	Assistant Commissary of Subsistence	3	X	10.00	=	30.00
	Acting Assistant Quartermaster	3	X	3.33	=	9.99
	Subtotals	3		-		415.49
	Mean	415.49 / 3 =		138.49		

Table B.5 Estimated Monthly Salary for First Lieutenants Serving at Fort Hoskins, 2 of 2

Randall, Darius B.	First Lieutenant (Non-Mounted)	3	X	118.50	=	355.50
	Subtotals	3		-		355.50
	Mean	355.50 / 3 =		118.50		
All First Lieutenants	Subtotals	63		-		8135.32
	Mean	8195.32 / 63 =		130.08		

Table B.6 Estimated Monthly Salary for Second Lieutenants Serving at Fort Hoskins, 1 of 2

Officer	Duties	# of Months		Pay Rate		Product (\$)
Sheridan, Philip H.	Second Lieutenant (Non-Mounted)	11	X	113.50	=	1248.50
	Acting Assistant Commissary of Subsistence	8	X	3.33	=	26.64
	Acting Assistant Quartermaster	8	X	3.33	=	26.64
	Subtotals	11		-		1301.78
	Mean	1301.78 / 11 =		118.34		
Gentry, William	Second Lieutenant (Non-Mounted)	51	X	113.50	=	5788.50
	Assistant Commissary of Subsistence	51	X	10.00	=	51.00
	Acting Assistant Quartermaster	51	X	3.33	=	169.83
	Subtotals	51		-		6009.30
	Mean	6009.30 / 51 =		117.83		
Garber, Hezekiah	Second Lieutenant (Non-Mounted)	21	X	113.50	=	2383.50
	Subtotals	21		-		2383.50
	Mean	2383.50 / 21 =		113.50		
Herzer, Louis	Second Lieutenant (Non-Mounted)	28	X	113.50	=	3178.00
	Post Adjutant	1	X	10.00	=	10.00
	Subtotals	28		-		3188.00
	Mean	3188.00 / 28 =		113.85		
Rathbun, James S.	Second Lieutenant (Non-Mounted)	4	X	113.50	=	454.00
	Assistant Commissary of Subsistence	1	X	10.00	=	10.00
	Acting Assistant Quartermaster	1	X	3.33	=	3.33
	Subtotals	4		-		467.33
	Mean	467.33 / 4 =		116.83		
Cullen, John W.	Second Lieutenant (Non-Mounted)	4	X	113.50	=	454.00
	Post Adjutant	4	X	10.00	=	40.00
	Subtotals	4		-		494.00
	Mean	494.00 / 4 =		123.50		

Table B.6 Estimated Monthly Salary for Second Lieutenants Serving at Fort Hoskins, 1 of 2

Officer	Duties	# of Months		Pay Rate		Product (\$)
Balch, James A.	Second Lieutenant (Non-Mounted)	2	X	113.50	=	227.00
	Subtotals	3		-		340.50
	Mean	340.50 / 3 =		113.50		
McCall, James K.	Second Lieutenant (Non-Mounted)	5	X	113.50	=	567.50
	Subtotals	5				567.50
	Mean	567.50 / 5 =		113.50		
Carlton, Caleb H.	Second Lieutenant (Non-Mounted)	11	X	113.50	=	1248.50
	Company Commander	5	X	10.00	=	50.00
	Subtotals	11		-		1298.50
	Mean	1298.50 / 11 =		118.04		
Andrews, John N.	Second Lieutenant (Non-Mounted)	7	X	113.50	=	794.50
	Subtotals	7		-		794.50
	Mean	794.50 / 7 =		113.50		
Watson, Grove	Second Lieutenant (Non-Mounted)	9	X	113.50	=	1021.50
	Subtotals	9		-		1021.50
	Mean	1021.50 / 9 =		113.50		
All Second Lieutenants		154		-		
	Subtotals	154		-		
	Mean	17866.41 / 154 =		116.01		

APPENDIX C: FORT HOSKINS SUBSISTENCE ACCOUNT BOOK PRICE LIST
AND INDEX VALUE CALCULATION TABLES

In this appendix you will find the absolute price list and relative price index and index calculations for several subsistence articles that were purchased by the commissioned officer at Fort Hoskins. The data provided below are derived solely from a single document, the *Fort Hoskins Subsistence Account Book*, hereafter referred to as the FHSAB (FHSAB 1862).

On the first page of the FHSAB was recorded the *Prices of Subsistence Stores for the Year Ending June 30, 1863 at Fort Hoskins* which contained a list of all of the subsistence articles sold by the Commissary Department and their associated price per unit (Table C.1). From this price list and the individual sales of subsistence articles listed in the FHSAB it was possible to calculate an index value for each subsistence article sold and purchased (Table C.1).

Table C.1 Fort Hoskins Subsistence Account Book Prices of Subsistence Stores and Index Values

Class	Article	SAB Price (\$)	Index Value
Meat	Ham	0.160 per pound	2.00
	Pork	0.100 per pound	1.25
	Beef	0.080 per pound	1.00
Bread	Corn Meal	0.070 per pound	2.00
	Hard Bread (Tack)	0.070 per pound	2.00
	Flour	0.035 per pound	1.00
Vegetable	Rice	0.065 per pound	3.25
	Beans	0.048 per pound	2.82
	Hominy	0.045 per pound	2.25
	Potatoes	0.017 per pound	1.00
Beverage	Tea	0.700 per pound	5.28
	Coffee, Java	0.300 per pound	2.26
	Coffee, Costa Rica	0.150 per pound	1.13
	Coffee, Rio	0.132 per pound	1.00
Sweetener	Sugar, Powdered	0.130 per pound	1.73
	Sugar, Crushed	0.122 per pound	1.63
	Sugar, Brown	0.112 per pound	1.49
	Molasses	0.075 per pound	1.00
Seasoning	Vinegar	0.090 per quart	N/A
	Salt	0.030 per quart	N/A
Non-Edible	Candles, Sperm	0.510 per pound	2.13
	Candles, Adamantine	0.240 per pound	1.00
	Soap, Brown	0.070 per pound	N/A
Indulgence	Pickles	1.650 per gallon	N/A
	Pie Fruits	0.252 per pound	N/A
	Syrup	0.875 per gallon	N/A
	Whiskey, Superior	2.500 per gallon	3.33
	Whiskey, Common	0.750 per gallon	1.00

Subsequently the above index was used to calculate index values for several subsistence articles that were grouped by food class and were used to compare food purchasing behavior between commissioned officers at the post. These values were calculated in the same manner as Miller (1980, 1991) used to calculate his CC Index by creating an index value for each subsistence article relative to the value of the cheapest subsistence article listed within each food class. Each subsistence article was grouped with similar food articles into eight food classes (i.e., meat, bread, vegetable, beverage, sweetener, seasoning, non-edible and indulgence) that correspond to mid-19th century United States Army rations. See Chapters 3 and 5 for further discussion. The tables below provide the data used to calculate these index values for each commissioned officer and provides the product and subtotals for each food article and the product and mean for each food class (Tables C.2, C.3, C.4 and C.5).

Table C.2 FHSAB Index Calculations for Purchases of Subsistence Stores by Captain Seidenstricker

Class	Article	#		Value	Product
Meat	Ham	80.00	x	2.00	= 160.00
	Pork	28.00	x	1.25	= 35.00
	Beef	641.00	x	1.00	= 641.00
	Subtotal	749.00		-	836.00
	Mean	836.00 / 749 =		1.12	
Bread	Flour	574.00	x	1.00	= 574.00
	Subtotal	574.00		-	574.00
	Mean	574.00 / 574.00 =		1.00	
Vegetable	Rice	3.00	x	3.25	= 9.75
	Beans	66.92	x	2.82	= 188.71
	Potatoes	137.60	x	1.00	= 137.60
	Subtotal	207.52		-	336.06
	Mean	336.06 / 207.52 =		1.62	
Beverage	Tea	4.00	x	5.28	= 21.12
	Coffee, Java	10.00	x	2.26	= 22.60
	Coffee, Costa Rica	84.50	x	1.13	= 95.48
	Coffee, Rio	30.00	x	1.00	= 30.00
	Subtotal	128.50		-	169.20
	Mean	169.20 / 128.50 =		1.32	
Sweetener	Sugar, Crushed	72.00	x	1.63	= 117.36
	Sugar, Brown	62.00	x	1.49	= 92.38
	Molasses	19.47	x	1.00	= 19.47
	Subtotal	153.47		-	229.21
	Mean	229.21 / 153.47 =		1.49	
Non-Edibles	Candles, Sperm	27.00	x	2.13	= 57.51
	Candles, Adamantine	60.00	x	1.00	= 60.00
	Subtotal	87.00		-	117.51
	Mean	117.51 / 87.00 =		1.35	
Indulgences	Whiskey, Superior	26.63	x	3.33	= 88.67
	Whiskey, Common	14.50	x	1.00	= 14.50
	Subtotal	41.13		-	103.17
	Mean	103.17 / 41.13 =		2.51	
All Classes	Subtotal	1940.62		-	2362.15
	Mean	2362.15 / 1940.62 =		1.22	

Table C.3 FHSAB Index Calculations for Purchases of Subsistence Stores by First Lieutenant Funk

Class	Article	#		Value		Product
Meat	Ham	36.00	X	2.00	=	72.00
	Beef	47.75	X	1.00	=	47.75
		Subtotal	83.75		-	119.75
		Mean		$119.75 / 83.75 =$		1.42
Bread	Flour	35.00	X	1.00	=	35.00
		Subtotal	35.00		-	35.00
		Mean		$35.00 / 35.00 =$		1.00
Vegetable	Rice	3.00	X	3.25	=	9.75
		Subtotal	3.00		-	9.75
		Mean		$9.75 / 3.00 =$		3.25
Beverage	Tea	2.00	X	5.28	=	10.56
	Coffee, Costa Rica	5.00	X	1.13	=	5.65
		Subtotal	7.00		-	16.21
		Mean		$16.21 / 7.00 =$		2.31
Sweetener	Sugar, Powdered	8.00	X	1.73	=	13.84
	Sugar, Crushed	11.00	X	1.63	=	17.93
	Sugar, Brown	16.00	X	1.49	=	23.84
		Subtotal	35.00		-	55.61
		Mean		$55.61 / 35.00 =$		1.59
Non-Edibles	Candles, Sperm	22.00	X	2.13	=	46.86
		Subtotal	22.00		-	46.86
		Mean		$46.86 / 22.00 =$		2.13
Indulgences	Whiskey, Superior	10.00	X	3.33	=	33.33
	Whiskey, Common	6.00	X	1.00	=	6.00
		Subtotal	16.00		-	39.33
		Mean		$39.33 / 16.00 =$		2.46
All Classes		Subtotal	201.75		-	322.51
		Mean		$322.51 / 201.75 =$		1.72

Table C.4 FHSAB Index Calculations for Purchases of Subsistence Stores by Second Lieutenant Herzer

Class	Article	#		Value		Product
Meat	Ham	24.00	X	2.00	=	48.00
	Pork	12.00	X	1.25	=	15.00
	Subtotal	36.00		-		63.00
	Mean	63.00 / 36.00 =		1.75		
Bread	Corn Meal	20.00	X	2.00		40.00
	Flour	5.00	X	1.00	=	5.00
	Subtotal	25.00		-		45.00
	Mean	45.00 / 25.00 =		1.80		
Sweetener	Sugar, Crushed	4.00	X	1.63	=	6.52
	Sugar, Brown	5.00	X	1.49	=	7.45
	Molasses	2.97	X	1.00	=	2.97
	Subtotal	11.97		-		16.94
	Mean	16.94 / 11.97 =		1.41		
Non-Edibles	Candles, Adamantine	22.00	X	1.00	=	22.00
	Subtotal	22.00		-		22.00
	Mean	22.00 / 22.00 =		1.00		
Indulgences	Whiskey, Superior	24.25	X	3.33	=	80.75
	Whiskey, Common	1.25	X	1.00	=	1.25
	Subtotal	25.50		-		82.00
	Mean	82.00 / 25.50 =		3.21		
All Classes	Subtotal	120.47		-		228.94
	Mean	228.94 / 120.47 =		1.90		

Table C.5 FHSAB Index Calculations for Subsistence Stores Listed as “Sales to Officers” at Fort Hoskins

Class	Article	#		Value		Product
Meat	Ham	202.50	X	2.00	=	405.00
	Pork	18.50	X	1.25	=	23.12
	Beef	788.25	X	1.00	=	788.25
	Subtotal	1009.25		-		1216.37
	Mean	1216.37 / 1009.25 =		1.20		
Bread	Corn Meal	20.00	X	2.00	=	40.00
	Flour	693.00	X	1.00	=	693.00
	Subtotal	713.00		-		733.00
	Mean	733.00 / 713.00 =		1.02		
Vegetable	Rice	28.50	X	3.25	=	92.62
	Beans	20.78	X	2.82	=	58.60
	Hominy	84.00	X	2.25	=	189.00
	Potatoes	100.00	X	1.00	=	100.00
	Subtotal	233.28		-		440.22
	Mean	440.22 / 233.28 =		1.89		
Beverage	Tea	8.66	X	5.28	=	45.72
	Coffee, Java	79.50	X	2.26	=	179.67
	Coffee, Costa Rica	31.00	X	1.13	=	35.03
	Coffee, Rio	7.00	X	1.00	=	7.00
	Subtotal	126.16		-		267.42
	Mean	267.42 / 126.16 =		2.12		
Sweetener	Sugar, Powdered	54.00	X	1.73	=	93.42
	Sugar, Crushed	206.50	X	1.63	=	336.60
	Sugar, Brown	147.00	X	1.49	=	219.03
	Molasses	44.55	X	1.00	=	44.55
	Subtotal	452.05		-		693.80
	Mean	693.80 / 452.05 =		1.53		
Non-Edibles	Candles, Sperm	19.00	X	2.13	=	40.47
	Candles, Adamantine	35.00	X	1.00	=	35.00
	Subtotal	54.00		-		75.47
	Mean	75.47 / 54.00 =		1.40		
Indulgences	Whiskey, Superior	30.00	X	3.33	=	99.90
	Whiskey, Common	0.25	X	1.00	=	0.25
	Subtotal	30.25		-		100.15
	Mean	100.15 / 30.25 =		3.31		
All Classes	Subtotal	2617.99		-		3526.43
	Mean	3526.43 / 2617.99 =		1.34		

APPENDIX D: COMMISSION OFFICERS' QUARTERS ARTIFACT DESCRIPTIONS

In this appendix you will find the detailed descriptions for the one thousand seven hundred and twenty-three (1,723) identifiable artifacts recovered from the commissioned officers' houses at Fort Yamhill and Fort Hoskins that are used in this study (Table D.1). These artifacts include 753 objects recovered from three of the officers houses at Fort Yamhill including 365 objects recovered from House 1 (FYH1), 208 objects recovered from House 2 (FYH2) and 180 objects recovered from House 3 (FYH3); and 970 objects recovered from the three officers houses at Fort Hoskins including 476 objects recovered from House 1 (FHH1), 322 objects recovered from House 2 (FHH2) and 172 objects recovered from House 3 (FHH3).

In order to reduce redundancy in the artifact descriptions from each of the officers' houses one description is provided for each artifact type and the number of those artifacts recovered from each of the officer's houses is provided in parentheses and indicated by the house abbreviations FYH1 (Fort Yamhill House 1), FYH2 (Fort Yamhill House 2), FYH3 (Fort Yamhill House 3), FHH1 (Fort Hoskins House 1), FHH2 (Fort Hoskins House 2) or FHH3 (Fort Hoskins House 3).

The artifacts described in this appendix are organized by primary function within three artifact GROUPS (domestic, military and personal), fifteen artifact CLASSES (e.g., housewares, uniforms, indulgences, adornment, recreational items), forty-six artifact TYPES (e.g., furniture, cooking vessels, glassware, food canisters, sewing items, military buttons, alcohol bottles, jewelry, office supplies, toys) and then ultimately by specific CATEGORY within each type (e.g., figurine, tumbler, plate, scissors, revolver, hair pin, bracelet, inkpot, marble, harmonica, coin). Each artifact is fully described including its dimensions, form and decoration and includes, if known, the pattern name, manufacturer and date of manufacture. Although all artifacts are described not all artifacts are depicted in photographs, instead a representative sample of artifacts from each artifact CLASS and sometimes TYPE were photographed together and presented at the end of each section.

Table D.1 Artifacts Recovered From Fort Yamhill and Fort Hoskins, 1 of 13

Group	Class	Type	Artifact	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
1. DOMESTIC	1. Housewares	1. Furniture	<i>1. Furniture Caster</i>	1	1	1			
			Furniture Total	1	1	1	0	0	0
1. DOMESTIC	1. Housewares	2. Lighting	<i>1. Chamber Stick</i>				1		
1. DOMESTIC	1. Housewares	2. Lighting	<i>2. Oil Lamp</i>	1	1	1	2	1	1
			Lighting Total	1	1	1	3	1	1
1. DOMESTIC	1. Housewares	3. Heating	<i>1. Stove</i>	1	1		1		
			Heating Total	1	1	0	1	0	0
1. DOMESTIC	1. Housewares	4. Decoration	<i>1. Figurine</i>				1		
1. DOMESTIC	1. Housewares	4. Decoration	<i>2. Flower Pot</i>				1		
1. DOMESTIC	1. Housewares	4. Decoration	<i>3. Tintype Frame</i>						1
			Decoration Total	0	0	1	2	0	1
			Housewares Total	3	3	3	6	1	2
1. DOMESTIC	2. Culinary	1. Storage Vessels	<i>1. Jar</i>				3	2	
			Storage Vessel Total	0	0	0	3	2	0
1. DOMESTIC	2. Culinary	2. Preparation Vessels	<i>1. Dish</i>				1		
			Preparation Vessel Total	0	0	0	1	0	0
1. DOMESTIC	2. Culinary	3. Cooking Vessels	<i>1. Baking Dish</i>				1		
1. DOMESTIC	2. Culinary	3. Cooking Vessels	<i>2. Kettle</i>				1		
			Cooking Vessel Total	0	0	0	2	0	0
1. DOMESTIC	2. Culinary	4. Appliances	<i>1. Cook Stove</i>					1	
			Cooking Appliances Total	0	0	0	0	1	0
			Culinary Total	0	0	0	6	3	0

Table D.1 Artifacts Recovered From Fort Yamhill and Fort Hoskins, 2 of 13

Group	Class	Type	Artifact	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
1. DOMESTIC	3. Gustatory	1. Glassware	<i>1. Tumbler</i>	8	6	2	30	5	4
1. DOMESTIC	3. Gustatory	1. Glassware	<i>3. Stemware</i>	2	1		9	3	
1. DOMESTIC	3. Gustatory	1. Glassware	<i>2. Ale Glass</i>	1					
1. DOMESTIC	3. Gustatory	1. Glassware	<i>4. Cordial</i>	2					
1. DOMESTIC	3. Gustatory	1. Glassware	<i>5. Shot Glass</i>	2			2	1	
1. DOMESTIC	3. Gustatory	1. Glassware	<i>6. Decanter</i>				3	1	
1. DOMESTIC	3. Gustatory	1. Glassware	<i>7. Plate</i>	1					
1. DOMESTIC	3. Gustatory	1. Glassware	<i>8. Bowl</i>	3		4	1		
1. DOMESTIC	3. Gustatory	1. Glassware	<i>9. Butter Dish</i>	1	1				
1. DOMESTIC	3. Gustatory	1. Glassware	<i>10. Compote/Celery Vase</i>	1					
1. DOMESTIC	3. Gustatory	1. Glassware	<i>11. Hollow Vessel</i>	1					
Glassware Total				22	8	6	45	10	4
1. DOMESTIC	3. Gustatory	2. Ceramics	<i>1. Cup/Mug</i>	24	7	6	9	7	3
1. DOMESTIC	3. Gustatory	2. Ceramics	<i>2. Saucer</i>	24	8	9	17	3	2
1. DOMESTIC	3. Gustatory	2. Ceramics	<i>3. Teaware</i>	2	1		6		2
1. DOMESTIC	3. Gustatory	2. Ceramics	<i>4. Plate</i>	20	8	12	33	5	5
1. DOMESTIC	3. Gustatory	2. Ceramics	<i>5. Bowl</i>	10	3	11	15	2	3
1. DOMESTIC	3. Gustatory	2. Ceramics	<i>6. Platter</i>	5		2	4		1
1. DOMESTIC	3. Gustatory	2. Ceramics	<i>7. Tureen</i>	1			1		
1. DOMESTIC	3. Gustatory	2. Ceramics	<i>8. Pitcher</i>	3			3		
1. DOMESTIC	3. Gustatory	2. Ceramics	<i>9. Butter Tub</i>				1		
1. DOMESTIC	3. Gustatory	2. Ceramics	<i>10. Dish</i>				1		
1. DOMESTIC	3. Gustatory	2. Ceramics	<i>10. Unidentified Flat Vessel</i>	3	3		2	3	3
1. DOMESTIC	3. Gustatory	2. Ceramics	<i>11. Unidentified Hollow Vessel</i>	1	1		3	1	
Ceramics Total				93	31	40	95	21	19

Table D.1 Artifacts Recovered From Fort Yamhill and Fort Hoskins, 3 of 13

Group	Class	Type	Artifact	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
1. DOMESTIC	3. Gustatory	3. Tinware	1. <i>Mess Pan</i>				1		
Tinware Total				0	0	0	1	0	0
1. DOMESTIC	3. Gustatory	4. Utensils	1. <i>Fork</i>				2	1	1
1. DOMESTIC	3. Gustatory	4. Utensils	2. <i>Spoon</i>	4		1	1		1
1. DOMESTIC	3. Gustatory	4. Utensils	3. <i>Table Knife</i>	3		1	1		
1. DOMESTIC	3. Gustatory	4. Utensils	4. <i>Indeterminate</i>	1		1		2	
Utensil Total				8	0	3	4	3	2
Gustatory Totals				123	39	49	145	34	25
1. DOMESTIC	4. Foodstuffs	1. Faunal Remains	1. <i>B. taurus (Cattle)</i>	20	16	29		3	15
1. DOMESTIC	4. Foodstuffs	1. Faunal Remains	2. <i>S. scrofa (Pig)</i>	3	8	1		2	1
1. DOMESTIC	4. Foodstuffs	1. Faunal Remains	3. <i>G. domesticus (Chicken)</i>	1	2	1	1	4	3
1. DOMESTIC	4. Foodstuffs	1. Faunal Remains	4. <i>G. domesticus Egg (Chicken)</i>	2					
1. DOMESTIC	4. Foodstuffs	1. Faunal Remains	5. <i>Odocoileus sp. (Deer)</i>	16	26	14		1	6
1. DOMESTIC	4. Foodstuffs	1. Faunal Remains	6. <i>Cervus sp. (Elk)</i>	1					
1. DOMESTIC	4. Foodstuffs	1. Faunal Remains	7. <i>Anser sp. (Goose)</i>					1	
1. DOMESTIC	4. Foodstuffs	1. Faunal Remains	8. <i>Galliform (Fowl)</i>		1			4	
1. DOMESTIC	4. Foodstuffs	1. Faunal Remains	9. <i>Osteichthyes (Fish)</i>				1		
1. DOMESTIC	4. Foodstuffs	1. Faunal Remains	10. <i>O. lurida (Oyster)</i>				52	11	19
1. DOMESTIC	4. Foodstuffs	1. Faunal Remains	11. <i>P. staminea (Clam)</i>				1		
1. DOMESTIC	4. Foodstuffs	1. Faunal Remains	12. <i>Tresus sp. (Clam)</i>						13
1. DOMESTIC	4. Foodstuffs	1. Faunal Remains	13. <i>C. nuttallii (Cockle)</i>						1
Faunal Remains Total				43	52	45	58	26	58
1. DOMESTIC	4. Foodstuffs	2. Non-Faunal	1. <i>Prunus persica (Peach)</i>	2					
Non-Faunal Total				2	0	0	0	0	0

Table D.1 Artifacts Recovered From Fort Yamhill and Fort Hoskins, 4 of 13

Group	Class	Type	Artifact	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
1. DOMESTIC	4. Foodstuffs	3. Food Canister	1. 6.25 x 3.50 Inch, Cylinder	8					
1. DOMESTIC	4. Foodstuffs	3. Food Canister	2. 5.25 x 4.00 Inch, Cylinder	12		1	1		
1. DOMESTIC	4. Foodstuffs	3. Food Canister	6. 3.50 x 4.75 Inch, Cylinder						1
1. DOMESTIC	4. Foodstuffs	3. Food Canister	3. Unk x 4.25 Inch, Cylinder			1			
1. DOMESTIC	4. Foodstuffs	3. Food Canister	4. Unk x 4.00 Inch, Cylinder	1					1
1. DOMESTIC	4. Foodstuffs	3. Food Canister	5. Unk x 3.62 Inch, Cylinder	2		1	4		
1. DOMESTIC	4. Foodstuffs	3. Food Canister	7. Unk x 3.00 Inch, Cylinder						1
1. DOMESTIC	4. Foodstuffs	3. Food Canister	8. Unk x 2.87 Inch, Cylinder					4	
1. DOMESTIC	4. Foodstuffs	3. Food Canister	9. Unk x 2.50 Inch, Cylinder						1
1. DOMESTIC	4. Foodstuffs	3. Food Canister	10. Unk x 2.37 Inch, Cylinder				2	2	
1. DOMESTIC	4. Foodstuffs	3. Food Canister	11. Unk X 4.00 Inch, Rectangular						1
1. DOMESTIC	4. Foodstuffs	3. Food Canister	12. Indeterminate, Rectangular	1					
Food Canister Total				24	0	3	7	6	5
1. DOMESTIC	4. Foodstuffs	4. Food Bottle	1. Pickle Bottle			1		1	
1. DOMESTIC	4. Foodstuffs	4. Food Bottle	2. Indeterminate Bottle				2	3	
Food Bottle Total				0	0	1	2	4	0

Table D.1 Artifacts Recovered From Fort Yamhill and Fort Hoskins, 5 of 13

Group	Class	Type	Artifact	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
1. DOMESTIC	4. Foodstuffs	5. Condiments	1. Relish Jar	1					
1. DOMESTIC	4. Foodstuffs	5. Condiments	2. Spice/Pepper Bottle	12	5	2	5	2	1
1. DOMESTIC	4. Foodstuffs	5. Condiments	3. London Club Sauce Bottle				1		
1. DOMESTIC	4. Foodstuffs	5. Condiments	4. Mustard Bottle	1				1	3
1. DOMESTIC	4. Foodstuffs	5. Condiments	5. Pepper Sauce Bottle				2	1	1
1. DOMESTIC	4. Foodstuffs	5. Condiments	6. Sauce Bottle				1		1
1. DOMESTIC	4. Foodstuffs	5. Condiments	7. Olive Oil Bottle				4	4	
1. DOMESTIC	4. Foodstuffs	5. Condiments	8. Flavoring Extract Bottle	1					
1. DOMESTIC	4. Foodstuffs	5. Condiments	9. Indeterminate Food Bottle	2	1				
Condiment Total				17	6	2	13	8	6
Foodstuffs Total				86	58	51	80	44	69
1. DOMESTIC	5. Maintenance	1. Sewing	1. Needlework Clamp				1		
1. DOMESTIC	5. Maintenance	1. Sewing	2. Scissors	1		1		1	
1. DOMESTIC	5. Maintenance	1. Sewing	3. Thimble	1	1		2		
1. DOMESTIC	5. Maintenance	1. Sewing	4. Safety Pin			2	2		
1. DOMESTIC	5. Maintenance	1. Sewing	5. Straight Pin					9	
Sewing Total				2	1	3	5	10	0
1. DOMESTIC	5. Maintenance	2. General Repair	1. Cement Bottle				1		
General Repair Total				0	0	0	1	0	0
Home Maintenance Total				2	1	3	6	10	0
<i>DOMESTIC TOTAL</i>				214	101	106	243	92	96

Table D.1 Artifacts Recovered From Fort Yamhill and Fort Hoskins, 6 of 13

Group	Class	Type	Artifact	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
2. MILITARY	1. Uniform	1. Button	1. <i>Military Academy (GS200)</i>	2					
2. MILITARY	1. Uniform	1. Button	2. <i>Infantry (GI215)</i>				1		
2. MILITARY	1. Uniform	1. Button	3. <i>Dragoon (DR215)</i>		2		1		
2. MILITARY	1. Uniform	1. Button	4. <i>Artillery (AY215)</i>				1		5
2. MILITARY	1. Uniform	1. Button	5. <i>General Service (GEN207)</i>				1		
2. MILITARY	1. Uniform	1. Button	6. <i>General Service (GEN215)</i>			1	3	3	
2. MILITARY	1. Uniform	1. Button	7. <i>Indeterminate</i>				3		
Button Total				2	2	1	10	3	5
2. MILITARY	1. Uniform	2. Headwear	1. <i>Shako Chin Strap</i>			1	1		
Buckle Total				0	0	1	1	0	0
2. MILITARY	1. Uniform	3. Insignia	1. <i>Branch Insignia</i>				1		
2. MILITARY	1. Uniform	3. Insignia	2. <i>Regimental Number</i>				1		
2. MILITARY	1. Uniform	3. Insignia	3. <i>Company Letter</i>	1					
Insignia Total				1	0	0	2	0	0
Uniform Total				3	2	2	13	3	5
2. MILITARY	2. Arms and Ammunition	1. Arms	1. <i>Revolver</i>				1		
2. MILITARY	2. Arms and Ammunition	1. Arms	2. <i>Bayonet</i>					1	
Arms Total				0	0	0	1	1	0
2. MILITARY	2. Arms and Ammunition	2. Projectile	1. <i>.28 Caliber</i>				4		2
2. MILITARY	2. Arms and Ammunition	2. Projectile	2. <i>.31 Caliber</i>		2			7	1
2. MILITARY	2. Arms and Ammunition	2. Projectile	3. <i>.36 Caliber</i>	6	3	2	5	13	4
2. MILITARY	2. Arms and Ammunition	2. Projectile	4. <i>.44 Caliber</i>					1	
2. MILITARY	2. Arms and Ammunition	2. Projectile	5. <i>Indeterminate</i>					6	
Projectile Total				6	5	2	9	27	7

Table D.1 Artifacts Recovered From Fort Yamhill and Fort Hoskins, 7 of 13

Group	Class	Type	Artifact	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
2. MILITARY	2. Arms and Ammunition	3. Ignition System	1. Percussion Cap	1		1		15	7
2. MILITARY	2. Arms and Ammunition	3. Ignition System	2. Percussion Cap Box	1			1	1	1
Ignition System Total				2	0	1	1	16	8
Arms and Ammunition Total				8	5	3	11	44	15
2. MILITARY	3. Accouterments	1. Canteen	1. Stopper			1	1	1	
Canteen Total				0	0	1	1	1	0
2. MILITARY	3. Accouterments	2. Cartridge Box	1. Buckle				1		
Cartridge Box Total				0	0	0	1	0	0
2. MILITARY	3. Accouterments	3. Knap Sack	1. Triangle Loop						1
Knap Sack Total				0	0	0	0	0	1
Accouterment Total				0	0	1	2	1	1
<i>MILITARY TOTAL</i>				11	7	6	26	48	21
3. PERSONAL	1. Indulgences	1. Alcoholic Beverage	1. Champagne	4	2	2	4	3	1
3. PERSONAL	1. Indulgences	1. Alcoholic Beverage	2. Wine	1		1			
3. PERSONAL	1. Indulgences	1. Alcoholic Beverage	3. Brandy		1				
3. PERSONAL	1. Indulgences	1. Alcoholic Beverage	4. Whiskey						1
3. PERSONAL	1. Indulgences	1. Alcoholic Beverage	5. Ale/Porter	1		3	1	1	1
3. PERSONAL	1. Indulgences	1. Alcoholic Beverage	6. Spirit/Ale/Porter/ Wine	3	6		4	3	1
3. PERSONAL	1. Indulgences	2. Alcohol Accessory	1. Flask				1		
Alcohol Bottle Total				9	9	6	10	7	4

Table D.1 Artifacts Recovered From Fort Yamhill and Fort Hoskins, 8 of 13

Group	Class	Type	Artifact	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
3. PERSONAL	1. Indulgences	3. Tobacco	1. <i>Hardrubber, Two-Piece</i>				1		
3. PERSONAL	1. Indulgences	3. Tobacco	2. <i>Porcelain, Two-Piece</i>	1					
3. PERSONAL	1. Indulgences	3. Tobacco	3. <i>Earthenware, Two-Piece</i>	3	5	3	5	5	2
3. PERSONAL	1. Indulgences	3. Tobacco	4. <i>Earthenware, One-Piece</i>	7	1	3	13	1	8
3. PERSONAL	1. Indulgences	3. Tobacco	5. <i>Earthenware, Indeterminate</i>		2				
3. PERSONAL	1. Indulgences	3. Tobacco	6. <i>Indeterminate, Spark Cap</i>				1		1
3. PERSONAL	1. Indulgences	3. Tobacco	7. <i>Spittoon</i>		1				
Tobacco Total				11	9	6	20	6	11
3. PERSONAL	1. Indulgences	4. Non-Alcoholic	1. <i>Siphon (Seltzer) Bottle</i>				1		
3. PERSONAL	1. Indulgences	4. Non-Alcoholic	2. <i>Carbonated Beverage Bottle</i>		1		2		1
Non-Alcoholic Beverage Total				0	1	0	3	0	1
Indulgence Total				20	19	12	33	13	16
3. PERSONAL	2. Health	1. Medical	1. <i>Digestive</i>	5			2		1
3. PERSONAL	2. Health	1. Medical	2. <i>Respiratory</i>		2				
3. PERSONAL	2. Health	1. Medical	3. <i>Circulatory</i>		1		1	1	1
3. PERSONAL	2. Health	1. Medical	4. <i>Pain Killer</i>	3	1				
3. PERSONAL	2. Health	1. Medical	5. <i>General/Cure-All</i>	3	2	1		3	1
3. PERSONAL	2. Health	1. Medical	6. <i>Indeterminate</i>	6	5	5	9	6	1
3. PERSONAL	2. Health	1. Medical	7. <i>Irrigating Syringe</i>	1			2		
Medicine Total				18	11	6	14	10	4

Table D.1 Artifacts Recovered From Fort Yamhill and Fort Hoskins, 9 of 13

Group	Class	Type	Artifact	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
3. PERSONAL	2. Health	2. Grooming	1. Cologne/Perfume	2					
3. PERSONAL	2. Health	2. Grooming	2. Hair Tonic/Dye		2			1	1
3. PERSONAL	2. Health	2. Grooming	3. Hair, Tooth and Skin	1	1		2		
3. PERSONAL	2. Health	2. Grooming	4. Indeterminate		1			1	
3. PERSONAL	2. Health	2. Grooming	5. Dressing Comb	4	1	3	4	1	1
3. PERSONAL	2. Health	2. Grooming	6. Mirror	3	1	2	2	1	1
3. PERSONAL	2. Health	2. Grooming	7. Toothbrush			1	3		
3. PERSONAL	2. Health	2. Grooming	8. Toothpick					13	1
3. PERSONAL	2. Health	2. Grooming	9. Soap Box	1			1		
3. PERSONAL	2. Health	2. Grooming	10. Wash Basin			1	2		
3. PERSONAL	2. Health	2. Grooming	11. Chamber Pot			1	3		
Grooming Total				11	6	8	17	17	4
Health Total				29	17	14	31	27	8
3. PERSONAL	3. Adornment	1. Hair Accessory	1. Head Band		1	1			
3. PERSONAL	3. Adornment	1. Hair Accessory	2. Hair Pin	3	1			1	
Hair Accessory Total				3	2	1	0	1	0

Table D.1 Artifacts Recovered From Fort Yamhill and Fort Hoskins, 10 of 13

Group	Class	Type	Artifact	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
3. PERSONAL	3. Adornment	2. Button	1. Brass Shanked	9	5	1	1	2	1
3. PERSONAL	3. Adornment	2. Button	2. Glass Shanked		4	2		1	1
3. PERSONAL	3. Adornment	2. Button	3. Ceramic Shanked		1	5			
3. PERSONAL	3. Adornment	2. Button	4. Fabric Shanked						1
3. PERSONAL	3. Adornment	2. Button	5. Iron Shanked	3		2	1		
3. PERSONAL	3. Adornment	2. Button	6. Leather Shanked	1					
3. PERSONAL	3. Adornment	2. Button	7. Mineral Shanked					9	
3. PERSONAL	3. Adornment	2. Button	8. Bone Shanked		1				
3. PERSONAL	3. Adornment	2. Button	9. Hard Rubber Sew-Through		1	1			
3. PERSONAL	3. Adornment	2. Button	10. Shell Sew-Through		1		3		
3. PERSONAL	3. Adornment	2. Button	11. Pewter Sew-Through	1		1	8	2	1
3. PERSONAL	3. Adornment	2. Button	12. Iron Sew-Through				4	2	
3. PERSONAL	3. Adornment	2. Button	13. Bone Sew-Through		1		2	2	
3. PERSONAL	3. Adornment	2. Button	14. Brass Sew-Through	1		1			
3. PERSONAL	3. Adornment	2. Button	15. Ceramic Sew-Through	22	20	7	33	15	
Button Total				37	34	20	52	33	4
3. PERSONAL	3. Adornment	3. Buckle	1. Belt				1		
3. PERSONAL	3. Adornment	3. Buckle	2. Suspender	2	1		1		
3. PERSONAL	3. Adornment	3. Buckle	3. Slide	1			2	2	
Buckle Total				3	1	0	4	2	0
3. PERSONAL	3. Adornment	4. Clothing Fastener	1. Corset Busk		1		1	1	
3. PERSONAL	3. Adornment	4. Clothing Fastener	2. Hook-and-Eye		1			3	
3. PERSONAL	3. Adornment	4. Clothing Fastener	3. Aglet	1		1			
3. PERSONAL	3. Adornment	4. Clothing Fastener	4. Rivet				1		
Clothing Fastener Total				1	2	1	2	4	0

Table D.1 Artifacts Recovered From Fort Yamhill and Fort Hoskins, 11 of 13

Group	Class	Type	Artifact	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
3. PERSONAL	3. Adornment	5. Jewelry	1. Pendant	2	1				1
3. PERSONAL	3. Adornment	5. Jewelry	2. Bracelet		1	1			
3. PERSONAL	3. Adornment	5. Jewelry	3. Finger Ring	1				2	
3. PERSONAL	3. Adornment	5. Jewelry	4. Bead	7	7	1	40	1	
Jewelry Total				10	9	2	40	3	1
3. PERSONAL	3. Adornment	6. Accessories	1. Pocket Watch	1	1				
Miscellaneous Accessory Total				1	1	0	0	0	0
3. PERSONAL	3. Adornment	7. Footwear	1. Miscellaneous Parts	3	1	5	1		
Footwear Total				3	1	5	1	0	0
Adornment Total				58	50	29	99	43	5
3. PERSONAL	4. Administration	1. Office Supplies	1. Pen				1		2
3. PERSONAL	4. Administration	1. Office Supplies	2. Inkpot	1					
3. PERSONAL	4. Administration	1. Office Supplies	3. Individual Ink Bottle	4	1	1	3	1	2
3. PERSONAL	4. Administration	1. Office Supplies	4. Bulk Ink Bottle	1		1			1
3. PERSONAL	4. Administration	1. Office Supplies	5. Slate Pencil	1	4	1	4	3	
3. PERSONAL	4. Administration	1. Office Supplies	6. Slate Tablet	2		2			
3. PERSONAL	4. Administration	1. Office Supplies	7. Graphite Pencil		3		1		
3. PERSONAL	4. Administration	1. Office Supplies	8. Sealing Wax	1			1		
Office Supplies Total				10	8	5	10	4	5
Administration Total				10	8	5	10	4	5
3. PERSONAL	5. Recreation	1. Toys and Games	1. Tea Set	1	1	1	2	1	
3. PERSONAL	5. Recreation	1. Toys and Games	2. Doll	1		1	1	3	
3. PERSONAL	5. Recreation	1. Toys and Games	3. Marble	3	1		5	1	
3. PERSONAL	5. Recreation	1. Toys and Games	4. Domino				1		
Toys and Games Total				5	2	2	9	5	0

Table D.1 Artifacts Recovered From Fort Yamhill and Fort Hoskins, 12 of 13

Group	Class	Type	Artifact	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
3. PERSONAL	5. Recreation	2. Musical Instrument	1. <i>Chordophone</i>					1	
3. PERSONAL	5. Recreation	2. Musical Instrument	2. <i>Aerophone</i>	1					
3. PERSONAL	5. Recreation	2. Musical Instrument	3. <i>Harmonica</i>				1		
3. PERSONAL	5. Recreation	2. Musical Instrument	4. <i>Mouth Harp</i>	2		1			
Musical Instrument Total				3	0	1	1	1	0
3. PERSONAL	5. Recreation	3. Hunting and Fishing	1. <i>Firearm</i>				2	4	
3. PERSONAL	5. Recreation	3. Hunting and Fishing	2. <i>Percussion Cap</i>	5	1	1	4	38	10
3. PERSONAL	5. Recreation	3. Hunting and Fishing	3. <i>Black Powder Flask</i>	1			2		1
3. PERSONAL	5. Recreation	3. Hunting and Fishing	4. <i>Large Caliber Projectile</i>				6	6	3
3. PERSONAL	5. Recreation	3. Hunting and Fishing	5. <i>Shot/Pellet Projectile</i>	4	2		4	39	5
3. PERSONAL	5. Recreation	3. Hunting and Fishing	6. <i>Fish Hook</i>				1		
Hunting and Fishing Total				10	3	1	19	87	19
Recreation Total				18	5	4	29	93	19
3. PERSONAL	6. Pocket Items	1. Tools	1. <i>Spectacles</i>					2	
3. PERSONAL	6. Pocket Items	1. Tools	2. <i>Pocket Knife</i>	2	1		1		1
Tools Total				2	1	0	1	2	1
3. PERSONAL	6. Pocket Items	2. Currency	1. <i>Coin</i>			1		1	
Currency Total				0	0	1	0	1	0
Pocket Item Total				2	1	1	1	3	1
3. PERSONAL	7. Transportation	1. Luggage	1. <i>Carpet Bag</i>	1					
Luggage Total				1	0	0	0	0	0

Table D.1 Artifacts Recovered From Fort Yamhill and Fort Hoskins, 13 of 13

Group	Class	Type	Artifact	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
3. PERSONAL	7. Transportation	2. Horse Furniture	1. <i>Bit</i>	1					
3. PERSONAL	7. Transportation	2. Horse Furniture	2. <i>Stirrup</i>						1
3. PERSONAL	7. Transportation	2. Horse Furniture	3. <i>Saddle Girth Buckle</i>				1		
3. PERSONAL	7. Transportation	2. Horse Furniture	4. <i>Sleigh Bell</i>				1		
3. PERSONAL	7. Transportation	2. Horse Furniture	5. <i>Horseshoe</i>	1	1	1			
Horse Furniture Total				2	1	1	2	0	1
Transportation Total				3	1	1	2	0	1
<i>PERSONAL TOTAL</i>				140	101	66	205	183	55
GRAND TOTAL				365	209	178	474	323	172

DOMESTIC GROUP

Eight hundred and fifty-one (FYH1=214, FHH1=242, FYH2=101, FHH2=92, FYH3=106, FHH3=96) artifacts from the Domestic Group were recovered. The Domestic Group contains artifacts pertaining to the home such as furniture and decoration as well as the daily activities of the household such as cooking, cleaning, eating, drinking and home maintenance. The Domestic Group contains five artifact classes: Housewares, Culinary, Gustatory, Foodstuffs and Home Maintenance.

Housewares

Eighteen (FYH1=3, FHH1=6, FYH2=3, FHH2=1, FYH3=3, FHH3=2) artifacts from the Housewares Class were recovered. The Housewares Class contains artifacts pertaining to the furnishing and decoration of the home and is represented by artifacts such as chairs, lamps, heating stoves, figurines and flower pots. The Housewares Class has four artifact types: Furniture, Lighting Appliances, Heating Appliances and Decorative Items.

Furniture

Furniture Caster

Three (FYH1=1, FYH2=1, FYH3=1) pieces of furniture were recovered. All three pieces of furniture are represented by furniture casters. One (FYH1) furniture caster is represented by a caster wheel made of iron and measures 1.49 inches (37.89 mm) in diameter and 0.856 inches (21.75 mm) wide. Two (FYH2=1, FYH3=1) of the furniture casters are represented by caster wheel frames also made of iron. One (FYH2) caster frame measures 1.17 inches (29.83 mm) tall with an exterior width of 1.62 inches (32.48 mm) and an interior width of 0.931 inches (23.64 mm) and the other (FYH3) caster frame measures 1.19 inches (30.27 mm) tall with an exterior width of 1.12 inches (28.54 mm) and an interior width of 0.786 inches (19.95 mm).

Lighting Appliances

Chamber Stick

One (FHH1) chamber stick was recovered. The chamber stick is made of white porcelain and is represented by approximately one-half of a saucer-shaped base measuring 4.75 inches (120.65 mm) in diameter. The fragment also has part of the well-stem junction. The vessel is plain (undecorated) in decoration and unmarked.

Oil Lamp

Seven oil lamps were recovered (FYH1=1, FHH1=2, FYH2=1, FHH2=1, FYH3=1, FHH3=1). Six (FYH1=1, FHH1=2, FHH2=1, FYH3=1, FHH3=1) of the seven oil lamps are represented by colorless glass chimneys while the other (FYH2) oil lamp is

represented by a brass burner. The most complete chimney (FHH2) has a bulged base and measures 8.25 inches (209.55 mm) high with a 1.25 inch (31.75 mm) base diameter and a 0.95 inch (24.13 mm) rim diameter. The other five oil lamp chimneys vary in base and rim diameters. One (FYH1) oil lamp chimney has a 1.25 inch (31.75 mm) rim diameter and a 2.00 inch (50.8 mm) base diameter. One (FHH1) has a 1.75 inch (44.45 mm) rim/base diameter and another (FHH1) has a 1.25 inch (31.75 mm) inch rim/base diameter. The remaining two (FYH3=1, FHH3=1) oil lamp chimneys are represented by fragments for which accurate diameter measurements could not be taken. One (FYH2) brass burner from an oil lamp was also recovered. The burner measures 0.959 inches (23.61 mm) tall and 1.826 inches (46.38 mm) in diameter and is decorated with nine quatrefoils punched through the brass around the circumference. In addition to the brass burner several fragments of chimney glass measuring 1.25 inches (31.75 mm) were also recovered from FYH2. The fragments are probably part of the same oil lamp as the brass burner and therefore are not counted as a distinct object in the MNO counts.

Heating Appliances

Parlor Stove

Three (FYH1=1, FHH1=1, FYH2=1) parlor stoves were recovered. One (FYH1) stove is best represented by its cast iron spark guard. The guard is rectangular and measures 13.00 inches (330.20 mm) wide, 6.60 inches (167.65 mm) tall and 0.38 inches (9.65 mm) thick. The spark guard is cast in an open lattice work pattern with a projecting handle and is embossed with a pattern or molder's identification number that reads "HQ7". One (FYH2) stove is represented by several fragments of a sacrificial interior wall that was designed to protect the outer wall of the stove from heat damage. The sacrificial wall fragments are cast with a corrugated or ribbed pattern on one side and some of the fragments are embossed with a pattern or molder's identification number that reads "M". The third parlor stove (FHH1) is also represented by several cast iron fragments. Unfortunately, the cast iron stove fragments appear to be missing from the collection and therefore positive identification of the stove was taken from Bowyer (1992b).

Decorative Items

Figurine

Two (FHH1=1, FYH3=1) decorative bric-a-brac figurines were recovered. Both figurines are made of white unglazed (Parian) porcelain molded in the form of female human figures. One (FYH3) figurine is missing its head but measures 3.25 inches (82.55 mm) high from feet to shoulders and 1.60 inches (40.64 mm) in diameter at the base. The figurine appears to be molded in the form a young girl wearing a dress and cloak and carrying a basket and may be a representation of Little Red Riding Hood. The other figurine (FHH1) is represented by a fragment of only the upper part of the torso and measures 1.22 inches (31.20 mm) wide and 0.53 inches (13.51 mm) thick at

the shoulders. The figurine is molded in the form of a human female wearing scaled armor and holding a spear and may represent the Greek goddess Athena or the Roman goddess Minerva.

Flower Pot

One (FHH1) flower pot was recovered. The flower pot is made of red earthenware clay and is complete. The pot measures 6.25 inches (158.75 mm) tall with an 8.00 inch (203.20 mm) diameter at the rim and 4.50 inch (114.30 mm) diameter at the base. The flower pot is unglazed and undecorated but molded with a 0.61 inch (15.61 mm) tall bead rim and a 0.84 inch (21.46 mm) diameter hole in the base to allow water to drain.

Tin-Type Picture Frame

One (FHH3) tintype picture frame was recovered. The frame is made of undecorated brass and measures 3.14 inches (79.90 mm) tall, 2.59 inches (65.87 mm) wide and 0.019 inches (0.48 mm) thick. These dimensions are consistent with quarter-plate tintype pictures. The surface of the frame is plain but the interior edge of the frame is cut in an ornate scroll pattern commonly seen on 1860s tintype cases (Lewis 2010:297).



Figure D.1 Houseware Items, Representative Sample: A) Glass Oil Lamp Chimney (FHH2); B) Brass Oil Lamp Burner (FYH2); C) Porcelain Chamber Stick (FHH1); D) Furniture Caster Wheel (FYH1); E) Furniture Caster Frame (FYH3); F) Porcelain Athena/Minerva Figurine (FHH1); G) Porcelain “Little Red Riding Hood” Figurine (FYH1); H) Brass Tintype Frame (FHH3)



Figure D.2 Houseware Items, Cast Iron Stove Parts, Representative Sample: A) Stove Leg (FHH1), B) Spark Guard (FYH1), C) Sacrificial Wall Fragment (FYH1)



Figure D.3 Houseware Item, Redware Flower Pot (FHH1)

Culinary

Nine (FHH1=6, FHH2=3) artifacts from the Culinary Class were recovered. The Culinary Class contains artifacts pertaining to the storage and preparation of food and drink and is represented by artifacts such as storage jars, baking dishes, kettles and cooking stoves. The Culinary Class has four artifact types: Storage Vessels, Preparation Vessels, Cooking Vessels and Cooking Appliances.

Storage Vessels

Food Storage Jar

Five (FHH1=3, FHH2=2) food storage jars were recovered. One (FHH1) of the jars represented by a lid is made of brown stoneware clay with a salt glaze and measures 4.75 inches (12.065 mm) in diameter. The other jar (FHH2) represented by a lid is made of red earthenware clay with a silvery-gray slip and measures 5.5 inches (139.70 mm) in diameter. The (FHH1) stoneware jar represented by a rim is made of brown clay, glazed on the interior and unglazed in the exterior and measures 5.00 inches (127.00 mm) in diameter. The jar also has a flat rim. The (FHH2) stoneware jar represented by a base fragment is made of brown clay with a dark brown slip, is unglazed on the exterior but has a dark brown slip and glazed on the interior and measures 5.75 inches (146.05 mm) in diameter. The interior slip and glaze are almost entirely worn off of the vessel. The last stoneware jar (FHH1) is represented by a single body fragment made of brown clay with a dark brown slip. The fragment is too small to take accurate diameter measurements.

Food Preparation Vessels

Dish

One (FHH1) yellowware dish was recovered. The vessel is represented by a single yellowware body fragment. Although the exact function of the vessel is unknown since most yellowware vessels were culinary objects used in the storage and/or preparation of foods (McAllister and Michel 1993) the vessel has been classified as such here.

Cooking Vessels

Baking Dish

One (FHH1) baking dish was recovered. The vessel is made of yellowware is oval in shape and measures approximately 10.00 inches (254 mm) in length. The vessel has deep flared rim and has an impressed maker's mark on the base that reads "7C". This mark was unidentified.

Kettle

One (FHH1) kettle was recovered. The vessel is made of iron is round in shape and measures 7.00 inches (177.80 mm) in diameter, unknown in height and 0.11 (2.90 mm) thick. The kettle is made of cast iron and appears to be plain in decoration.

Cooking Appliances

Cook Stove

One (FHH2) cook stove was recovered. The cook stove is represented by single cast stove top plate fragment and a complete stove leg. The top plate fragment is a corner fragment and contains part of the indented frame for the eye plate cover. The leg is of the removable type and complete. Short and stocky in appearance the leg measures 4.72 inches (120 mm) high and is cast with a Rococo Revival-style scroll motif.



Figure D.4 Culinary Items, Representative Sample: A) Stoneware Jar Lid (FHH1); B) Stoneware Jar Rim (FHH1); C) Stoneware Jar Base (FHH2); D) Cast Iron Kettle Rim (FHH1); E) Cast Iron Cook Stove Fragment (FHH2); F) Yellowware Baking Dish (FHH1)

Gustatory

Four hundred and thirteen (FYH1=123, FHH1=143, FYH2=39, FHH2=34, FYH3=49, FHH3=25) artifacts from the Gustatory Class were recovered. The Gustatory Class contains artifacts pertaining to the presentation, serving and consumption of food and drink and is represented by artifacts such as tumblers, shot glasses, decanters, cups, saucers, plates, bowls, tureens, pitchers, platters, miscellaneous serving dishes, mess pans and eating utensils. The Gustatory Class has seven artifact types base on fabric or material type: Glass (Glassware), Ceramic (Porcelain, Ironstone, Earthenware and Yellowware) and Metal (Tinware and Iron/Steel Utensils).

Glassware

Ninety-four (FYH1=21, FHH1= 45, FYH2=8, FHH2=10, FYH3=6, FHH3=4) glassware vessels were recovered. Several glassware forms are represented including tumblers, stemware, ale glasses, cordials, shot glasses, decanters, plates, bowls, butter dishes and compote/celery vases. The glassware vessels are also decorated in a variety of methods including plain, pressed, roughed and cut.

Tumblers

Fifty-five (FYH1=8, FHH1=30, FYH2=6, FHH2=5, FYH3=2, FHH3=4) glass tumblers were recovered during excavations. All of the tumblers are made of mold blown colorless glass, have a plain rim, circular horizontal cross section, tapered body with no foot and a flat or shallow concave base (Jones and Sullivan 1989:143). The measurements of the tumblers ranged from 3.00 to 3.75 inches (76.20 to 95.25 mm) in height, 2.75 to 4.00 inches (69.85 to 101.60 mm) in rim diameter and 2.00 to 3.00 inches (50.80 to 76.20 mm) in base diameter. At least seven different pressed and cut patterns were identified within the tumbler assemblage including *Ashburton*, *Bohemian*, *Flute*, *New York*, *Prism*, *Plain*, and several indeterminate patterns.

Ashburton

Seven (FHH1=4, FYH2=1, FHH3=2) of the tumblers were pressed in the *Ashburton* pattern. The *Ashburton* pattern is characterized by a row of either connected or disconnected ovals usually seven in number around the circumference of the vessel near the rim over a row of either connected or disconnected panels again usually seven in number but offset from the ovals above around the circumference of the vessel near the base. The *Ashburton* pattern was manufactured buy at least two manufactures including the New England Glass Company who introduced their pattern c.1845 and McKee and Brothers who introduced their version c. 1850 (McCain 1998:38; Revi 1973:261, 236). Four (FHH1=3, FHH3=1) tumblers are complete. One (FHH1) tumbler measures 3.62 inches tall and 3.50 inches in diameter. Three (FHH1=2, FHH3=1) tumblers measure 3.50 inches tall and 3.25

inches in diameter. Three (FHH1=1, FYH2=1, FHH3=1) tumblers are represented by body fragments and have indeterminate vessel heights and diameters.

Bohemian

Two (FHH1=1, FHH2=1) of the tumblers were pressed in the *Bohemian* pattern. The *Bohemian* pattern is characterized by a series of eight to ten vertical and flat panels around the body of the vessel. The panels run all the way from the base to the rim with the tops of the panels rounded to create a decorative effect. The *Bohemian* pattern was manufactured by at least two manufacturers including Bakewell, Pears and Company who introduced their pattern in the 1850s and the O'Hara Flint Glass Works who introduced their version c. 1861 (Jones 2000:164; McCain 1998:328; Revi 1973:45). One (FHH2) tumbler is complete and measures 4.00 inches tall and 3.00 inches in diameter. One (FHH1) tumbler is represented by a large rim fragment and measures 3.00 inches in diameter.

Flute (Paneled)

Thirty-three (FYH1=3, FHH1=21, FYH2=3, FHH2=4, FYH3=2) of the tumblers were pressed or cut in the *Flute* pattern. The *Flute* pattern was "pressed" for all but one of the tumblers recovered. The only non-pressed decorated tumbler had the *Flute* pattern "cut" into the vessel. The *Flute* pattern is characterized by a series of six, eight or nine vertical and flat panels around the body of the vessel but only progresses from the base up one-half to two-thirds up the sides of the vessel leaving the top one-half or one-third of the vessel plain (undecorated). This pattern is sometimes called, generically, *Paneled*. The *Flute* (or paneled) pattern was the most common decorative pattern seen on glass tumblers during the 19th-century (Jones 2000:225) and nearly every glass manufacturer produced their own version of the pattern including the McKee and Brothers c. 1850, the New England Glass Company c. 1850s, and King, Son and Company c. 1864 (Revi 1973:212, 238 and 252).

Nine (FHH1) tumblers are complete. One (FHH1) measures 3.75 inches tall and 3.25 inches in diameter. Two (FHH1=2) measures 3.50 inches tall and 3.50 inches in diameter. Three (FHH1=3) measures 3.50 inches tall and 3.25 inches in diameter. One (FHH1) measures 3.50 inches tall and 2.50 inches in diameter. One (FHH1) measures 3.25 inches tall and 3.00 inches in diameter. One (FHH1) measures 3.00 inches tall and 3.50 inches in diameter. Ten (FHH1=8, FYH2=2) tumblers are represented by rim fragments. Three (FHH1) measure 3.50 inches in diameter. Five (FHH1=4, FYH2=1) measure 3.25 inches in diameter. Two (FHH1=1, FYH2=1) measures 3.00 inches in diameter. Seven (FYH1=4, FHH1=1, FYH2=1, FHH2=1) tumblers are represented by base fragments. One (FHH1) measures 2.00 inches in diameter. One (FYH1) measures 2.29 inches in diameter. One (FYH1) measures 2.45 inches in diameter. One (FYH1) measures 2.50 inches in diameter. Two (FYH1=1, FHH2=1) measures 2.67 inches in diameter. One (FYH2) measures 2.75 inches in diameter. Seven (FHH1=2, FHH2=3, FYH3=2) tumblers are represented by body fragments and have indeterminate vessel heights and diameters.

Cincinnati

Five (FYH1=3, FHH1=2) of the tumblers were pressed in the *Cincinnati* pattern. The *Cincinnati* pattern is characterized by a series of three rows of connected ovals with each row offset to create a honeycomb-like appearance. The oval pattern extends from the base of the vessel four-fifths up the sides of the vessel leaving the top one-fifth of the vessel plain (undecorated). The *Cincinnati* pattern was manufactured by the O'Hara Flint Glass Works c. 1848 (Jones 2000:164). One (FYH1) tumbler is complete and measures 3.25 inches tall and 4.00 inches in diameter. One (FHH1) tumbler is represented by a rim fragment and measures 3.50 inches in diameter. One (FHH1) tumbler is represented by a base fragment and measures 2.50 inches in diameter. Two (FYH1) tumblers are represented by large body fragments and have indeterminate vessel heights and diameters.

Prism

Two (FYH1=1, FYH2=1) of the tumblers were pressed in the *Prism* pattern. The *Prism* pattern is characterized by a series (unknown number) of very narrow and concave vertical flutes around the body of the vessel running from the base to the rim. In the *Prism* pattern the flutes run all the way up to the rim, but in a related pattern (*Blaze*) the flutes terminate at varying heights creating a geometric "flame" effect on the upper part of the vessel. The *Prism* pattern was manufactured by McKee & Brothers, c. 1860s (Batty 1998:23; Lee 1931:63; Revi 1973:231). One (FYH2) tumbler is represented by several body fragments and measures 2.75 inches in diameter. One (FYH1) tumbler is represented by a base fragment and measures 2.50 inches in diameter.

Plain (Roughed)

Two (FHH1) of the tumblers were pressed with the *Plain (Roughed)* pattern. Both of the *Plain* tumblers are not decorated with pressed or cut pattern but instead decorated with a plain and even pattern of roughed glass that creates a "frosted" appearance. Roughed glass, through grinding, became fashionable in the 1840s-1850s but the very fine uniform matte texture of the glass suggests that it was achieved through acid etching which superseded grinding in the 1860s (Jones 2000:179). One (FHH1) tumbler is represented by a rim fragment and measures 3.25 inches in diameter. One (FHH1) tumbler is represented by a large body fragment and measures 2.75 inches in diameter.

Indeterminate Patterns

Four (FYH1=1, FYH2=1, FHH3=2) of the tumblers were decorated with indeterminate patterns. Although several of the vessels appear to have pressed patterns the positive identification of these patterns was not possible. At least two of these vessels may be fluted or paneled in decoration. A couple of the vessels were also "plain" in their decoration but were too small in order to confirm if the entire

vessel was *Plain* (undecorated) or just the fragment that was present which in all cases were fragments of rims. Although the exact decorative pattern was not identified for these vessels based on the characteristics of visible patterns, the diameter of the vessel and the thickness and style of the rim each of these tumblers were identified as distinct vessels from those described above. One (FYH1) tumbler is represented by a rim fragment and measures 3.25 inches in diameter. One (FYH2) tumbler is represented by a base fragment and measures 2.50 inches in diameter. Two (FHH3) tumblers are represented by large body fragments and have indeterminate vessel heights and diameters.

Stemware Vessels (Wine Glasses and Goblets)

Fifteen (FYH1=2, FHH1=9, FYH2=1, FHH2=3) stemware vessels were recovered during excavations. Stemware is a general term used for vessels consisting of a foot, a stem and a bowl (Jones and Sullivan 1989:138). The term “stemware” will be used in this report to describe only glass drinking vessels that have stems such as wine glasses and goblets (cordials will be kept separate). Because of the similarity between wine glasses and goblets in their shape, size and function no distinction will be made between these vessels as it was almost impossible to do so based on the small fragments recovered, therefore, all vessels of this type will be called “stemware”. Other stemware vessels because of the distinctive shape and function, such as ale glasses and cordials, were placed in their own artifact categories. None of the vessels were complete enough to get an accurate height measurement but large enough rim and base fragments were recovered so that the measurements of the stemware ranged from 2.25 to 3.50 inches in rim diameters and 2.25 to 3.20 inches in base diameters. At least four different pressed and cut patterns were identified within the stemware assemblage including *Banded Argus*, *Flute*, *Thumbprint*, *Union* and several indeterminate patterns.

Argus (Banded Argus)

One (FHH1) of the stemware vessels was pressed in the *Banded Argus* pattern. The *Banded Argus* pattern is characterized by a row of connected circles above a row of connected ovals which in turn is above a series of connected ovals that are “stretched” from the bottom of the bowl to the base of the vessel creating the stem. In all three rows the circles and ovals are connected and run around the circumference of the vessel. The top row of circles is set just below the rim which is sometimes, as in the one recovered from FHH1, pressed with a thick band around the circumference of the vessel. The *Argus* pattern was manufactured by several glass manufacturers including McKee & Brothers c. 1865, and Bakewell, Pears and Company c. 1870 (Revi 1973:48 and 236). McCain (1998:44-45) attributes a *Banded Argus* pattern goblet to Bakewell, Pears and Company c. 1870. One (FHH1) stemware vessel is represented by a large rim fragment and measures 3.50 inches in diameter.

Flute

Eight (FYH2=1, FHH1=4, FHH2=3) of the stemware vessels were pressed or cut in the *Flute* pattern. The *Flute* pattern was “pressed” for all but three of the stemware vessels recovered. The three non-pressed decorated stemware vessels had the *Flute* pattern “cut” into the vessel. One (FHH1) of the vessels has an unknown number of cut flutes on the stem. One (FYH2) of the vessels has five cut flutes on the stem of the vessels while the third (FHH2) stemware vessel had an unknown number of cut panels on the bowl. The remaining five stemware vessels were had the *Flute* pattern pressed on the lower section of the bowl. See *Flute* under the tumbler descriptions above for a detailed description of the pattern and manufacturing and dating information. Three (FHH1) stemware vessels are represented by a rim fragments. Two (FHH1) measure 2.75 inches in diameter. One (FHH1) measures 2.25 inches in diameter. Three (FHH1=1, FHH2=2) stemware vessel are represented by large body fragments and have indeterminate vessel heights and diameters. One (FHH2) stemware vessel is represented by a cut glass stem fragment and has indeterminate vessel heights and diameters.

Thumbprint

One (FHH1) of the stemware vessels was pressed in the *Thumbprint* pattern. The *Thumbprint* pattern is characterized by four rows of disconnected circles that run around the circumference of the vessel. The rows of circles cover the entire surface of the vessel from the rim to the bottom of the bowl. The according to Lee (1931:186) the *Thumbprint* pattern is related to the *Argus* pattern described above and she surmises that it was produced in the early 1860s by the McKee and Brothers. *Thumbprint* is also attributed to Bakewell, Pears and Company c. 1870 under the *Argus* pattern name (McCain 1998:44; Revi 1978:48, 51). One (FHH1) stemware vessel is represented by a body fragment and has indeterminate vessel heights and diameters.

Union

One (FYH1) of the stemware vessels was pressed in the *Union* pattern. The *Union* pattern is characterized by a series of circles with a raise dot in the center. Each circle is framed in a diamond-shaped shield filled with diamond-shaped facets. Between the tops of the diamond-shaped shields the vessel is decorated with fans filled with diamond-shaped facets. The *Union* pattern was manufactured by The New England Glass Company during the 1860s (McCain 1998:180; Revi 1978:253, 262). One (FYH1) stemware vessel is represented by large body fragment and has an indeterminate vessel height and diameter.

Indeterminate Pattern

Two (FYH1=1, FHH1=1) of the stemware vessels were decorated with indeterminate pressed patterns. One (FYH1) of the vessels is represented by a nearly complete base measuring 3.20 inches (81.28 mm) in diameter and the other stemware vessel (FHH1) is also represented by a nearly complete base but measuring 2.25 inches (57.15 mm) in diameter. Two (FYH1=1, FHH1=1) stemware vessels are represented by base fragments. One (FYH1) measures 3.20 inches in diameter. One (FHH1) measures 2.25 inches in diameter.

Ale Glass

One (FYH1) ale glass was recovered. Ale glasses have a circular horizontal cross section, tapered body, very short stem and are footed with a shallow concave base (Jones and Sullivan 1989:138-142). Ale glasses are technically considered stemmed vessels although the “stem” of the ale glass is extremely short and almost nonexistent. Due to its distinctive shape and more specialized intended function ale glasses are placed in their own artifact category in this classification. The ale glass recovered is complete and measures 6.25 inches (158.75 mm) tall with a 3.00 inch (76.20 mm) rim diameter and a 3.15 inch (80.01 mm) base diameter. The ale glass is pressed in the *Ashburton* pattern. See *Ashburton* under the tumbler descriptions above for a detailed description of the pattern and manufacturing and dating information.

Cordial

Two (FYH1) cordials were recovered. Both of the vessels recovered have a plain rim, conical bowl, baluster stem and a plain conical foot (Jones and Sullivan 1989:138-141). Cordials are technically considered stemmed vessels but due to its distinctive shape and more specialized intended function cordials are placed in their own artifact category in this classification. The most complete cordial although missing the rim the vessel measures a little over 4.00 inches (101.60 mm) with a 2.12 inch (53.84 mm) base diameter. The other cordial is represented by a base measuring 2.23 inches (56.64 mm) in diameter. Both vessels are made of colorless glass and decorated in the *Flute* pattern with cut panels. See *Flute* under the tumbler descriptions above for a detailed description of the pattern and manufacturing and dating information.

Shot Glass

Five (FYH1=2, FHH1=2, FHH2=1) shot glasses were recovered. All of the shot glasses recovered were made of colorless glass and have a plain rim, circular horizontal cross section, tapered body with no foot and a flat or shallow concave base (Jones and Sullivan 1989:143). The measurements of the shot glasses ranged from 2.75 to 2.91 inches (76.20 to 95.25 mm) in height, 2.50 to 3.00 inches (69.85 to 101.60 mm) in rim diameter and 1.71 inches (50.80 to 76.20 mm) in base diameter.

At least two different pressed patterns were identified within the shot glass assemblage including *Flute* and *Plain* patterns.

Flute

Two (FYH1=1, FHH1=1) of the shot glasses were pressed in the *Flute* pattern. Both of the shot glasses are molded in the eight-panel variant of the *Flute* pattern and the panels on both vessels only extended approximately one-half of the way up the vessel. See *Flute* under the tumbler descriptions above for a detailed description of the pattern and manufacturing and dating information. One (FYH1) shot glass is complete and measures 2.91 inches tall with a 2.50 inch rim diameter and a 1.71 inch base diameter. One (FHH1) shot glass is represented by a base fragment and measures 2.00 inches in diameter.

Plain

Three (FYH1=1, FHH1=1, FHH2=1) of the shot glasses were pressed in the *Plain* or undecorated pattern. All three vessels appear to have no pressed or cut patterns nor do they display any evidence of a roughed decoration. *Plain* decorated vessels were produced by nearly every glass manufacturer during the 19th century. One (FHH2) shot glass is complete and measures 2.75 inches tall with a 2.50 inch rim diameter. One (FYH1) shot glass is represented by a rim fragment and measures 2.50 inches in diameter. One (FHH1) shot glass is represented by a rim fragment and measures 3.00 inches in diameter.

Decanter

Four (FHH1=3, FHH2=1) glass decanters were recovered. All of the decanters recovered were made of colorless glass, mold blown and decorated with pressed and/or cut designs. All of the decanters are narrow-mouthed vessels without pouring spouts and have glass stoppers (Jones and Sullivan 1989:134). Two (FHH1) of the decanters are of the three-ring (Anglo-Irish) type with a flanged lip and ground bore, three neck rings and is decorated in the *Flute* pattern with thirteen cut panels on the shoulder and lower body (Jones 2000:198; Jones and Sullivan 1989:134). One (FHH1) of the Anglo-Irish type decanters is nearly complete (missing only the stopper) and measures 8.00 inches (203.20 mm) tall with a 4.50 inch (114.30 mm) base diameter. In British and American factories the Anglo-Irish shape continued in production after mid century but the rings had disappeared by the 1850s. The form with neck rings continued to be made in Swedish and Danish glass factories after 1850 (Jones 2000:198). One (FHH1) appears to be *plain* in decoration and is represented by only a large colorless glass body fragment. One (FHH2) decanter is represented by only the stopper. The stopper is made of colorless glass in the form of a spire and decorated with cut facets.



Figure D.5 Glass Drink Ware Vessels, Representative Sample: A) Pressed *Ashburton* Ale Glass (FYH1); B) Cut *Flute* decanter (FHH1); C) Cut *Flute* Tumbler (FHH1); D) Pressed “Banded” *Ashburton* Tumbler (FHH1); E) Cut *Flute* Cordial (FYH1); F) Pressed *Plain* Shot Glass (FHH2)

Plate

One (FYH1) glass plate was recovered. The single plate is made of milk or opaque white glass and pressed with an unidentified floral pattern. The plate, described as a shallow circular dish (Jones and Sullivan 1989:137) measures 10.00 inches (254 mm) in diameter. Opaque white (now called milk glass) and opalescent milky white (fiery opalescent) pieces of glass have been pressed in America since the 1830s and by the 1860s lines of some patterns were made in milk glass (NMGCS 2019).

Bowl

Eight (FYH1=3, FHH1=1, FYH3=4) glass bowls were recovered. Bowls here are described after Jones and Sullivan (1989:131) as a deep open vessel tending to be wider than it is high and having a flat or footed base. The bowls measure 3.75 to 6.00 inches (95.25 to 152.40 mm) in diameter and three most complete bowls measure 1.00 inches (25.40 mm) in high. At least four different pressed patterns were identified within the glass bowl assemblage including *Bohemian*, *Paneled Oval*, *Plain* and two indeterminate patterns.

Bohemian

One (FYH3=1) of the bowls was pressed in the *Bohemian* pattern. The *Bohemian* pattern is characterized by series of vertical and flat panels around the body of the vessel and the base of the bowl is molded with fifteen tear drop-shaped flutes

arranged in a circle around the vessel center point of the vessel. The bowl measures at least 6.00 inches (154.20 mm) in diameter. See *Bohemian* under the tumbler descriptions above for a detailed description of the pattern and manufacturing and dating information.

Paneled Oval

Four (FYH1=3, FYH3=1) of the bowls were pressed in the *Paneled Oval* pattern. The *Paneled Oval* pattern is characterized by a series of ovals (that look more like acorns than ovals) around the circumference of the bowl. Each oval is set within a rectangular panel composed of squares. The bases of the bowls are pressed with a diamond pattern. The *Paneled Oval* pattern has yet to be attributed to any glass manufacture to date, but Lee (1944:77, 84) states that the pattern is found most frequently in New England and dates the pattern to the 1860s. McCain (1998:46-47) also dates the pattern to the 1860s. All four bowls are nearly complete and measure 3.00 inches (76.20 mm) in diameter and 1.00 inches (25.40 mm) high.

Plain

One (FHH1=1) of the bowls is *Plain* in decoration. The *Plain* bowl measures 3.75 inches (95.25 mm) in diameter. The vessel appears to have no pressed or cut patterns nor does it display any evidence of a roughed decoration. *Plain* decorated vessels were produced by nearly every glass manufacturer during the 19th century.

Indeterminate

Two (FYH3) of the bowls are decorated with indeterminate pressed patterns. One of the bowls measures approximately 3.00 inches (76.20 mm) in diameter and is decorated with an indeterminate rib and column pattern consisting of a series of large convex ribs alternating with a series of smaller pointed ribs. The other bowl is also pressed in a rib and/or column pattern. The columns in the pattern are shorter and more pointed. Although the exact decorative pattern was not identified for these vessels based on the characteristics of visible patterns each of these bowls were identified as distinct vessels from those described above.

Butter Dish

Two (FYH1=1, FYH2=1) butter dishes were recovered. Butter dishes were of a similar form as bowls as deep open vessels tending to be wider than they are high and having a flat or footed base (Jones and Sullivan 1989:131). In addition, butter dishes were sometimes covered with a matching lid but were also produced without lids (Jones 2000:202, 224). Both butter dishes are made of colorless glass and pressed in the *Star and Dart* pattern. The *Star and Dart* pattern is characterized by series of long diamonds called “darts” and six-pointed “stars” with smaller “darts” above the stars. The *Star and Dart* pattern has yet to be attributed to any glass manufacturer but McCain (1998:476-477) dates the pattern to the 1850s.

Compote/Celery Vase

One (FYH1) compote or celery vase was recovered. Compotes are a class of serving vessels that consists of either a bowl or a wide flat dish that is pedestalled (Wetherbee 1996:27). A celery vase is also a class of serving vessel that consists of a tall and narrow bowl that is stemmed (Jones 2000:191; McCain 1998:93). Although the exact vessel form is unknown the vessel is made of colorless glass and is pressed in the *Mitre Diamond* pattern. The *Mitre Diamond* pattern is characterized by a series of diamonds or saw tooth-like shapes that cover the sides of the vessel and project above the rim creating a repetitive pointed pattern. The *Mitre Diamond* (or *Saw Tooth*) pattern was produced by several glass manufacturers including McKee and Brothers who produced the pattern c. 1850 and The New England Glass Company who introduced their version in the 1860s (McCain 1998:180; Revi 1973:240, 253, 262)

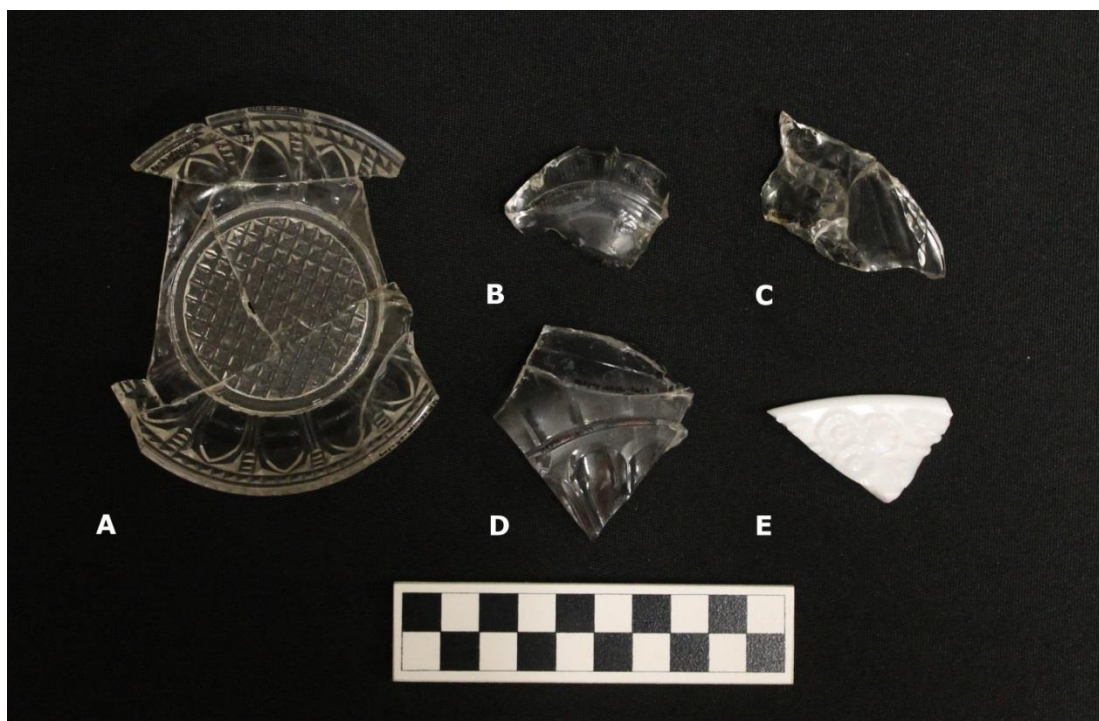


Figure D.6 Glass Serving/Eating Ware, Representative Sample: A) Pressed *Paneled Oval* bowl (FYH1); B) Pressed Bowl with an Indeterminate *Ribbed* Pattern (FYH3); C) Pressed *Union* Hollow Vessel (FYH1); D) Pressed *Bohemian* Bowl (FYH3); E) Pressed Milk Glass Plate with an Indeterminate *Floral* Pattern (FYH1)

Ceramicware Vessels

Two hundred and ninety-nine (FYH1=93, FHH1=95, FYH2=31, FHH2=21, FYH3=40, FHH3=19) ceramicware vessels were recovered including fifty-seven (FYH1=13, FHH1=34, FYH2=2, FHH2=5, FYH3=1, FHH3=2) porcelain vessels, one (FHH1) Chinese export porcelain vessel, one hundred and eighty-nine (FYH1=67, FHH1=45, FYH2=24, FHH2=11, FYH3=29, FHH3=13) ironstone vessels, fifty-one (FYH1=12, FHH1=15, FYH2=5, FHH2=5, FYH3=10, FHH3=4) earthenware vessels and one (FYH1) yellowware vessel.

Twelve vessels forms were recovered including fifty-four (FYH1=24, FHH1=7, FYH2=7, FHH2=7, FYH3=6, FHH3=3) cups/mugs, sixty-three (FYH1=24, FHH1=17, FYH2=8, FHH2=8, FHH2=3, FYH3=9, FHH3=2) saucers, eleven (FYH1=2, FHH1=6, FYH2=1, FHH3=2) teaware vessels, eighty-three (FYH1=20, FHH1=33, FYH2=8, FHH2=5, FYH3=12, FHH3=5) plates, forty-four (FYH1=10, FHH1=15, FYH2=3, FHH2=2, FYH3=11, FHH3=3) bowls, twelve (FYH1=5, FHH1=4, FYH3=2, FHH3=1) platters, two (FYH1=1, FHH1=1) tureens, one (FHH1) butter tub, one (FHH1) dish, six (FYH1=3, FHH1=3) pitchers, fourteen (FYH1=3, FHH1=2, FYH2=3, FHH2=3, FHH3=3) flat vessels and six (FYH1=1, FHH1=3, FYH2=1, FHH2=1) hollow vessels.

Eight decoration types were identified in the gustatory ceramic assemblage including seven (FYH1=4, FHH1=2, FHH3=1) gilded, (FYH1=8, FHH1=2, FYH2=3, FHH2=2, FYH3=7) hand-painted, (FYH1=34, FHH1=30, FYH2=16, FHH2=8, FYH3=11, FHH3=6) molded, (FYH1=4, FHH1=7, FYH2=1, FHH2=2, FYH3=1, FHH3=2) annular, three (FYH1) sponge, six (FHH1=4, FYH2=1, FYH3=1) edge, thirteen (FYH1=4, FHH1=5, FYH2=1, FHH2=1, FYH3=1, FHH3=1) transfer-printed and (FYH1=36, FHH1=45, FYH2=31, FHH2=21, FYH3=40, FHH3=19) plain decorated vessels.

Porcelain Vessels

Fifty-seven (FYH1=13, FHH1=34, FYH2=2, FHH2=5, FYH3=1, FHH3=2) porcelain vessels were recovered. The term porcelain is used here to refer to a ceramic fabric that is relatively thin in cross-section, with a very white appearance, a high level of translucency, high mechanical strength and high chip resistance. Porcelain of this type is also known as English soft paste porcelain or bone china and was the most dominate type produced in the England by the early 19th century and the most dominate type of porcelain in America during the second half of the 19th century (Miller et al. 2000:96). Eight (FYH1=2, FHH1=5, FHH3=1) serving vessels and forty-one (FYH1=9, FHH1=27, FYH2=2, FHH2=1, FYH3=1, FHH3=1) eating and drinking vessels were made of porcelain. At least nine different vessel forms are represented including eleven (FYH1=3, FHH1=6, FHH2=1, FYH3=1) cups, eight (FYH1=2, FHH1=5, FHH2=1) saucers, six (FYH1=2, FHH1=3, FHH3=1) teaware vessels, twenty-four (FYH1=5, FHH1=15, FYH2=2, FHH2=1, FHH3=1) plates, two (FHH1) bowls, two (FYH1=1, FHH1=1) tureens, one (FHH1) pitcher, three (FYH1=1, FHH2=1, FHH3=1) indeterminate flat vessels and two (FHH1=1, FHH2=1) indeterminate hollow vessels. Four decoration types were observed on the

porcelain vessels including seven (FYH1=4, FHH1=2, FHH3=1) gilded vessels, ten (FYH1=5, FHH1=2, FYH2=1, FHH2=2) hand-painted vessels, eight (FYH1=1, FHH1=7) mold decorated vessels and thirty-three (FYH1=3, FHH1=24, FYH2=1, FHH2=3, FYH3=1, FHH3=1) *Plain* or undecorated vessels.

Eating and Drinking Vessels

Forty-one (FYH1=9, FHH1=27, FYH2=2, FHH2=1, FYH3=1, FHH3=1) porcelain eating and drinking vessels were recovered including eleven (FYH1=2, FHH1=6, FHH2=1, FYH3=1) cups/mugs, eight (FYH1=2, FHH1=5, FYH2=1) saucers, twenty-three (FYH1=5, FHH1=15, FYH2=2, FHH2=1) plates and two (FHH1) bowls.

Cup

Eleven (FYH1=3, FHH1=6, FHH2=1, FYH3=1) porcelain cups were recovered. Two (FYH1=1, FHH1=1) of the cups are gilded, three (FYH1=1, FHH1=1, FHH2=1) of the cups are hand-painted and six (FYH1=1, FHH1=4, FYH3=1) of the cups are plain.

Gilded

Two (FYH1=1, FHH1=1) of the porcelain cups recovered are decorated with gilded designs. One (FYH1) of the gilded cups is molded with a dodecagon (twelve-sided) horizontal cross section and a loop handle. The vessel measures 3.00 inches (76.20 mm) and is decorated with a gilded band around the circumference of the rim and a gilded stripe down the exterior of the handle and a colorless glaze. The other porcelain cup (FHH1) is also molded and with gilded highlights. The vessel measures 4.00 inches (101.60 mm) in diameter with a circular, or round, horizontal cross section and an ornate scroll handle. The vessel is decorated in the *Rococo Berlin* pattern. The *Rococo Berlin* pattern is characterized by a molded ornate scroll pattern around the rim of the vessel with gilded highlights. On the front of the vessel the molded and gilded pattern frames a hand-painted panel containing a bouquet of flowers. The *Rococo Berlin* pattern was manufactured by Copeland and Garrett c. 1833-1847 (Godden 2001:173).

Hand-Painted

Three (FYH1=1, FHH1=1, FHH2=1) of the porcelain cups recovered are decorated with hand-painted designs. One (FYH1) of the hand-painted cups is molded with a dodecagon (twelve-sided) horizontal cross section and a loop handle and measures 3.00 inches (76.20 mm) in diameter. The vessel is decorated with a hand-painted pattern of red Gerbera daisies and pink roses with green vines and leaves over a colorless glaze. The bottom of the vessel is marked with and incised molder's mark of a cursive "A" or "V". The other two (FHH1=1, FHH2=1) hand-painted cups both measure 4.00 inches (101.60 mm) in diameter and are decorated with an unidentified floral pattern.

Plain

Six (FYH1=1, FHH1=4, FYH3=1) of the porcelain cups recovered are plain or undecorated. One (FYH1) of the cups measures 3.00 inches (76.20 mm) in diameter and has a circular horizontal, or round, cross section. Two cups (FHH1=1, FYH3=1) measures 3.00 inches (76.20 mm) in diameter and are molded with a dodecagon (twelve-sided) horizontal cross section. One (FHH1) of the plain cups is molded with a dodecagon (twelve-sided) horizontal cross section and measures 3.25 inches (82.55 mm) in diameter. Two (FHH1) of the cups measure 3.75 inches (95.25 mm) in diameter and are molded with a dodecagon (twelve-sided) horizontal cross section.

Saucer

Eight (FYH1=2, FHH1=5, FHH2=1) porcelain saucers were recovered. Two (FYH1) of the saucers are gilded, six of (FHH1=5, FHH2=1) saucers are plain.

Glided

Two (FYH1) of the porcelain saucers recovered are decorated with gilded designs. One (FYH1) of the saucers measures 6.00 inches (152.40 mm) in diameter and is molded with eighteen divisions or panels. The vessel is decorated with a single gilded band around the rim. The other saucer (FYH1) measures 6.50 inches (165.10 mm) in diameter and is decorated with single gilded line around the rim of the vessel.

Plain

Six (FHH1=5, FHH2=1) of the porcelain saucers recovered are plain or undecorated. Two (FHH1) of the saucers measure 5.50 inches (139.70 mm) in diameter and are plain and unmolded. One (FHH1) of the saucers measures 5.75 inches (146.05 mm) in diameter and is molded with a dodecagon (twelve-sided) horizontal cross section. Three (FHH1=2, FHH2=1) of the vessels are also plain and unmolded but measure 6.00 inches (152.40 mm) in diameter.

Plate

Twenty-four (FYH1=5, FHH1=15, FYH2=2, FHH2=1, FHH3=1) porcelain plates were recovered. One (FYH1) of the plates is gilded, four (FYH1=3, FYH2=1) of the plates are hand-painted, three (FHH1) of the plates are molded and fifteen (FYH1=1, FHH1=12, FYH2=1, FHH2=1) of the plates are plain.

Gilded

One (FYH1) of the porcelain plates recovered is gilded. The plate measures 6.75 inches (171.45 mm) in diameter and is decorated with a single gilded band around the rim.

Hand-Painted

Four (FYH1=3, FYH2=1) of the porcelain plates recovered are hand-painted. Four (FYH1=3, FYH2=1) of the plates measure 7.25 inches (184.15 mm) in diameter and is molded with eighteen divisions or panels. The vessels are also decorated with a hand-painted pattern of red Gerbera daisies and pink roses with green vines and leaves over a colorless glaze. Two of these vessels are marked on the bottom with and incised molder's mark of a cursive "L".

Molded

Three (FHH1) of the porcelain plates recovered are decorated with molded patterns. All three plates measure 7.00 inches (177.80 mm) in diameter and each is molded with a different unidentified ribbed pattern.

Plain

Fifteen (FYH1=1, FHH1=12, FYH2=1, FHH2=1) of the porcelain plates recovered are *Plain* or undecorated. Three (FYH1=1, FHH1=1, FYH2=1) of the plates measure 7.00 inches (177.80 mm) in diameter. One (FHH1) of the plates measures 7.50 inches (190.50 mm) in diameter. Five (FHH1) of the plates measure 8.00 inches (203.20 mm) in diameter. The bottom of one of the 8.00 inch plates is marked with and incised molder's mark of an unidentified cursive letter. Three (FHH1) of the plates measure 8.50 inches (215.90 mm) in diameter. One (FHH1) of the plates measures 9.00 inches (228.60 mm) in diameter. One (FHH1) of the plates measures 9.50 inches (241.30 mm) in diameter. One (FHH2) of the plates measures 10.00 inches (254.00 mm) in diameter.

Bowl

Two (FHH1) porcelain bowls were recovered. Both bowls are *Plain* or undecorated with flared rims. One of the bowls measures 6.00 inches (152.40 mm) in diameter and the other 8.50 inches (215.90 mm) in diameter.

Serving Vessels

Nine (FYH1=2, FHH1=6, FHH3=1) porcelain serving vessels were recovered including six (FYH1=1, FHH1=4, FHH3=1) tea serving vessels, two (FYH1=1, FHH1=1) tureens and one (FHH1) pitcher.

Teawares

Six (FYH1=1, FHH1=4, FHH3=1) porcelain teaware vessels were recovered. Two (FHH1=1, FHH3=1) of the vessels are gilded, two (FYH1=1, FHH1=1) of the vessels are hand-painted, one (FHH1) of the vessels is molded and one (FHH1) of the vessels is plain.

Gilded

Two (FHH1=1, FHH3=1) of the porcelain teaware vessels recovered are gilded. One (FHH1) vessel measures 5.00 inches (127.00 mm) in diameter and may be decorated in the *Rococo Berlin* pattern with a molded wreath or leaf design around the circumference of the cover with gilded highlights. See *Gilded* under the porcelain cup descriptions above for a detailed description of the *Rococo Berlin* pattern and manufacturing and dating information. The cover is marked on the inside with a printed maker's mark in green ink that reads "[in ornate scrollwork border] COPELAND / & GARRETT / FELDSPAR PORCELAIN". Copeland and Garrett used this mark between 1833 and 1847 (Godden 2001:173). Another (FHH3) vessel is also molded and gilded with an indeterminate pattern but is represented by fragment of a hollowware vessel handle. The cover and handle most-likely belong to a teaware vessel such as a coffee pot, tea pot, sugar jar or creamer.

Hand-Painted

Two (FYH1=1, FHH1=1) of the porcelain teaware vessels recovered are hand-painted. One (FYH1) of the vessels is represented by porcelain cover measuring 2.00 inches (50.80 mm) in diameter and decorated with a hand-painted pattern of red Gerbera daisies and pink roses with green vines and leaves over a colorless glaze. The cover most-likely belongs to a teaware vessel such as a coffee pot, tea pot, sugar jar or creamer. Another (FHH1) vessel is represented by a fragment of tea or coffee pot spout. The vessel is decorated with an indeterminate hand-painted floral pattern that may be the same *Rococo Berlin* pattern described above.

Molded

One (FHH1) of the porcelain teaware vessels recovered is decorated with a molded pattern. The vessel is represented by porcelain cover measuring 4.00 inches (101.60 mm) in diameter and decorated with concentric molded circles. The cover most-likely belongs to a teaware vessel such as a coffee pot, tea pot, sugar jar or creamer.

Plain

One (FHH1) of the porcelain teaware vessels recovered is *Plain* or undecorated. The vessel is made of white porcelain and is represented by an open spout or poring lip. Lips/spouts of this type are commonly found on milk jugs (Wetherbee 1996:32).

Tureen

Two (FYH1=1, FHH1=1) porcelain tureens were recovered. One (FYH1) of the tureens is made of white porcelain and represented by fragments of a bar finial from the vessel lid. The finial is molded in the form of acanthus leaves with a colorless glaze. The second tureen (FHH1) is also made of white porcelain with a colorless glaze and is represented by a body/rim fragment. The size of the vessel is unknown but it does appear to be sided, plain in decoration and the top part of the rim is unglazed.

Pitcher

One (FHH1) porcelain pitcher was recovered. The pitcher is made of an unglazed off-white porcelain, known as parian, and is molded with water or pond lilies in raised relief (possibly the *Water Lily* pattern). The pitcher has a “modified dutch jug” vessel form dating from the 1830s onward and the pond or water lilies are of a “growing plant” motif as if “growing-up” from the base of the vessel, dating to the late-1840s (Henrywood (1984:27-28, 31-32; Hughes 1985:11-12, 1991). The *Water Lily* pattern is attributed to Copeland and Garrett c. 1847.

Unidentified Flat and Hollow Vessels

Five (FYH1=1, FHH1=1, FHH2=2, FHH3=1) porcelain vessels were recovered for which their vessels form could not be positively identified and therefore have been classified here as either flat vessels or hollow vessels. Three (FYH1=1, FHH2=1, FHH3=1) indeterminate flat vessels and two (FHH1=1, FHH2=1) indeterminate hollow vessels.

Flat Vessel

Three (FYH1=1, FHH2=1, FHH3=1) porcelain flat vessels were recovered. Two (FYH1=1, FHH3=1) of the vessels are made of white porcelain are plain in decoration and have a colorless glaze. One (FHH2) of the vessels is made of white porcelain but decorated with a hand-painted decoration of an indeterminate floral pattern over a colorless glaze.

Hollow Vessel

Two (FHH1=1, FHH2=1) porcelain hollow vessels were recovered. One (FHH1) of the hollow vessel is molded with an unidentified pattern. The other (FHH2) vessel is plain in decoration but appears to be handled.



Figure D.7 Porcelain Gustatory Ceramics, Representative Sample of Eating and Drinking Wares: A) “Matched” Hand-Painted *Floral* Plate (FYH1); B) “Matched” Hand-Painted “Floral” Tea Cup (FYH1); C) *Paneled* Coffee Cup (FHH1); D) *Plain* Small Plate (FYH1); E) *Plain* Dinner Plate (FYH1)

Unidentified Vitrified China (Porcelain)

One (FHH1) unidentified porcelain bowl was recovered. The bowl is made of a gray vitrified/semi-vitrified porcelain fabric and decorated with a blue and white transfer-printed pattern. The pattern is unidentified but consists of plum blossoms. The bowl is represented by a single body fragment so the exact size of the vessel is unknown but based on the curvature of the body the diameter of the bowl is probably greater than 8.00 inches (203.20 mm) in diameter.



Figure D.8 Unidentified Vitrified China Bowl (FHH1)

Ironstone Vessels

One hundred and eighty-seven (FYH1=67, FHH1=43, FYH2=24, FHH2=11, FYH3=29, FHH3=13) ironstone vessels were recovered. The term ironstone will be used here to refer to vessels with a very durable white earthenware fabric, usually thick in cross-section and sometimes vitrified or semi-vitrified, and most commonly decorated with raised molded patterns or plain (Wetherbee 1985:5; 1996:31). Ceramics of this type are also known as white granite or white ironstone and were the most dominate ceramic type in America from the 1850s until the end of the 19th century (Miller et al. 2000:95).

Twenty-one (FYH1=7, FHH1=10, FYH2=1, FYH3=1, FHH3=2) serving vessels and one hundred and fifty-five (FYH1=58, FHH1=31, FYH2=20, FHH2=9, FYH3=28, FHH3=9) eating and drinking vessels were made of ironstone. At least eleven different vessel forms are represented including thirty-three (FYH1=18, FHH1=1, FYH2=6, FHH2=3, FYH3=3, FHH3=2) cups, forty-four (FYH1=17, FHH1=12, FYH2=6, FHH2=2, FYH3=5, FHH3=2) saucers, five (FYH1=1, FHH1=2, FYH2=1, FHH3=1) teaware vessels, fifty-four (FYH1=15, FHH1=13, FYH2=6, FHH2=4, FYH3=12, FHH3=4) plates, twenty-four (FYH1=8, FHH1=5, FYH2=2, FYH3=8, FHH3=1) bowls, eight (FYH1=4, FHH1=2, FYH3=1, FHH3=1) platters, one (FHH1) butter tub, one (FHH1) dish, four (FYH1=2, FHH1=2) pitchers, nine (FYH1=2, FHH1=1, FYH2=2, FHH2=2, FHH3=2) indeterminate flat vessels and four (FHH1=3, FYH2=1) indeterminate hollow vessels.

Only two forms of decoration were observed on the ironstone vessels either molded or plain. Ninety-six of the vessels were decorated with molded patterns including one (FHH1) *Arch/Loop*, one (FYH3) *Boote's 1851 Round*, five (FYH1=2, FYH2=1, FYH3=1, FHH3=1) *Columbia*, five (FYH1=1, FHH1=3, FYH3=1) *Double Sydenham*, one (FYH1) *Fig/Round*, one (FYH1) *Fig/Union*, one (FYH1) *Fluted Gothic*, thirteen (FYH1=7, FHH1=4, FHH2=2) *Gothic*, one (FHH2) *Hanging Leaves*,

three (FYH1=2, FYH3=1) *Hebe Shape*, four (FYH1=2, FYH2=1, FYH3=1) *Lily of the Valley*, one (FYH1) *Lily Shape*, two (FHH1=1, FYH2=1) *Pearl Sydenham*, four *Pomegranate* (FYH1=2, FYH2=1, FYH3=1), one (FHH3) *Portland Shape*, one (FHH1) *Prize Puritan*, one (FYH1) *Rolling Star*, two (FYH1=1, FYH2=1) *Scalloped Decagon*, five (FYH1=2, FHH1=1, FYH2=1, FYH3=1) *Sharon Arch*, two (FYH1=1, FHH1=1) *Sydenham*, two (FHH2=1, FYH3=1) *Trent Shape*, one (FHH2) *Triple Boarder*, one (FHH1) *True Scallop*, three (FYH2=2, FYH3=1) *Vintage Shape*, two (FHH1=1, FHH2=1) *Western Shape* and thirty-one (FYH1=8, FHH1=9, FYH2=8, FHH2=1, FYH3=2, FHH3=3) indeterminate molded patterns. Ninety-one (FYH1=34, FHH1=19, FYH2=8, FHH2=4, FYH3=18, FHH3=8) of the vessels are *Plain* or undecorated.

Eating and Drinking Vessels

One hundred and fifty-five (FYH1=58, FHH1=31, FYH2=20, FHH2=9, FYH3=28, FHH3=9) ironstone eating and drinking vessels were recovered including thirty-three (FYH1=18, FHH1=1, FYH2=6, FHH2=3, FYH3=3, FHH3=2) cups/mugs, forty-four (FYH1=17, FHH1=12, FYH2=6, FHH2=2, FYH3=5, FHH3=2) saucers, fifty-four (FYH1=15, FHH1=13, FYH2=6, FYH3=8, FHH3=1) plates and twenty-four (FYH1=8, FHH1=5, FYH2=2, FYH3=8, FHH3=1) bowls.

Cup/Mug

Thirty-three (FYH1=18, FHH1=2, FYH2=6, FHH2=3, FYH3=3, FHH3=2) ironstone cups/mugs were recovered.

Lily Shape

One (FYH1) of the ironstone cups/mugs is molded in the *Lily Shape*. The *Lily Shape* is vine-type pattern characterized by a long vine-like stem with a series of spear-shaped leaves with undulate margins and pinnate venation and closed trumpet-shaped flowers around the rim. The *Lily Shape* was registered by Henry Burgess, Burslem and manufactured c. 1864 to 1892 (Dieringer and Dieringer 2001:93). One (FYH1) cup/mug measures 3.50 inches (88.90 mm) in diameter.

Pomegranate Shape

One (FYH1) of the ironstone cups/mugs is molded in the *Pomegranate Shape*. The *Pomegranate Shape* is a ribbon-type pattern characterized by a single ribbon with three lines looped to create six knots at evenly spaced intervals around the rim. The *Pomegranate Shape* was registered by Jacob Furnival and Company c. 1850 (Dieringer and Dieringer 2001:134). One (FYH1) cup/mug measures 3.25 inches (82.55 mm) in diameter.

Sharon Arch

Three (FYH1=1, FYH2=1, FYH3=1) of the ironstone cups/mugs is molded in the *Sharon Arch* pattern. The *Sharon Arch* pattern is ribbon-type pattern characterized by a single ribbon looped to create six knots and evenly space intervals around the rim. Between the knots is a scroll and leaf motif and opposite each of the knots is a single dot. The *Sharon Arch* pattern was registered by J. Wedgwood of Tunstall on April 12, 1861 (Dieringer and Dieringer 2001:136). The pattern was also called *Erie Shape* and shared with Davenport and Company of Longport. One (FYH2) cup/mug measures 3.00 inches (76.20 mm) in diameter. Two (FYH1=1, FYH3=1) cups/mugs measures 3.25 inches (82.55 mm) in diameter.

Columbia Shape

One (FYH1) of the ironstone cups/mugs is molded in the *Columbia Shape*. The *Columbia Shape* is an ogee-type pattern characterized by a series of ogee shapes with the points outward and between the ogees are lotus flowers. The *Columbia Pattern* was registered by G. W. Read, a modeler, on October 29, 1855 (Dieringer and Dieringer 2001:50). One (FYH1) cup/mug measures 4.00 inches (101.60 mm) in diameter.

Pearl Sydenham

One (FYH2) of the ironstone cups/mugs is molded in the *Pearl Sydenham* pattern. The *Pearl Sydenham* is an ogee-type pattern characterized by a series of ogee shapes end to end with the points outward. The *Pearl Sydenham* pattern was registered by J. & G. Meakin of Henley c. 1851 and the pattern was manufactured until at least 1891 (Dieringer and Dieringer 2001:54). One (FYH2) cup/mug measures 3.00 inches (76.20 mm) in diameter.

Sydenham

One (FYH1) of the ironstone cups/mugs is molded in the *Sydenham* pattern. The *Sydenham* is an ogee-type pattern characterized by a series of ogee shapes with the points outward and between the ogees are stylized lotus flowers. The *Sydenham* pattern was registered by T. R. Boote of Burslem on September 3, 1853 and again on June 21, 1854 (Dieringer and Dieringer 2001:52; Wetherbee 1996:50, 55). One (FYH1) cup/mug measures 4.00 inches (101.60 mm) in diameter.

Gothic

Three (FYH1=1, FHH1=1, FHH2=1) of the ironstone cups/mugs is molded in the *Gothic* pattern. The *Gothic* pattern is a sided-type pattern characterized by multiple sides (usually six to ten) with a simple boarder of one to several lines. The *Gothic* pattern was a common ironstone pattern of the 1840s and 1850s and nearly every ironstone potter of the period made their version of the pattern (Wetherbee 1996:35).

One (FHH1) cup/mug measures 3.50 inches (88.90 mm) in diameter and is molded with a hexagon (six-sided) horizontal cross section. One (FHH2) cup/mug measures 4.75 inches (120.65 mm) in diameter and is molded with an octagon (eight-sided) horizontal cross section. One (FYH1) cup/mug is molded with a decagon (ten-sided) horizontal cross section.

Indeterminate Molded Patterns

Ten (FYH1=4, FYH2=2, FHH2=1, FYH3=1, FHH3=2) of the ironstone cups/mugs are molded with indeterminate molded patterns. Two (FYH1=1, FYH2=2) cup/mug is molded with three horizontal lines around the circumference of the vessel near the rim. One of these vessels (FYH1) measures 3.00 inch (76.20 mm) diameter and the other (FYH2) measures 3.50 inches (88.90 mm) in diameter. The other cups/mugs are decorated with unidentified molded designs. One (FYH1) of the cups/mugs measures 3.00 inches (76.20 mm) in diameter. Two (FYH1=1, FYH3=1) of the cups/mugs measures 3.25 inches (82.55 mm) in diameter. Two (FYH1=1, FHH2=1) of the cups/mugs measures 3.50 inches (88.90 mm) in diameter. One (FYH1) of the cups/mugs measures 4.00 inches (101.60 mm) in diameter. One (FHH3) of the cups/mugs measures 4.50 inches (114.30 mm) in diameter. One (FHH3) mug/cup is represented by the fragment of a handle.

Plain

Fourteen (FYH1=8, FHH1=2, FYH2=2, FHH2=1, FYH3=1) of the ironstone cups/mugs are *Plain* or undecorated.

Four (FYH1=3, FHH1=1) of these vessels are handle-less mugs. Two (FYH1) of the handle-less mugs measure 3.50 inches (88.90 mm) in diameter. One (FHH1) of the handle-less mugs measures 3.75 inches (95.25 mm) in diameter. One (FYH1) of the handle-less mugs measure 4.00 inches (101.60 mm) in diameter.

Ten (FYH1=5, FHH1=1, FYH2=2, FHH2=1, FYH3=1) of the other *Plain* decorated cups/mugs are either handled or handle-less. One (FYH1) cup/mug measures 3.25 inches (82.55 mm) in diameter. One (FYH2) cup/mug measures 3.50 inches (88.90 mm) in diameter. One (FHH1) cup/mug measures 3.75 inches (95.25 mm) in diameter. Seven (FYH1=4, FYH2=1, FHH2=1, FYH3=1) cups/mugs measure 4.00 inches (101.60 mm) in diameter.

Saucer

Forty-four (FYH1=17, FHH1=12, FYH2=6, FHH2=2, FYH3=5, FHH3=2) ironstone saucers were recovered.

Arch/Loop

One (FHH1) of the ironstone saucers is molded in an Arch or Loop-type pattern. The Arch or Loop-type patterns are characterized by a series of arches and/or loops around the circumference of the vessel. The *Arch/Loop* pattern is unattributed. One (FHH1) saucer measures 6.00 inches (152.40 mm) in diameter. The saucer is also made of high quality ironstone that displays a blue tint and no crazing.

Sharon Arch

Two (FYH1=1, FHH1=1) of the ironstone saucers are molded in the *Sharon Arch* pattern. The *Sharon Arch* pattern is ribbon-type pattern characterized by a single ribbon looped to create six knots and evenly space intervals around the rim. Between the knots is a scroll and leaf motif and opposite each of the knots is a single dot. The *Sharon Arch* pattern was registered by J. Wedgwood of Tunstall on April 12, 1861 (Dieringer and Dieringer 2001:136). The pattern was also called *Erie Shape* and shared with Davenport and Company of Longport. Two (FYH1=1, FHH1=1) of the saucers measures 6.00 inches (152.40 mm) in diameter.

Fluted Gothic

One (FYH1) of the ironstone saucers is molded in the *Flute Gothic* pattern. The *Fluted Gothic* pattern is a sided-type pattern characterized by multiple sides (usually six to ten) that are fluted (concave) with a simple boarder of one to several lines. The *Fluted Gothic* pattern was registered to James Edwards and Son in the 1850s (Stoltzfus and Snyder 1997:60). The pattern was also called *Fluted Panels*. One (FYH1) saucer measures 6.25 inches (158.75 mm) in diameter and is marked on the bottom of the vessel with an impressed maker's mark that reads "JAS. EDWARDS & SON / DALEHALL". This maker's mark was used by James Edwards and Sons between 1851 and 1877 (Gibson 2011:68).

Gothic

Two (FYH1) of the ironstone saucers are molded in the *Gothic* pattern. The *Gothic* pattern is a sided-type pattern characterized by multiple sides (usually six to ten) with a simple boarder of one to several lines. The *Gothic* pattern was a common ironstone pattern of the 1840s and 1850s and nearly every ironstone potter of the period made their version of the pattern (Wetherbee 1996:35). One (FYH1) saucer measures 6.00 inches (152.40 mm) in diameter and is molded with twelve-sides (dodecagon). This particular saucer has raised ribs and a plain banded rim that is seen on twelve-sided *Gothic* plates potted by J. Wedgwood, Davenport and W. Adams and Sons during the 1850s (Dieringer and Dieringer 2001:22). Another (FYH1) *Gothic* pattern saucer also measures 6.00 inches (152.40 mm) in diameter but is round (not sided). The pattern is similar to several scalloped-type patterns (Dieringer and Dieringer 2001:21).

Pearl Sydenham

One (FHH1) ironstone saucer is molded in the *Pearl Sydenham* pattern. The *Pearl Sydenham* is an ogee-type pattern characterized by a series of ogee shapes end to end with the points outward. The *Pearl Sydenham* pattern was registered by J. & G. Meakin of Hanley c. 1851 and was manufactured until at least 1891 (Dieringer and Dieringer 2001:54). One (FHH1) saucer measures 6.00 inches (152.40 mm) in diameter.

Pomegranate Shape

Three (FYH1=1, FYH2=1, FYH3=1) of the ironstone saucers are molded in the *Pomegranate Shape*. The *Pomegranate Shape* is a ribbon-type pattern characterized by a single ribbon with three lines looped to create six knots at evenly spaced intervals around the rim. The *Pomegranate Shape* was registered by Jacob Furnival and Company c. 1850 (Dieringer and Dieringer 2001:134). One (FYH2) saucer measures 5.00 inches (127.00 mm) in diameter. Two (FYH1=1, FYH3=1) saucers measure 6.00 inches (152.40 mm) in diameter.

Fig (Round)

One (FYH1) of the ironstone saucers is molded in the *Fig (Round)* pattern. The *Fig (Round)* pattern is characterized by a series of figs flanked by two fig leaves. The pattern is repetitive around the exterior of the vessel. The *Fig (Round)* pattern was registered by Davenport and Company, Longport in 1856 (Stoltzfus and Snyder 1997:54; Wetherbee 1996:110). The *Fig (Round)* pattern was shared with J. Wedgewood of Tunstall. One (FYH1) of the saucers measures 6.00 inches (152.40 mm) in diameter.

Double Sydenham

One (FYH3=1) of the ironstone saucers is molded in the *Double Sydenham* pattern. The *Double Sydenham* pattern is an ogee-type pattern characterized by a series of ogee shapes with the points outward and between the ogees are indented loops. Like the *Gothic* pattern discussed above, the *Double Sydenham* pattern was a common ironstone pattern of the 1850s and 1860s and nearly every ironstone potter of the period made their version of the pattern. It is believed that the *Double Sydenham* pattern was probably registered by a modeler in the 1850s (Dieringer and Dieringer 2001:59). One (FYH3) saucer measures 6.00 inches (152.40 mm) in diameter.

Hanging Leaves

One (FHH2) of the ironstone saucers is molded in the *Hanging Leaves* pattern. The *Hanging Leaves* pattern is a floral-type pattern characterized by five sets of single bands that form a double arch toward the rim and terminate in three pedals or leaves on each end. The *Hanging Leaves* pattern dates to c. 1850 and is attributed to Anthony

Shaw (Dieringer and Dieringer 2001:121). One (FHH2) saucer measures 7.00 inches (177.80 mm) in diameter.

Western Shape

One (FHH1) of the ironstone saucers is molded in the *Western Shape*. The *Western Shape* is a bell-shaped flower pattern characterized by two intertwined vines around the rim punctuated with lily of the valley flowers and leaves. The *Western Shape* was registered by Hope and Carter on September 26, 1862 (Dieringer and Dieringer 2001:108). One (FHH1) saucer measures 6.00 inches (152.40 mm) in diameter.

Indeterminate Molded Patterns

Eleven (FYH1=2, FHH1=6, FYH2=2, FHH3=1) of the ironstone saucers are molded with indeterminate patterns. One (FHH1) of the ironstone saucers is 4.50 inches (114.30 mm) in diameter and molded in an unidentified fluted or scalloped pattern. Ten (FYH1=2, FYH2=1, FHH1=6, FHH3=1) of the saucers measure 6.00 inches (152.40 mm) in diameter. One (FHH1) of the 6.00 inch saucers is molded in an unidentified pattern similar to *Boote's 1851 Shape* but the vessel shape is irregular and more similar to the *Portland Shape* (Dieringer and Dieringer 2011:31-32). One (FHH1) of the 6.00 inch saucers is molded in an unidentified pattern similar to *Pankhurst's Unnamed Shape* (Dieringer and Dieringer 2011:33). One (FYH1) of the 6.00 inch saucers is molded with an indeterminate line and flute pattern and another (FYH1) is molded with two concentric lines around the inside of the vessel near the rim. One (FHH1) of the 6.00 inch saucers are molded with an unidentified fluted or scalloped pattern. Three (FYH2=1, FHH1=2) of the 6.00 inch saucers are molded with an unidentified patterns. One (FYH2) saucer measures 6.50 inches (165.10 mm) and is molded with an unidentified pattern but identical to an unnamed pattern observed on a handle-less punch cup in Wetherbee (1996:25).

Plain

Nineteen (FYH1=9, FHH1=2, FYH2=3, FHH2=1, FYH3=3, FHH3=1) of the ironstone saucers are *Plain* or undecorated. One (FYH2) of the saucers measures 5.50 inches (139.70 mm) in diameter. Seventeen (FYH1=9, FYH2=2, FYH3=2, FHH1=2, FHH2=1, FHH3=1) of the saucers measure 6.00 inches (152.40 mm) in diameter. Two (FYH1=1, FHH1=1) of the 6.00 inch diameter saucers have flared rims while the other thirteen (FYH1=8, FYH2=2, FYH3=2, FHH1=1) have straight rims. One (FYH3) of the saucers measures 6.50 inches (165.10 mm) in diameter.

Plate

Fifty-four (FYH1=15, FHH1=13, FYH2=6, FHH2=4, FYH3=12, FHH3=4) ironstone plates were recovered.

Lily of the Valley

Four (FYH1=2, FYH2=1, FYH3=1) of the ironstone plates are molded in the *Lily of the Valley* pattern. The *Lily of the Valley* pattern is bell-shaped flower pattern characterized by four groups of lily of the valley flowers and leaves evenly space around the rim. The *Lily of the Valley* pattern was registered by James Edwards and Sons in Dale Hall on September 1, 1859 and again on February 27, 1861 (Dieringer and Dieringer 2001: 105). Three (FYH1=2, FYH2=1) plates measures 8.00 inches (203.20 mm) in diameter. One (FYH1) of the 8.00 inch plates has a printed maker's mark in black ink that reads "[British Royal Arms mark] / THOMAS HUGHES / BURSLEM". This mark was used by Thomas Hughes of Burslem and Longport from 1860 until 1876 (Godden 2001: 339). One (FYH3=1) plate measures 9.00 inches (228.60 mm) in diameter.

Fig/Union Shape

One (FYH1) of the ironstone plates is molded in the *Fig/Union Shape*. The *Fig/Union Shape* is a fruit and vine/sided-type pattern characterized by eight sides with three raised line running around the circumference punctuated on the even corners by a fig with two leave and a stem and on the odd corners by an "X" over the raised lines. The *Fig/Union Shape* was registered by J. Wedgwood of Tunstall on November 14, 1856 (Dieringer and Dieringer 2001:91). The *Fig/Union Shape* was also shared with Davenport and Company of Longport. One (FYH1) plate is decagon (ten-sided) in shape and measures 10.00 inches (254.00 mm) in diameter.

Rolling Star

One (FYH1) of the ironstone plates is molded in the *Rolling Star* pattern. The *Rolling Star* pattern is an arch or loop-type pattern characterized by an evenly undulating raised line around the rim. The *Rolling Star* pattern was manufactured by James Edwards between 1842 and 1851 (Dieringer and Dieringer 2001: 45). One (FYH1) plate measures 9.00 inches (228.60 mm) in diameter.

Scalloped Decagon

Two (FYH1=1, FYH2=1) of the ironstone plates is molded in the *Scalloped Decagon* pattern. The *Scalloped Decagon* is a ogee and scalloped/side-type pattern characterized by ten sides with a repeating pattern of three closely grouped scallops at each corner of the rim with one longer scallop along each side. The *Scalloped Decagon* pattern was registered by J. Wedgwood of Tunstall on October 23, 1852 and again on January 14, 1853. The pattern was shared with Davenport and Company who registered the pattern on October 6, 1854 (Dieringer and Dieringer 2001:61). The pattern is also sometimes known as the *Cambridge Shape*. Two (FYH1=1, FYH2=1) plates are decagon (ten-sided) in shape and measures 10.00 inches (254.00 mm) in diameter. One (FYH2) of the 10.00 inch plates has an impressed maker's mark that reads "DAVENPORT / # [anchor] # / IRONSTONE

CHINA”. The specific date numbers on either side of the “anchor” are unreadable. Davenport and Company used this mark from the 1850s into the 1870s (Gibson 2011:61; Godden 2001:189-190).

Gothic

One (FYH1) of the ironstone plates is molded in the *Gothic* pattern. The *Gothic* pattern is a sided-type pattern characterized by multiple sides (usually six to ten) with a simple boarder of one to several lines. The *Gothic* pattern was a common ironstone pattern of the 1840s and 1850s and nearly every ironstone potter of the period made their version of the pattern (Wetherbee 1996:35). One (FYH1) plate measures 10.00 inches (254.00 mm) in diameter and is molded with twelve-sides (dodecagon). This particular plate has raised ribs and a plain banded rim that is seen on twelve-sided *Gothic* plates potted by J. Wedgwood, Davenport and W. Adams and Sons during the 1850s (Dieringer and Dieringer 2001:22).

Double Sydenham

Four (FYH1=1, FHH1=3) of the ironstone plates is molded in the *Double Sydenham* pattern. The *Double Sydenham* pattern is an ogee-type pattern characterized by a series of ogee shapes with the points outward and between the ogees are indented loops. Like the *Gothic* pattern discussed above, the *Double Sydenham* pattern was a common ironstone pattern of the 1850s and 1860s and nearly every ironstone potter of the period made their version of the pattern. It is believed that the *Double Sydenham* pattern was probably registered by a modeler in the 1850s (Dieringer and Dieringer 2001:59). Three (FHH1=3) plates measures 6.50 inches (165.10 mm) in diameter. Two of the 6.50 inch plates have printed maker’s marks in black ink and that read “[British Royal Arms mark] / IRONSTONE / H & G late HARVEY”. Holland and Green used this mark from 1852 to 1880 (Gibson 2011:87). One (FYH1=1) plate measures 8.00 inches (203.20 mm) in diameter.

Columbia Shape

Three (FYH1=1, FYH2=1, FYH3=1) of the ironstone plates are molded in the *Columbia Shape*. The *Columbia Shape* is an ogee-type pattern characterized by a series of ogee shapes with the points outward and between the ogees are lotus flowers. The *Columbia Pattern* was registered by G. W. Read, a modeler, on October 29, 1855 (Dieringer and Dieringer 2001:50). Three (FYH1=1, FYH2=1, FYH3=1) plates measures 8.00 inches (203.20 mm) in diameter.

Portland Shape

One (FHH3) of the ironstone plates is molded in the *Portland Shape*. The *Portland Shape* is a scallop-type pattern characterized by a series of twelve scallops end to end around the vessel with a single line around the rim. The *Portland Shape* is attributed to Elsmore and Forster and Company of Tunstall who manufactured the pattern between 1853 and 1871 (Dieringer and Dieringer 2001:32). One (FHH3) plate measures 7.00 inches (177.80 mm) in diameter.

Prize Puritan

One (FHH1) of the ironstones plate is molded in the *Prize Puritan* pattern. The *Prize Puritan* pattern is a scroll and swirl-type pattern characterized by a complex boarder of raised lines that frame long oblong medallions and short hourglass-shaped medallions. The *Prize Puritan* pattern was registered by T. J. & J. Mayer in Dale Hall on September 2, 1851 (Dieringer and Dieringer 2001:64). One (FHH1) plate measures 7.00 inches (177.80 mm) in diameter and has a printed maker's mark. The maker's mark is printed in black ink and reads "PRIZE MEDAL 1851 / [standing Royal Coat of Arms flanking Registration Diamond / T. J. & J. MAYER [in ribbon] / DALE HALL POTTERY / Longport [in cursive script] / IMPROVED BERLIN IRONSTONE". The numbers in the registration diamond are unreadable. T. J. and J. Mayer used this mark c. 1851 (Gibson 2011:102).

Sydenham Shape

One (FHH1) of the ironstone plates is molded in the *Sydenham Shape*. The *Sydenham* is an ogee-type pattern characterized by a series of ogee shapes with the points outward and between the ogees are stylized lotus flowers. The *Sydenham Shape* was registered by T. and R. Boote in Burslem on September 3, 1853 (Dieringer and Dieringer 2011:53). One (FHH1) plate measures 7.00 inches (177.80 mm) in diameter and has an impressed maker's mark that reads [in circle] T & R BOOTE / [registration diamond: "Y" – 1853] / SYDENHAM SHAPE". T. and R. Boote use this mark from 1842-1891 (Gibson 2011:35).

Trent Shape

Two (FHH2=1, FYH3=1) of the ironstone plates is molded in the *Trent Shape*. The *Trent Shape* is a ribbon-type pattern characterized by a single ribbon around the rim punctuated by six pairs of double knots evenly space around the circumference. The *Trent Shape* was registered by John Alcock of Cobridge on June 7, 1855 (Dieringer and Dieringer 2001:135). One (FYH3) plate measures 9.00 inches (228.60 mm) in diameter and has an impressed and stamped maker's mark. The impressed mark reads "[in circle] "JOHN ALCOCK [in upper arch] / [registration diamond] TRENT SHAPE [in lower arch]". The numbers in the registration diamond are unreadable. The other maker's mark is printed in black ink and reads "[seated Royal Coat of Arms] / IMPERIAL / IRONSTONE CHINA / JOHN ALCOCK". John Alcock used

the combination of these marks from 1850 to 1861 (Gibson 2011:24). One (FHH2) plate measures 10.00 inches (254.00 mm) in diameter.

Triple Boarder

One (FHH2) of the ironstone plates is molded in the *Triple Boarder* pattern. The *Triple Boarder* pattern is an early round-type pattern characterized by three narrow raised band or lines around the rim with six indents spaced evenly around the rim. The *Triple Boarder* pattern was manufactured by James Edwards of Dale Hall from 1842 to 1851 (Dieringer and Dieringer 2001:14). One (FHH2) plate measures 9.00 inches (228.60 mm) in diameter.

True Scallop

One (FHH1) of the ironstone plates is molded in the *True Scallop* pattern. The *True Scallop* pattern is a scallop-type pattern characterized by fourteen concave scallops of equal size. The *True Scallop* pattern is attributed to several potters including James Edwards, Jacob Furnival, T. and R. Boote, and E. Walley c. 1845 (Dieringer and Dieringer 2001:29). One (FHH1) plate measures 11.00 inches (279.40 mm) in diameter.

Vintage Shape

Three (FYH2=2, FYH3=1) of the ironstone plates are molded in the *Vintage Shape*. The *Vintage Shape* is a grape-type pattern characterized by two intertwined vines around the rim with six clusters of grapes with three leaves evenly spaces and with six long oblong medallions between the grape clusters. The *Vintage Shape* was first attributed to W. Adams and then later to E. and C. Challinor in c. 1865 (Dieringer and Dieringer 2001:123). Three (FYH2=2, FYH3=1) plates measure 9.00 inches (228.60 mm).

Western Shape

One (FHH2) of the ironstone plates is molded in the *Western Shape*. The *Western Shape* is a bell-shaped flower pattern characterized by two intertwined vines around the rim punctuated with lily of the valley flowers and leaves. The *Western Shape* was registered by Hope and Carter of Burslem on September 26, 1862 (Dieringer and Dieringer 2001:108). One (FHH2) plate measures 9.50 inches (241.30 mm) in diameter.

Indeterminate Molded Patterns

Two (FYH2=1, FYH3=1) of the ironstone plates are molded with indeterminate patterns. Two (FYH2=1, FYH3=1) plates measures 9.00 inches (228.60 mm) in diameter and are molded in two different unidentified patterns.

Plain

Twenty-five (FYH1=7, FHH1=7, FHH2=1, FYH3=7, FHH3=3) of the ironstone plates are *Plain* or undecorated. Three (FYH1=2, FHH3=1) plates measures 6.50 inches (165.10 mm) in diameter. One of the 6.50 inch plates is has an impressed maker's mark that reads "IRONSTONE / CHINA / E. & C. CHALLINOR" in ornate border below [British Royal Arms mark]. The mark was used by E. and C. Challinor of Fenton between 1862 and 1891 (Gibson 2011:46). One (FHH2) of the plates measures 7.50 inches (190.50 mm) in diameter and has an impressed maker's mark that reads "[in ornate oval] IMPROVED / FELDSPAR / C. MEIGH & SON". The mark was used by Charles Meigh and Son of Hanley from 1850 to 1861 (Gibson 2011:113). Three (FYH3) of the plates measure 8.00 inches (203.20 mm) in diameter. One (FHH1) of the plates measures 8.50 inches (215.90 mm) in diameter. One (FHH1) of the plates measures 8.75 inches (22.25 mm) in diameter and has an impressed maker's mark that reads "MADDOCK'S / PATENT / IRONSTONE / CHINA". The mark was used by John Maddock of Burslem from 1842 to 1855 (Gibson 2011:96). Eleven (FYH1=4, FHH1=4, FYH3=2, FHH3=1) of the plates measure 9.00 inches (228.60 mm) in diameter. Four (FHH1=1, FYH3=2, FHH3=1) of the plates measures 10.00 inches (254.00 mm) in diameter. One (FYH1) of the *Plain* plates is sided with an unknown number of sides (possibly *Gothic*) and had an unknown diameter.

Bowl

Twenty-four (FYH1=8, FHH1=5, FYH2=2, FYH3=8, FHH3=1) ironstone bowls were recovered.

Boote's 1851 Round

One (FYH3) of the ironstone bowls is molded in the *Boote's 1851 Round* pattern. The *Boote's 1851 Round* pattern is an ogee-type pattern characterized by a series of ogee shapes placed end to end with the points outward. The *Boote's 1851 Round* pattern was registered by T. and R. Boote of Burslem on July 21, 1851 (Dieringer and Dieringer 2001:51). One (FYH3) of the bowls measures 7.00 inches (177.80 mm) in diameter.

Indeterminate Molded Patterns

One (FYH1) of the ironstone bowls is molded with indeterminate patterns. One (FYH1) bowl measures 9.00 inches (228.60 mm) in diameter and decorated with a molded line around the circumference of the interior of the vessel.

Plain

Twenty-two (FYH1=7, FHH1=5, FYH2=2, FYH3=7, FHH3=1) of the ironstone bowls are *Plain* or undecorated. One (FHH1) of the bowls measures 4.00 inches

(101.60 mm) in diameter. One of the 4.00 inch bowls has a flared rim. Three (FYH1=1, FYH3=2) of the bowls measures 4.50 inches (114.30 mm) in diameter. One (FYH1) of the bowls measures 4.75 inches (120.65 mm) in diameter. Six (FYH1=1, FHH1=1, FYH3=4) of the bowls measures 5.00 inches (127.00 mm) in diameter. One (FYH2) of the bowls measures 5.50 inches (139.70 mm) in diameter. Five (FYH1=1, FHH1=1, FYH2=1, FYH3=1, FHH3=1) of the bowls measure 6.00 inches (152.40 mm) in diameter. One (FYH1) of the bowls measures 6.50 inches (165.10 mm) in diameter. One (FYH1) of the 6.50 inch bowls has a flared rim. One (FYH1) of the bowls measures 7.00 inches (177.80 mm) in diameter. One (FYH1) of the 7.00 inch bowls has a flared rim. Three (FYH1=1, FHH1=2) of the bowls measures 8.00 inches (203.20 mm) in diameter. Two (FYH1=1, FHH1=1) of the 8.00 inch bowls have flared rim.

Serving Vessels

Twenty-one (FYH1=7, FHH1=10, FYH2=1, FYH3=1, FHH3=2) ironstone serving vessels were recovered including seven (FYH1=1, FHH1=4, FYH2=1, FHH3=1) tea serving vessels, eight (FYH1=4, FHH1=2, FYH3=1, FHH3=1) platters, one (FHH1) butter tub, one (FHH1) dish and four (FYH1=2, FHH1=2) pitchers.

Teaware

Seven (FYH1=1, FHH1=4, FYH2=1, FHH3=1) ironstone teaware vessels were recovered.

Columbia Shape

One (FHH3=1) ironstone teaware vessel was molded in the *Columbia Shape*. The *Columbia Shape* is an ogee-type pattern characterized by a series of ogee shapes with the points outward and between the ogees are lotus flowers. The *Columbia Pattern* was registered by G. W. Read, a modeler, on October 29, 1855 (Dieringer and Dieringer 2001:50). The vessel is represented by an open spout or poring lip. Lips/spouts of this type are commonly found on milk jugs (Empirical Observation; Stoltzfus and Snyder 1997; Wetherbee 1996).

Indeterminate Molded Patterns

Three (FYH1=1, FHH1=1, FYH2=1) ironstone teaware vessel was molded with an indeterminate pattern. Two (FYH1=1, FHH1=1) of the vessels are represented by ironstone covers measuring 4.00 inches (101.60 mm) in diameter and decorated with concentric molded circles. One (FYH2=1) of the vessels is represented by an ironstone cover measuring 5.00 inches (127.00 mm) in diameter. The covers most-likely belong to teaware vessels such as a coffee pot, tea pot, sugar jar or creamer.

Plain

One (FHH1) ironstone teaware vessel is *Plain* or undecorated. The vessel is represented by an ironstone covers measuring 4.00 inches (101.60 mm) in diameter and is undecorated or *Plain*. The cover most-likely belongs to teaware vessel such as a coffee pot, tea pot, sugar jar or creamer.

Platter

Eight (FYH1=4, FHH1=2, FYH3=1, FHH3=1) ironstone platters were recovered.

Hebe Shape

Three (FYH1=2, FYH3=1) of the ironstone platters are molded with the *Hebe Shape*. The *Hebe Shape* is a ogee and scallop-type pattern characterized by one large ogee-shape around the interior of the rim with five sets of double points pointing outward and where two indented lines create and paneled oval shaped medallion. The *Hebe Shape* was registered by John Alcock of Cobridge on May 7, 1853 (Dieringer and Dieringer 2001:63). The pattern is also sometimes known as the *Goddess of Youth* pattern. Three (FYH1=2, FYH3=1) platters are oval in shape and measure 14.25 inches (361.95 mm) long by 10.87 inches (276.09 mm). One (FYH1) of the platters has an impressed maker's mark that reads "JOHN ALCOCK / [Registration Diamond] / HEBE SHAPE". The date numbers in the registration diamond are unreadable. John Alcock of Cobridge used this mark from 1850 to 1861 (Gibson 2011:24; Godden 2001:27).

Plain

Five (FYH1=2, FHH1=2, FHH3=1) of the ironstone platters are *Plain* or undecorated. Three (FYH1=2, FHH1=2) of the platters are oval in shape. One (FYH1) platter measures 18.00 inches (457.20 mm) long. Two (FHH1) of the platters measure 17.00 inches (431.80 mm) in length. One (FYH1) platter measures 14.25 inches (361.95 mm) long and 10.87 inches (276.09 mm) wide. One (FYH1) of the 14.25 inches platters has an impressed maker's mark that is unreadable. One (FHH3) platter is represented by a very large base and body fragment. The exact size of the vessel is unknown but the thickness of the base and body suggests that the vessel is a large platter.

Butter Tub

One (FHH1) ironstone butter tub was recovered. The tub is molded in a hexadecagon (sixteen-sided) variation of the *Gothic* pattern with two crabstock handles. The *Gothic* pattern is a sided-type pattern characterized by multiple sides (usually six to ten) with a simple boarder of one to several lines. The *Gothic* pattern was a common ironstone pattern of the 1840s and 1850s and nearly every ironstone potter of the period made their version of the pattern (Wetherbee 1996:35). The butter tub

measures 5.50 inches (139.70 mm) in diameter and 2.25 inches (57.15 mm) high and has a printed maker's mark in black ink that reads "[standing Royal Coat of Arms] / J. F. T. L. [in ribbon]". The mark was used by Jacob Furnival of Cobridge from 1845 to 1870 (Gibson 2011:76).

Dish

One (FHH1) ironstone dish was recovered. The dish is molded in the *Gothic* pattern with an octagonal (eight-sided) horizontal cross section and a flared rim. The *Gothic* pattern is a sided-type pattern characterized by multiple sides (usually six to ten) with a simple boarder of one to several lines. The *Gothic* pattern was a common ironstone pattern of the 1840s and 1850s and nearly every ironstone potter of the period made their version of the pattern (Wetherbee 1996:35). The vessel measures 3.00 inches (76.20 mm) in diameter and 2.00 inches (50.80 mm) high.

Pitcher

Four (FYH1=2, FHH1=2) ironstone pitchers were recovered.

Gothic

Three (FYH1=2, FHH1=1) of the ironstone pitchers are molded with the *Gothic* pattern. The *Gothic* pattern is a sided-type pattern characterized by multiple sides (usually six to ten) with a simple boarder of one to several lines. The *Gothic* pattern was a common ironstone pattern of the 1840s and 1850s and nearly every ironstone potter of the period made their version of the pattern (Wetherbee 1996:35). One (FHH1) of the pitchers is complete and measures 11.50 inches (292.10 mm) high and 7.00 inches (177.80 mm) in diameter at the base. The complete pitcher is octagonal (eight-sided) in horizontal cross section and has the characteristic *Gothic* bracket handle molded with a foliate thumbrest. The complete pitcher also has a printed maker's mark in black ink that reads "SUPERIOR [in ribbon] / [eagle with shield body, holding olive branch in right talon and four arrows in left talon] / WHITE GRANITE [in ribbon] / W. ADAMS & SONS". William Adams and Sons of Tunstall and Stoke used this mark from the 1850s until 1865 (Gibson 2011:16). Two (FYH1) of the pitchers are represented by *Gothic* bracket handles molded with foliate thumbrests.

Indeterminate Molded Patterns

One (FHH1) of the ironstone pitchers is molded with an indeterminate pattern. The pitcher measures at least 6.50 inches (165.10 mm) in diameter and is molded with an unidentified pattern of two ribbed bands (each 0.87 inches [22.09 mm] wide that are on opposite sides of the vessel from each other. The bands begin at the base of the vessel and extend vertically toward the top of the vessel. The pitcher is also made of high quality ironstone which displays a blue tint and no crazing.

Unidentified Flat and Hollow Vessels

Thirteen (FYH1=2, FHH1=4, FYH2=3, FHH2=2, FHH3=2) ironstone vessels were recovered for which their vessels form could not be positively identified and therefore have been classified here as either flat vessels or hollow vessels. Nine (FYH1=2, FHH1=1, FYH2=2, FHH2=2, FHH3=2) indeterminate flat vessels and four (FHH1=3, FHH2=1) indeterminate hollow vessels.

Flat Vessel

Nine (FYH1=2, FHH1=1, FYH2=2, FHH2=2, FHH3=2) ironstone flat vessels were recovered.

Gothic

Two (FYH1=1, FHH2=1) of the ironstone flat vessels is molded in the *Gothic* pattern. The *Gothic* pattern is a sided-type pattern characterized by multiple sides (usually six to ten) with a simple boarder of one to several lines. The *Gothic* pattern was a common ironstone pattern of the 1840s and 1850s and nearly every ironstone potter of the period made their version of the pattern (Wetherbee 1996:35). One (FYH1=1, FHH2=1) of the vessels is clearly a flat vessel but because it is sided with an unknown number of sides it is not possible to determine the diameter and therefore the vessel could be either a plate or a saucer.

Indeterminate Molded Patterns

One (FYH2) of the ironstone flat vessels is molded with an indeterminate pattern. One (FYH2=1) of the vessels is clearly a flat vessel (either a plate or saucer) but the ceramic fragment is too incomplete to determine the diameter of the vessel. One (FYH3=1) of the vessels is molded with an unidentified pattern of three parallel lines that decorated the circumference of the interior of the vessel near the rim.

Plain

Six (FYH1=1, FHH1=1, FYH2=1, FHH2=1, FHH3=2) of the ironstone flat vessels is *Plain* or undecorated. All six (FYH1=1, FHH1=1, FYH2=1, FHH2=1, FHH3=2) of the vessels are clearly a flat vessels (either a plate or saucer) but the ceramic fragments are too incomplete to determine the diameter of the vessels, but the thickness of the rims are different from any of the vessels discussed above and therefore these fragments represent a distinct vessels. One (FHH3) of the flat vessels is made of a high quality ironstone which displays a blue tint and no crazing.

Hollow Vessel

Four (FHH1=3, FYH2=1) ironstone hollow vessels were recovered.

Indeterminate Molded Patterns

Two (FHH1=1, FYH2=1) ironstone hollow vessel are molded with indeterminate patterns. All of the vessels are clearly hollow vessels (a cup, bowl, tureen or dish) but the ceramic fragment is too incomplete to determine the diameter of the vessels. Two (FHH1=1, FYH2=1) of the vessels are molded with two different unidentified floral patterns consisting of vines and leaves.

Plain

Two (FHH1) ironstone hollow vessels are *Plain* or undecorated. All of the vessels are clearly a hollow vessel (cup, bowl, tureen or dish) but the ceramic fragment is too incomplete to determine the diameter of the vessel. One (FHH1) of the vessels has a flared rim.



Figure D.9 Ironstone Eating and Drinking Vessels, Representative Sample: A) *Plain* Bowl (FYH1); B) *Double Sydenham* Small Plate (FHH1); C) *Plain* Dinner Plate (FHH1); D) *Plain* Handleless Cup/Mug (FHH1)



Figure D.10 Ironstone Serving Vessels, Representative Sample: A) *Gothic* Water Pitcher (FHH1); B) *Hebe Shape* Platter (FYH3); C) *Gothic* Butter Tub with Crabstock Handles (FHH1)

Earthenware (Whiteware)

Fifty-one (FYH1=12, FHH1=15, FYH2=5, FHH2=5, FYH3=10, FHH3=4) earthenware (whiteware) vessels were recovered. The term earthenware will be used here to refer to vessels with a soft, water-absorbent body, white to cream or ivory in color and made impermeable by glazing (Snyder 1997:7). These types of ceramics are also referred to as “whiteware” (Miller 1980, 1991; Miller et al. 1994). Ceramics of this type are rarely classified by their fabric but instead are classified by the type of decoration and/or glaze (Miller et al. 2000:90-94). For the purposes of this study all earthenware vessels were grouped as “earthenware vessels” and further classified by their type of decoration. Four (FYH1=1, FHH1=2, FYH3=1) serving vessels and forty-four (FYH1=10, FHH1=12, FYH2=4, FHH2=5, FYH3=8, FHH3=4) eating and drinking vessels were made of earthenware. At least seven different vessel forms are represented including ten (FYH1=3, FYH2=1, FHH2=3, FYH3=2, FHH3=1) cups, eleven (FYH1=5, FYH2=2, FYH3=4) saucers, six (FHH1=5, FHH3=1) plates, seventeen (FYH1=2, FHH1=7, FYH2=1, FHH2=2, FYH3=3, FHH3=2) bowls, four (FYH1=1, FHH1=2, FYH3=1) platters, two (FHH1=1, FYH2=1) indeterminate flat vessels and one (FYH1) indeterminate hollow vessel. Seven forms of decoration were observed on the earthenware vessels including sixteen (FYH1=3, FHH1=7, FYH2=1, FHH2=2, FYH3=1, FHH3=2) annular decorated vessels, six (FHH1=4, FYH2=1, FYH3=1) edge decorated vessels, eleven (FYH1=2, FYH2=2, FYH3=7) hand-painted decorated vessels, two (FHH2=1, FHH3=1) molded vessels, three (FYH1) sponge decorated vessels, twelve (FYH1=4, FHH1=4, FYH2=1, FHH2=1,

FYH3=1, FHH3=1) transfer-printed vessels and one (FHH2) *Plain* or undecorated earthenware vessel.

Eating and Drinking Vessels

Forty-four (FYH1=10, FHH1=12, FYH2=4, FHH2=5, FYH3=8, FHH3=4) earthenware eating and drinking vessels were recovered including ten (FYH1=3, FYH2=1, FHH2=3, FYH3=2, FHH3=1) cups/mugs, eleven (FYH1=5, FYH2=2, FYH3=4) saucers, six (FHH1=5, FHH3=1) plates and seventeen (FYH1=2, FHH1=7, FYH2=1, FHH2=2, FYH3=3, FHH3=2) bowls.

Cup/Mug

Ten (FYH1=3, FYH2=1, FHH2=3, FYH3=2, FHH3=1) earthenware cups/mugs were recovered.

Transfer-Printed

Three (FYH1=2, FHH2=1) of the earthenware cups/mugs are decorated with transfer-printed patterns. Two (FYH1) of the cups/mugs are decorated with *Dr. Franklin's Maxims*. One (FYH1) of the cups/mugs measures 2.50 inches (63.50 mm) high and 2.50 inches (63.50 mm) in diameter and is decorated with one of *Dr. Franklin's Maxims* in brown ink. The cup/mug is decorated with "DR. FRANKLIN'S MAXIMS / LOST TIME IS NEVER FOUND AGAIN / [above a depiction of four men in a rowing boat and a paddle steamer in the distance with]". Although the exact manufacturer of the cup/mug is unknown the same pattern can be seen on plates (#1100 and #1119 in Riley 1991: 278-279). One (FYH1) cup/mug is also decorated with one of *Dr. Franklin's Maxims* but in green ink. The cup/mug reads "He who goes a borrowing goes a sorrowing". Riley (1991:12) dates these cups/mugs from the 1830s to the 1850s and attributes them to the Staffordshire potteries in general. One (FHH2) of the cups/mugs is decorated with an unidentified black transfer-print pattern consisting of dots probably meant to convey shadow.

Sponge Decorated

One (FYH1) of the earthenware cups/mugs is decorated with a sponge applied pattern. Sponge decorated patterns are characterized by the color being applied by dipping a sponge into the glaze color and then applying the sponge to the ware to be decorated, either by dabbing with the natural sponge or with a sponge cut into a pattern. The paint within the applied pattern is usually uneven in thickness so that some parts of the pattern are darker than others. One (FYH1) of the cups/mugs measures 4.00 inches (101.60 mm) in diameter and has an under the glaze cut sponge and hand-painted polychrome pattern. On the exterior of the vessel the pattern consists of a light blue hand-painted band flanked by two dark blue hand-painted lines overlaid with a repeating motif of red sponge applied quatrefoil flowers between two dark blue lines and over a light blue band. On the interior of the vessel is

decorated with a single light blue hand-painted line around the circumference. Miller (1991:6) and Earl (2004) date vessels of this decoration from the 1840s to the 1870s.

Hand-Painted

Three (FYH2=1, FYH3=2) of the earthenware cups/mugs are decorated with hand-painted patterns. Hand-painted patterns are characterized by the application of the colored decoration by hand and usually with a paintbrush. The resulting decoration usually displays brushstrokes or streaks visible in the paint. One (FYH2) of the cups/mugs measures 3.00 inches (76.20 mm) in diameter and is decorated with a dark green zigzag line under the glaze. One (FYH3) of the cups/mugs measures 4.00 inches (101.60 mm) in diameter and is decorated with a single black line around the circumference of the cup/mug in the interior of the vessel and with another single black line around the exterior of the vessel. One (FYH3) of the cups/mugs with an unknown diameter is decorated with a pattern of green leaves and dashes.

Molded Decoration

Two (FHH2=1, FHH3=1) of the earthenware cups/mugs are decorated with the same molded pattern. The cup/mugs measure 3.50 inches (88.90 mm) in diameter and are decorated with three 3/8 inch (9.52 mm) wide recessed lines around the circumference of the body of the vessel.

Plain

One (FHH2) of the earthenware cups/mugs is *Plain* or undecorated. One (FHH2) of the cups/mugs measures 3.50 inches (88.90 mm) in diameter and appears to be completely void of decoration.

Saucer

Eleven (FYH1=5, FYH2=2, FYH3=4) earthenware saucers were recovered.

Transfer-Printed

Three (FYH1=1, FYH2=1, FYH3=1) of the earthenware saucers is decorated with a transfer-printed pattern. One (FYH1) of the saucers measures 6.00 inches (152.40 mm) in diameter and is decorated with an unidentified purple transfer-printed pattern consisting of a line of repeating three-leaf clovers between two sets of thin lines and thick bands on the interior of the vessel. Two (FYH2=1, FYH3=1) of the saucers measure 6.00 inches (152.40 mm) in diameter and are decorated with an unidentified purple transfer-printed pattern consisting of numerous three petal flowers on a “tangle” of vines. The pattern matches the saucer described above.

Sponge Decorated

Two (FYH1=2) of the earthenware saucers is decorated with a cut sponge applied pattern. Sponge decorated patterns are characterized by the color being applied by dipping a sponge into the glaze color and then applying the sponge to the ware to be decorated, either by dabbing with the natural sponge or with a sponge cut into a pattern. The paint within the applied pattern is usually uneven in thickness so that some parts of the pattern are darker than others. One (FYH1) of the saucers measures 6.00 inches (152.40 mm) in diameter and is decorated with repeating rows of three blue diamonds decreasing in size from the rim to the well and blue line around rim. Although the vessel recovered is missing the maker's mark an identical vessel on found on Ebay had an impressed mark that read "DAVENPORT / # [anchor] #". The specific date numbers on either side of the "anchor" are unreadable. William Davenport and Company used this mark from the 1850s into the 1870s (Gibson 2011:61; Godden 2001:189-190). One (FYH1) of the saucers measures 6.00 inches (152.40 mm) in diameter and is decorated with repeating pink sponge applied ovals over a green hand-painted line and between two green hand-painted lines. The ovals and lines decorate the circumference of the interior of the vessel. Miller (1991:6) and Earl (2004) date vessels of this decoration from the 1840s to the 1870s.

Hand-Painted

Six (FYH1=2, FYH2=1, FYH3=3) of the earthenware saucers are decorated with a hand-painted pattern. Hand-painted patterns are characterized by under the glaze painted designs in which the paint strokes from the bristles are still visible. Three (FYH1=1, FYH2=1, FYH3=1) of the saucers are decorated with a polychrome floral pattern of bright blue and pinkish red flowers, green leaves, black stems and thin black lines. Miller (1980) dates vessels of this decoration from the 1830s to the 1860s. Two (FYH1=1, FYH3=1) of these saucers measure approximately 6.00 inches (152.40 mm) in diameter and the other (FYH2) measures 6.50 inches (165.10 mm) in diameter. Three (FYH1=1, FYH3=2) of the saucers are decorated with a single hand-painted green line around the exterior of the vessel near the rim. Two (FYH1=1, FYH3=1) of the saucers decorated with the hand-painted green lines measure 5.25 inches (133.35 mm) in diameter and one (FYH3=1) of them measures 4.75 inches (120.65 mm) in diameter.

Plate

Six (FHH1=5, FHH3=1) earthenware plates were recovered.

Transfer-printed

Four (FHH1=3, FHH3=1) of the earthenware plates are decorated with transfer-print patterns. Transfer-printed (or printed) patterns are characterized by usually intricate picture designs of buildings, people, animals, plants, geometric designs and domestic or foreign scenes under the glaze and made of ink transferred from a copper plate to

the vessel by tissue paper. One (FHH1) of the plates is decorated with the *Formosa* pattern in flow blue. The *Formosa* pattern is characterized by a Chinese central motif with pagodas, mountains and two figures surrounded by continuous repeating floral boarder design. The *Formosa* pattern was manufactured by John and Joseph Mayer c. 1850 (Williams 1971:25). The plate measures 4.00 inches (101.60 mm) in diameter and has an impressed maker's mark that reads "FB". The "FB" may stand for "Flow Blue" which the plate is decorated with. Two (FHH1) of the plates are represented by base fragments and for which the vessel size is unknown. One (FHH1) of the plates is decorated with an unidentified transfer-print pattern of trees and clouds in blue ink. One (FHH1) of the plates is decorated with an unidentified transfer-print pattern consisting of geometric shapes in black ink. The pattern is very similar to children's "ABC" plates in Riley (1991). One (FHH3) of the plates is decorated with an unidentified floral pattern in blue (possibly flow blue) ink.

Edge Decorated

Two (FHH1) of the earthenware plates are edge decorated. Edge decorated patterns are characterized by the restriction of the decoration to the edge or rim of the vessel. Edge decorated wares can be molded, painted or both. One (FHH1) of the plates measures 8.00 inches (203.20 mm) in diameter and has a plain unscalped rim with a simple impressed repetitive pattern of feathers and painted in blue. McAllister (2001:11) dates this edge design from the 1830s into the 1860s, but Hunter and Miller (1994) give a production range for this design from 1825 to 1891 with a maximum popularity period of 1841 to 1857 and a median of 1849. Hunter and Miller (1994) date the unscalped rim patterns from the 1840s to the 1860s. One (FHH1) of the plates has a Neoclassical scalped rim with an impressed repetitive pattern of curved lines and painted in blue. McAllister (2001:11) dates this edge design from c. 1820 to 1830 and Miller (1987) provides a production range from 1795 to 1845 with a maximum popularity period of 1802 to 1832 and a median of 1817. Hunter and Miller (1994) date the scalped rim patterns from 1800 to the 1830s.

Bowl

Seventeen (FYH1=2, FHH1=7, FYH2=1, FHH2=2, FYH3=3, FHH3=2) earthenware bowls were recovered.

Annular Decorated

Fifteen (FYH1=2, FYH2=1, FYH3=1, FHH1=7, FHH2=2, FHH3=2) earthenware bowls are decorated with annular patterns. Annular ware patterns are often classified as dipped wares of various styles. The only style recovered is the banded ware type. This is the simplest form of the dipped decoration and is characterized by horizontal bands of slip varying number, thickness and color that decorate the exterior of the vessel.

Three (FHH1) of the bowls measure 5.00 inches (127.00 mm) in diameter and are decorated with a 2.00 inch (50.80 mm) thick blue band around the circumference of the vessel. One (FHH2) of the bowls measures 6.50 inches (165.10 mm) in diameter and is decorated with 7/8 inch (22.22 mm) wide blue band around the body of the bowl that is flanked by one set of two lines 3/16 inch (4.74 mm) wide above the larger band near the rim and one set of the same sized lines below the larger band near the base. Noel Hume (1969), Miller (1991) and Sussman (1997) date the blue banded variety of white earthenware annular decorated bowls from 1840 into the 20th century.

Four (FYH1=2, FYH2=1, FYH3=1) of the annular decorated bowls are decorated on the exterior of the vessel with one green band between two green lines around the circumference of the bowl near the rim. One (FYH2) of these bowls measures 6.5 inches (165.10 mm) in diameter with a flared rim and three (FYH1=2, FYH3=1) of these bowls measure 6.00 inches (152.40 mm) in diameter with straight rims.

Three (FHH1=2, FHH3=1) of the bowls are decorated with a 1/8 inch (3.17 mm) wide brown line around the circumference of the bowl near the rim with a larger (of an unknown width) blue-gray band around the circumference of the body of the bowl. One (FHH1) of these bowls measures 4.50 inches (114.30 mm) in diameter and the other measures 6.00 inches (152.40 mm) in diameter.

Four (FHH1=2, FHH2=1, FHH3=1) of the bowls measure 5.50 inches (139.70 mm) in diameter and are decorated with three 1/8 inch (3.17 mm) wide blue lines around the circumference of the bowl near the rim with a larger 1.25 inch (31.75 mm) wide green band around the circumference of the body of the bowl with three more blue lines each measuring 1/8 inch (3.17 mm) wide around the circumference of the bowl near the base. Annular decorated bowls made of white earthenware and decorated in colors other than the blue banded variety date from the 1830s to the early-1840s (Noel Hume 1969, Miller 1991, Sussman 1997).

Hand-Painted

Two (FYH3) earthenware bowls are decorated with hand-painted patterns. Hand-painted patterns are characterized by Hand-painted patterns are characterized by under the glaze painted designs in which the paint strokes from the bristles are still visible. Two (FYH3) of the bowls are footed and decorated with a single green line around the footring.

Serving Vessels

Four (FYH1=1, FHH1=2, FYH3=1) earthenware serving vessels were recovered, all of which were platters.

Platter

Four (FYH1=1, FHH1=2, FYH3=1) earthenware platters were recovered.

Transfer-Printed

One (FYH1) of the earthenware platters is decorated with transfer-printed patterns. One (FYH1) earthenware platter is oval in shape and measures 18.00 inches (457.20 mm) long and 14.00 inches (355.60 mm) wide. The platter is decorated with the *Rhone Scenery* pattern in black ink. The *Rhone Scenery* pattern was manufactured by T. J. & J. Mayer between 1843 and 1855 (Williams 1978:390).

Edge Decorated

Three (FHH1=2, FYH3=1) of the earthenware platters are edge decorated. Edge decorated patterns are characterized by the restriction of the decoration to the edge or rim of the vessel. Edge decorated wares can be molded, painted or both. One (FHH1) of the platters has a plain unscalloped rim with a simple impressed repetitive pattern of feathers and painted in blue. McAllister (2001:11) dates this edge design from the 1830s into the 1860s, but Miller (1987) gives a production range for this design from 1825 to 1891 with a maximum popularity period of 1841 to 1857 and a median of 1849. Hunter and Miller (1994) date the unscalloped rim patterns from the 1840s to the 1860s. Two (FHH1=1, FYH3=1) of the platters has a Neoclassical scalloped rim with an impressed repetitive pattern of curved lines and painted in blue. McAllister (2001:11) dates this edge design from c. 1820 to 1830 and Miller (1987) provides a production range from 1795 to 1845 with a maximum popularity period of 1802 to 1832 and a median of 1817. Hunter and Miller (1994) date the scalloped rim patterns from 1800 to the 1830s.

Unidentified Flat and Hollow Vessels

Three (FYH1=1, FHH1=1, FYH2=1) earthenware vessels were recovered for which their vessels form could not be positively identified and therefore have been classified here as either flat vessels or hollow vessels. Two (FHH1=1, FYH2=1) indeterminate flat vessels and one (FYH1=1) indeterminate hollow vessels.

Flat Vessel

Two (FHH1=1, FYH2=1) earthenware flat vessels were recovered.

Transfer-Printed

One (FHH1) of the flat vessels is decorated with a transfer-printed pattern. The size and shape of the vessel is unknown but the vessel is decorated with an unidentified blue transfer-print pattern consisting of a scroll and leaves.

Edge Decorated

One (FYH2) of the flat vessels is decorated with an edge decorated pattern. The flat vessel has a neoclassical scalloped rim with an impressed repetitive pattern of curved lines and painted in blue. McAllister (2001:11) dates this edge design from c. 1820 to 1830 and Miller (1987) provides a production range from 1795 to 1845 with a maximum popularity period of 1802 to 1832 and a median of 1817. Hunter and Miller (1994) date the scalloped rim patterns from 1800 to the 1830s.

Hollow Vessel

One (FYH1) earthenware hollow vessel was recovered.

Annular Decorated

One (FYH1) of the hollow vessels is decorated with an annular pattern. The size and shape of the vessel is unknown but the vessel is decorated with gray-blue slip, probably a band.

Yellowware

One (FYH1) yellowware vessel ware was recovered. The term yellowware will be used here to refer to vessels with a fine grained body yellow in color that is sturdier than redware but less dense than stoneware and usually with either a plain or simple decoration (McAllister and Michel 1993:9-12). The finished body was still porous so nearly all yellowware are glazed.

Pitcher

One (FYH1) yellowware pitcher was recovered. The pitcher measures approximately 5.00 inches (127.00 mm) in diameter and is decorated with raised white lines in a group of at least nine running horizontally around the circumference of the vessel. Vessels with similar decoration and vessel form have been identified as “pitchers” measuring 10.00 inches (254.00 mm) and 8.5 inches (215.90 mm) in height (McAllister and Michel 1993:36, 38).



Figure D.11 Annular (Banded) Earthenware Bowls, Representative Sample: A) Brown Line and Blue Banded Bowl (FHH1); B) Brown Line and Blue-Gray Banded Bowl (FHH2); C) Blue Lines (Three) and Green Banded Bowl (FHH1); D) Blue Lines (Two) Above and Blue Lines (Two) Below Band Bowl (FHH1); E) Blue Banded Bowl (FHH1)

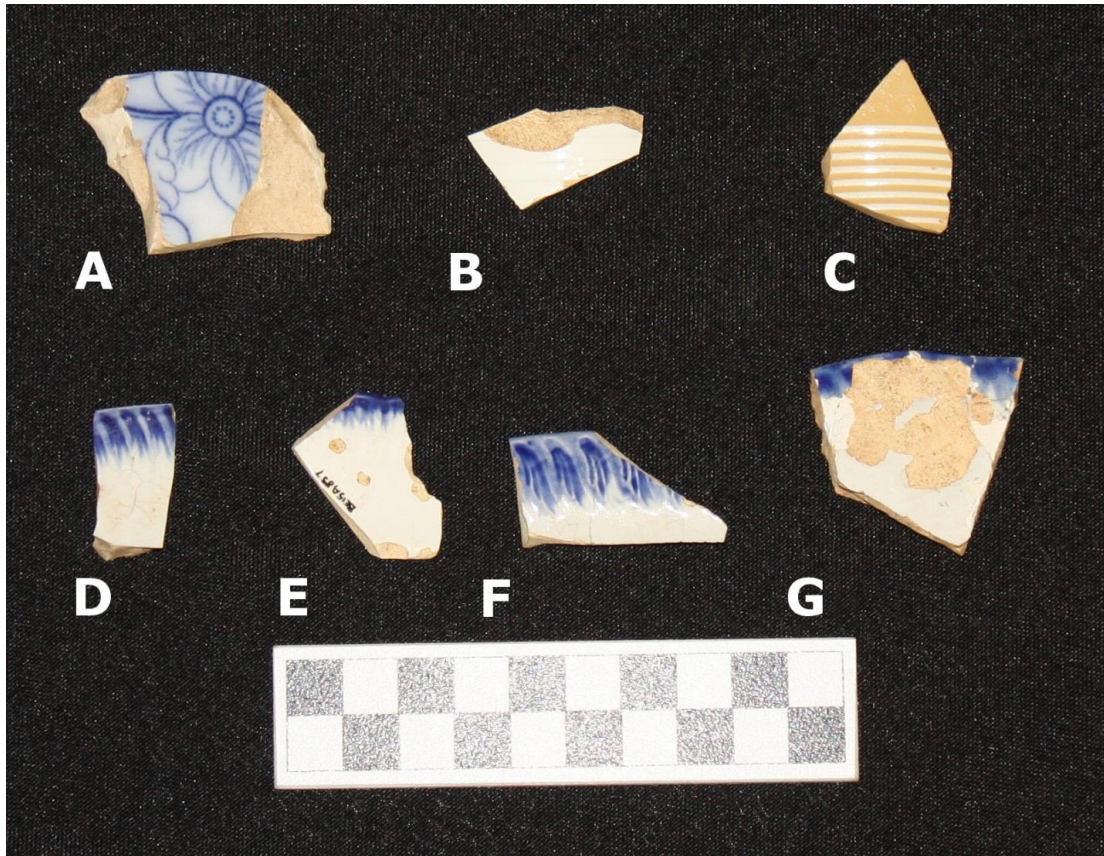


Figure D.12 Earthenware, Chinese Porcelain and Yellowware Ceramics,
 Representative Sample: A) Blue and White Chinese Porcelain Bowl (FHH1); B)
 Earthenware Bowl with Molded Bands (FHH2); C) Yellowware Pitcher (FYH1); D)
 Unscalloped Edge Decorated Plate (FHH1); E) Scalloped Edge Decorated Plate
 (FHH1); F) Unscalloped Edge Decorated Platter (FHH1); G) Scalloped Edge
 Decorated Flat Vessel (FYH2)



Figure D.13 Hand-Painted and Sponge Decorated Earthenware Vessels, Representative Sample: A) Hand-Painted Polychrome Saucer (FYH3); B) Hand-Painted Green Line (Two) and Banded Bowl (FYH3); C) Hand-Painted Green Line Bowl (FYH1); D) Blue Cut Sponge “Diamond” Pattern Saucer (FYH1); E) Pink and Blue Cut Sponge “Quatrefoil” Pattern Cup (FYH1); F) Pink and Green Cut Sponge “Oval” Pattern Saucer (FYH1)

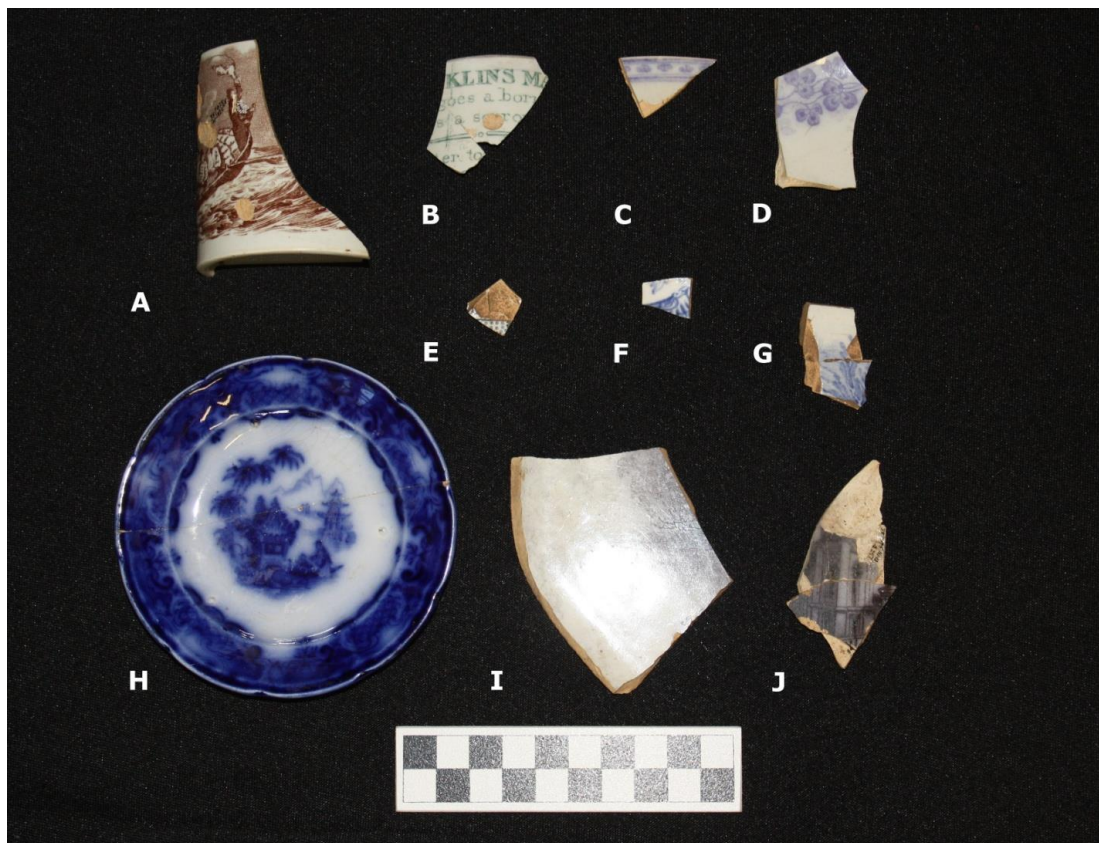


Figure D.14 Transfer-Printed Earthenware Vessels, Representative Sample: A) Brown “Dr. Franklin’s Maxims” Children’s Mug (FYH1); B) Green “Dr. Franklin’s Maxims” Children’s Mug (FYH1); C) Purple “Clover” Pattern Saucer (FYH1); D) Purple “Flower and Vine” Pattern Saucer (FYH1); E) Unidentified Black “Geometric” Pattern Flat Vessel (FHH1); F) Unidentified Blue “Floral” Pattern Flat Vessel (FHH1); G) Unidentified Blue “Floral” Pattern Flat Vessel (FHH1); H) Flow Blue *Formosa* Plate (FHH1); I and J) Mulberry/Black *Rhone Scenery* Platter (FYH3)

Tinware

One (FHH1) tinware vessel was recovered. The term tinware will be used here to refer vessels that are made of sheet metal is tinned, cut to size and then bent and folded into the desired shape and fastened with rivets to hold the desired form.

Mess Pan

One (FHH1) tinware mess pan was recovered. The mess pan is made of tinned iron in a shallow funnel-shaped dish with folded sides and bottom seams. The mess pan is distorted but estimations measure the rim diameter at 8.00 inches (203.20 mm) and the vessel height at 3.90 inches (99.06 mm). These dimensions are consistent with mess pans dating to the American Civil War (Lord 1963:172).



Figure D.15 Tinware (Iron) Mess Pan (FHH1)

Cutlery

Fork

Four (FHH1=2, FHH2=1, FHH3=1) forks were recovered.

One (FHH3) of the forks is represented by a fragment of the neck, root, head and tines. The head of the fork measures 0.69 inches (17.70 mm) wide and has three tines. Three (FHH1=2, FHH2=1) of the forks are represented by fragments of the root, neck and handle. One (FHH1) handle measures 3.85 inches (97.90 mm) long. One (FHH1) handle measures 4.36 inches (110.00 mm) long. One (FHH2) handle measures 4.40 inches (112.00 mm) long. Three (FHH1=2, FHH2=1) of the forks represented by handle fragments have bone side plates.

Spoons

Seven (FYH1=4, FHH1=1, FYH3=1, FHH3=1) spoons were recovered. All seven spoons are made of pewter.

Salt or Sugar Spoons

Two (FYH1) of the spoons are either salt or sugar spoons and measure approximately 4.00 inches (101.60 mm) in length. The two salt or sugar spoons are represented by bowls that are molded with a Rococo Revival clam shell motif on the back of the

bowl/drop. The most complete bowl measures 1.83 inches (46.66 mm) long and 1.10 inches (25.76 mm) wide.

Tea or Table Spoons

Three (FYH1=2, FYH3=1) of the spoons are probably either tea or table spoons measuring at least 5.00 inches (127.00 mm) in length. The handles of both spoons are molded in a pattern similar to *Hannover* with a raised center-spine along the handle. Although these two spoons are unmarked a spoon found on Ebay with an identical handle had a stamped maker's mark that read "PATENT 1859".

Serving Spoons

Two (FHH1=1, FHH3=1) of the spoons are serving spoons. One (FHH1) of the serving spoons and measures 7.87 inches (199.89 mm) in length. The spoon is made of Britannia pewter in the *Fiddle Thread* pattern. The *Fiddle Thread* pattern is characterized by the handle's shape which resembles a fiddle (violin) with the stem like a finger-board and the body with smooth parallel sides extending towards a rounded terminal but curve inward to create a pointed shape at the tip. The back of the spoon handle is stamped with a recessed maker's mark that reads "C. PARKER & CO. [in cartouche]". Charles Parker and Company manufactured American pewter utensils in Meriden, Connecticut in the 1850s (Kovel 1966:321; Thorn 1949:273). One (FHH3) of the serving spoons is represented by only a fragment of the handle. The handle is fairly large measures 1.05 inches (26.80 mm) wide and is decorated with unidentified stamped design consisting of scroll motif.

Table Knife

Five (FYH1=3, FHH1=1, FYH3=1) table knives were recovered.

Two (FYH1) table knives are complete and measure 9.00 inches (228.60 mm) long. Both knives are made of a steel blade and tang with bovine bone handle side plates. Both handles are inlaid with a union shield made of pewter. Identical table knives are stamped with a maker's mark on the blade near the bolster that reads "V [crown] R / JOHN ASKAM / SHEFFIELD // STEEL" (Empirical Observation). John Askam was a manufacturer of Sheffield Steel utensils produced for the American market from 1856 to the 1920s (Price and Zalesky 2008:141). One (FYH1) table knife is represented by a fragment of the blade that measures 0.705 inches (17.92 mm) wide. One (FHH1) table knife is represented by a fragment of the blade measures 5.50 inches (139.70 mm) long. This table knife may have had wood side plates on the handle. Bowyer (1992) records a wood handled table knife in his artifact catalog from FHH1 but the object appears to be missing. One (FYH3) table knife is represented by a blade tip. The tip is made of irons and measures 0.919 inches (2.33 mm) wide.

Indeterminate Cutlery Utensils

Four (FYH1=1, FHH2=2, FYH3=1) indeterminate cutlery utensils were recovered.

One (FYH1) of the indeterminate utensils is represented by a plain pewter utensil handle measuring 3.17 inches (80.66 mm) long. Three (FHH2=2, FYH3=1) of the indeterminate utensils are represented by plain iron utensil handles. One (FHH2) of the handles is nearly complete and measures 6.50 inches (165.10 mm) long and the other two are only fragments one (FHH2) measuring 2.74 inches (69.59 mm) long and the other (FYH3=1) having two holes in the handle and measuring 2.26 inches (57.55 mm) long.



Figure D.16 Gustatory Utensils, Representative Sample: A) Bone-handled Table Knife (FYH1); B) Pewter Spoon Handle (FHH1); C) Pewter Spoon Bowl (FYH1); D) Pewter Spoon Handle (FYH1); E) Iron Fork Head with Three Tines (FHH3); F) Pewter Spoon with “Rococo” Shell Bowl (FYH1); G) Iron Fork Handle (FHH2); H) Iron Fork with Wooden Handle (FHH1)

Foodstuffs

Three hundred and eighty-eight (FYH1=86, FHH1=80, FYH2=58, FHH2=44, FYH3=51, FHH3=69) artifacts from the Foodstuffs Class were recovered. The Foodstuffs Class contains the physical remains of the food and drink that was consumed at the officers’ quarters and is represented by artifacts such as animal bone,

fruit seeds, canned foods, bottle foods and bottle sauces and condiments. The Foodstuffs Class has five artifact types: Faunal Remains, Non-Faunal Remains, Food Canisters, Food Bottles and Condiments

Faunal Remains

Domestic Taxa

Bos taurus (Domestic Cow)

Eighty-three (FYH1=20, FYH2=16, FHH2=3, FYH3=29, FHH3=15) distinct and identifiable bone elements from the domestic cow (*Bos taurus*) were recovered. The bones recovered include thirty-six elements from the axial skeleton and forty-seven elements from appendicular skeleton including sixteen elements from the front limbs and thirty-one elements from the back limbs.

Axial Skeleton

There are no cranial elements in the identified cow remains. Axial elements include three (FYH2=1, FHH2=1, FYH3=1) cervical vertebrae, four (FYH2=2, FYH3=1, FHH3=1) thoracic vertebrae eleven (FYH3=4, FHH3=7) lumbar vertebrae, two (FYH2) indeterminate vertebrae and sixteen (FYH1=8, FYH2=5, FYH3=3) rib shaft segments. One (FHH2) of the cervical vertebrae was sawn in half laterally. One (FHH3) of the thoracic vertebrae was sawn through the transverse process and has a single cut mark on the vertebral body perpendicular to the spinal column. Two (FHH3) of the lumbar vertebrae were sawn vertically through the vertebral body and another (FHH3) was sawn horizontally through the vertebral body. Two (FYH3) of the lumbar vertebrae are complete, four (FHH3) are broken and two (FYH3) are represented by fragments. Two (FYH2) of the indeterminate vertebrae were sawn vertically through the vertebral body. One (FYH3) rib has a cut mark on the proximal shaft.

Appendicular Skeleton

Sixteen front limb elements were identified in the cow remains including nine (FYH1=4, FHH2=2, FYH3=3) scapula, two (FYH3) humeri, two (FHH3) radius-ulnas (FHH3), two (FYH3=1, FHH3=1) metacarpals and one (FYH2) intermediate phalange. Six of the scapulae have saw marks including two (FHH2) that are sawn both on the distal neck and on the caudal edge, one (FYH3) that is sawn on its proximal and distal ends and with a cut mark on its neck, one (FYH1) sawn on its distal end and two (FYH1) that are sawn on the proximal and distal ends. One (FYH3) humerus is sawn on the distal end and broken on the proximal end. Two (FHH3) radius-ulnas are sawn on the distal end, one with the saw mark parallel to the shaft and the other perpendicular to the shaft. One (FHH3) of the metacarpals is broken and appears to be unfused and might from a sub-adult.

Thirty-one back limb elements were identified in the cow remains including two (FYH3) innominate bones (an ilium neck and a pelvic blade), nineteen (FYH1=7, FYH2=3, FYH3=9) femurs, six (FYH1=1, FYH2=1, FYH3=3, FHH3=1) tibia, one (FHH3) talus, one (FHH3) calcaneus and two (FYH2=1, FHH3=1) metatarsals. One (FYH3) innominate bone, the pelvic blade, has a saw mark on the blade perpendicular to the blade. Eight of the femurs have saw marks including one (FYH1) that is sawn on the distal end with a cut mark on the medial shaft, two (FYH1=1, FYH3=1) that are sawn on the proximal and distal ends, one (FYH1) sawn on the proximal end and medial shaft, one (FYH3) sawn through the femoral head and three (FYH1) that are sawn on the medial and distal shaft into a steak cuts. The three cuts measure 0.81 inches (20.62 mm), 1.40 inches (35.62 mm) and 1.57 inches (39.89 mm) thick. Two of the femurs are culturally broken including one (FYH3) broken on the proximal end and the other (FYH1) broken on the distal end. Four of the tibia have saw marks including two (FYH3) sawn on the medial shaft, one (FYH1) broken on the proximal end and sawn on the distal end and one (FHH3) sawn on the proximal shaft and broken on the distal shaft. One (FHH3) metatarsal is broken on the proximal end.

Sus scrofa (Domestic Pig)

Fifteen (FYH1=2, FYH2=9, FHH2=2, FYH3=1, FHH3=1) distinct and identifiable bone and teeth elements from the domestic pig (*Sus scrofa*) were recovered. The bones recovered include eleven elements from the axial skeleton and four elements from the appendicular skeleton all of which are from the front limbs.

Axial Skeleton

Three cranial elements were identified in the pig remains including one (FYH2) third molar (M3), one (FHH2) lacrimal, pre-maxilla and maxilla and one (FHH3) indeterminate premolar/molar fragment. Other axial elements include one (FHH2) lumbar vertebrae and seven (FYH2=6, FYH3=1) rib shaft and end segments. One (FYH2) lacrimal, maxilla and pre-maxilla are broken and the lacrimal is small and might represent a sub-adult. One (FYH2) of the rib segments is a proximal shaft that is sawn on the distal end.

Appendicular Skeleton

Four front limb elements were identified in the pig remains including one (FYH2) scapula, one (FYH1) humerus and two (FYH1) ulnas. One (FYH1) humerus segment is broken on the medial shaft. There are no back limb elements identified in the recovered pig remains.

Gallus gallus domesticus (Domestic Chicken)

Ninety-four elements from the domestic chicken were recovered. These remains include thirteen elements from the axial skeleton and seventy-three elements from the appendicular skeleton including thirty-five elements from the front limbs and thirty-

eight elements from the back limbs. In addition to the bones recovered eight non-bone chicken remains were recovered including two eggs and six gastroliths. These remains represent thirteen (FYH1=3, FHH1=1, FYH2=1, FHH2=4, FYH3=1, FHH3=3) distinct domestic chickens (*Gallus gallus domesticus*).

Axial Skeleton

Three cranial elements were identified in the chicken remains including one (FYH2) lacrimal and two (FHH2) mandibles. Other axial elements include one (FHH2) cervical vertebrae, one (FHH3) thoracic vertebrae, five (FHH1=1, FHH2=1, FHH3=3) coracoids and three (FHH2=2, FHH3=1) sternums. One (FHH3) coracoid is broken on the proximal end. Two (FHH2=1, FHH3=1) coracoids are broken on the distal end and burned. Two (FHH2) mandibles are broken. Three (FHH2=2, FHH3=1) sternums are broken on the keel.

Appendicular Skeleton

Thirty-five front limb elements were identified in the chicken remains including three (FHH1=1, FHH2=2) scapula, twelve (FYH2=3, FHH2=4, FHH3=5) humeri, five (FYH2=1, FHH2=1, FHH3=3) radius, eight (FHH2=3, FHH3=5) ulna, six (FHH1=1, FHH2=3, FYH3=1, FHH3=1) carpometacarpus and one (FHH2) phalange. One (FHH2) scapula is broken on the distal end. Three (FHH2=2, FHH3=1) humeri are broken on the proximal end and one is burned. Two (FHH3) humeri are broken on the medial shaft. Three (FHH2=2, FHH3=1) humeri are broken on the distal end, one of which is burned. One (FHH3) radius is broken on the proximal end. Two (FHH3) radii are broken on the distal ends. Two (FHH3) ulnas are broken on the proximal ends. One (FHH2) ulna is broken on the medial shaft. One (FHH3) ulna is broken on the distal end.

Thirty-eight back limb elements were identified in the chicken remains including one (FYH2) innominate bone (acetabulum), three (FHH2) synsacrum, sixteen (FYH1=1, FYH2=3, FHH2=8, FYH3=2, FHH3=2) femurs, three (FHH2) fibula, ten (FHH1=1, FHH2=3, FYH3=1, FHH3=5) tibio-tarsus and five tarso-metatarsus (FHH2=2, FHH3=3). One (FHH2) synsacrum is broken. One (FHH2) femur has a chop mark on the proximal end. One (FYH1) femur is broken on the proximal and distal ends. Two (FHH2=1, FHH3=1) femur is broken on the proximal end. Four (FHH2=3, FHH3=1) femurs are broken on the medial shaft with one of them burned. Three (FHH2) fibulas are broken on the proximal ends. One (FYH3) tibiotarsus is broken on the proximal end. One (FYH3) tibiotarsus is cut on the distal end. Four (FHH2=2, FHH3=2) tibiotarsus are broken on the distal ends. One (FHH2) tibiotarsus is broken on the medial shaft and burned. Two (FHH3) tarsometatarsals are broken on the distal ends.

Eight non-bone faunal materials were identified in the chicken remains including six (FYH1=3, FYH2=1, FHH3=2) gastroliths and thirteen egg fragments (FYH1) representing a minimum of two eggs. Only the two chicken eggs represent distinct

faunal material and will be used in this study. Three (FYH1=2, FYH2=1) of the gastroliths are made of a white earthenware ceramic fragments and three of the gastroliths are made of glass including two (FYH1=1, FHH3=1) of a dark olive green glass and the other (FHH3) of an aqua glass. Thirteen (FYH1) white chicken egg fragments were also recovered and probably represent at least two eggs. One (FYH1) egg is represented by five egg shell fragments that were recovered from inside an iron canister. The other (FYH1) egg is represented by eight egg shell fragments there were recovered directly from the sediment of midden deposit.

Wild Terrestrial Taxa

Odocoileus sp. (Deer)

Sixty-three (FYH1=16, FYH2=26, FHH2=1, FYH3=14, FHH3=6) elements from the genus *Odocoileus* (deer) were recovered. The bones recovered include seventeen elements from the axial skeleton and forty-seven elements from the appendicular skeleton including thirteen elements from the front limbs and thirty-four elements from the back limbs.

Axial Skeleton

There are no cranial elements in the identified deer remains. Axial elements include three (FYH2) indeterminate vertebrae, one (FHH3) sacrum and thirteen (FYH1=2, FYH2=9, FYH3=2) ribs. One (FHH3) sacrum is broken. One (FYH3) rib is cut on the proximal shaft.

Appendicular Skeleton

Thirteen front limb elements were identified in the deer remains including two (FYH1=1, FYH2=1) scapula, three (FYH1=2, FYH1=1) humerus, five (FYH1=1, FYH2=2, FYH3=1, FHH3=1) radius and two (FYH3) metacarpal. One (FYH1) scapula is sawn on proximal end. One (FHH3) radius is sawn vertically through the radial head. One (FYH1) radius is broken at the proximal end.

Thirty-four back limb elements were identified in the deer remains including thirteen (FYH1=3, FYH2=6, FYH3=2, FHH3=2) innominate bones (ilium and pubis), four (FYH2=1, FYH3=3) femurs, ten (FYH1=2, FYH2=3, FYH3=4, FHH3=1) tibia, five (FYH1=4, FHH3=1) talus, one (FHH2) metatarsal and one (FYH1) proximal phalange. One (FYH3) innominate bone (ilium) is cut near the acetabulum. One (FYH3) femur is sawn on the distal end. One (FYH3) tibia is sawn on the proximal and medial shaft into a steak cut. The cut measures 1.57 inches (39.89 mm) thick. One (FHH3) tibia is broken on the medial shaft and sawn on the distal shaft. One (FHH3) talus is sawn diagonally through the medial shaft. One (FYH1) talus is sawn on distal end. One (FHH2) metatarsal is cut on the medial shaft perpendicular to the shaft.

Cervus sp. (Elk)

One (FYH1) element from the genus *Cervus* or elk (*Cervus sp.*) was recovered. The bone includes one back limb element from the appendicular skeleton. The single element from an elk is an innominate bone (ilium neck).

Anser sp. (Goose)

Eleven elements from the genus *Anser* or geese (*Anser sp.*) were recovered. These remains include four elements from the axial skeleton and seven elements from the appendicular skeleton including one element from the front limbs and six elements from the back limbs. These remains represent one (FHH2) distinct goose (*Anser sp.*).

Axial Skeleton

There are no cranial elements identified in the goose remains. Axial elements include two (FHH2) sternum, one (FHH2) coracoid and one (FHH2) synsacrum. Two (FHH2) sternums are broken at the keel. One synsacrum is also broken.

Appendicular Skeleton

One front limb element was identified in the goose remains including one (FHH2) humerus. One (FHH2) humerus is broken on the proximal end.

Six back limb elements were identified in the goose remains including one (FHH2) femur, three (FHH2) tibiotarsi and two (FHH2) tarsometatarsi. One (FHH2) femur is broken at the medial shaft. Three (FHH2) tibiotarsi are broken at the proximal ends.

Galliform (Fowl)

Twenty elements from unidentified birds from the order galliform were recovered. These remains include one element from the axial skeleton and nineteen elements from the appendicular skeleton including seven elements from the front limbs and twelve elements from the back limbs. These remains represent five (FYH2=1, FHH2=4) distinct birds of the order galliform.

Axial Skeleton

There are no cranial elements identified in the galliform remains. Axial elements include one (FHH2) coracoid.

Appendicular Skeleton

Seven front limb elements were identified in the galliform remains including one (FHH2) scapula, four (FHH2) humeri, one (FHH2) radius, one (FHH2) ulna and one (FHH2) phalange. One (FHH2) scapula is broken on the distal end. Two (FHH2)

humeri are cut, one on the medial shaft and broken on the proximal and distal ends, the other cut on the proximal shaft and broken on the medial shaft. One (FHH2) humerus is broken on the proximal end. One (FHH2) ulna is broken on the distal end.

Twelve back limb elements were identified in the galliform remains including two (FHH2) femurs, one (FHH2) tibiotarsus and nine (FHH2) tarsometatarsi. Two (FHH2) femurs are broken, one on the medial shaft and the other on the distal end. One (FHH2) tibio-tarsus is broken on the distal end. Six (FHH2) tarsometatarsi are broken, two on the proximal end and four on the distal ends.

Wild Aquatic Taxa

Osteichthyes (Fish)

One (FHH1) fish scale (superclass: *Osteichthyes*) was recovered. The fish scale is missing from the collection and therefore positive identification was taken from Bowyer (1992b). The scale was identified as coming from a fresh water species of fish but no further classification of the scale is currently possible.

Ostrea lurida (Native Pacific Oyster)

Five hundred and fourteen (FHH1=343, FHH2=62, FHH3=109) Native Pacific Oyster (*Ostrea lurida*) shell fragments were recovered weighing a total of 542.22 grams (FHH1=268.53 g, FHH2=128.44 g, FHH3=145.25 g). These remains include twenty-three (FHH1=7, FHH2=5, FHH3=11) half-shells, one hundred and thirty-eight (FHH1=96, FHH2=16, FHH3=26) hinges and three hundred and fifty-three (FHH1=240, FHH2=41, FHH3=72) body fragments. The 514 shell remains represent a minimum of eighty-two (FHH1=52, FHH2=11, FHH3=19) individual Native Pacific Oysters.

Protothaca staminea (Little Neck Clam)

Two (FHH1) Little Neck Clam (*Protothaca staminea*) shell fragments were recovered weighing a total of 4.86 grams. These remains include two (FHH1) body fragments that represent a minimum of one individual Little Neck Clam.

Clinocardium nuttallii (Cockle)

One (FHH3) salt water cockle (*Clinocardium nuttallii*) shell fragment was recovered weighing a total of 2.27 grams. These remains include one (FHH3) body fragment that represents a minimum of one individual cockle.

Tresus sp. (Clam)

Five hundred and thirty-five salt water clam (*Tresus sp.*) shell fragments were recovered weighing a total of 721.06 grams were recovered from FHH3. These

remains include twenty-five hinges and four hundred and ninety-eight body fragments. The 537 shell remains represent a minimum of twelve individuals of salt water clams from the genus *Tresus*.

Non-Faunal Foods

Peach

Two (FYH1) peach pits (*Prunus persica*) were recovered. One pit is complete and one pit is represented by half of a pit and several fragments. The two peach pits represent two (FYH1) distinct peaches.

Food Canister

Cylinder

Forty-three (FYH1=23, FHH1=7, FHH2=6, FYH3=3, FHH3=4) cylindrical iron canisters were recovered. All of the canisters were made of tinned iron with folded and lead soldered side and end seams and exhibit hole-in-cap closure technology with caps measuring in one of two diameters, either 2.00 inches or 2.25 inches. Eight (FYH1) of the canisters measure 6.25 inches tall and 3.50 inches in diameter. Fourteen (FYH1=12, FHH1=1, FYH3=1) of the canisters measure 5.25 inches tall and 4.00 inches in diameter. One (FHH3) of the canisters measures 3.50 inches tall and 4.75 inches in diameter. The height dimension for twenty of the canisters is unknown but the diameter for these canisters could be determined and include one (FYH3) 4.25 inch diameter canister, two (FYH1=1, FHH3=1) 4.00 inch diameter canisters, seven (FYH1=2, FHH1=4, FYH3=1) 3.62 inch diameter canisters, one (FHH3) 3.00 inch diameter canister, four (FHH2) 2.87 inch diameter canister, one (FHH3) 2.50 inch diameter canister and four (FHH1=2, FHH2=2) 2.37 inch diameter canisters. Three (FYH1) of the 6.25 x 3.5 inch cylinder canisters were crudely opened with a knife by making five incisions around the circumference of the cap and prying the cap open to remove the contents suggesting that they contained solid food items.

Rectangular

Two (FYH1=1, FHH3=1) rectangular iron canisters were recovered. Both canisters are made of tinned iron with folded and lead soldered side seams. The most complete canister (FHH3) measures 4.00 inches in either length or width with an unknown height. The size of the other canister (FYH1) is unknown but the canister is stamped with “[unreadable text] in rectangular boarder around the edge of the canister / 185_ / 1444 [inside a circle]”. The exact content of these canisters is unknown but their size and method of opening suggests that they contained solid foodstuffs.



Figure D.17 Iron Food Canister (FYH1). The Canister is Cylindrical and Measures 6.25 x 3.50 (33 ounces) Inches with Hole-in-Cap Closure Technology. The canister was crudely opened with a knife by making five incisions around the circumference of the cap and then prying the cap open to remove the contents.

Food Bottle

Pickle

Two (FHH2=1, FYH3=1) glass pickle bottles were recovered. The most complete pickle bottle (FHH2) is a cathedral-type bottle made of aqua glass and measures 11.50 inches tall with a 3.50 inches square base. The body of the bottle is molded on all four sides with a gothic cathedral design of pointed arched windows with trefoils. The bottle also has chamfered corners, an applied wide mouth one-part bead finish and an iron pontil mark (Jones and Sullivan 1989:87; Fike 1997:8; Lindsey 2014). The second pickle bottle (FYH3) is represented by nearly complete applied wide mouth one-part bead finish identical to the pickle bottle recovered from FHH2).

Indeterminate

Five (FHH1=2, FHH2=3) glass indeterminate food bottles were recovered. Three (FHH2) of the indeterminate food bottles are also cathedral-type bottles made of various shades of aqua glass. Two (FHH2) bottles are represented body fragment of a sided bottle molded with a gothic cathedral design of pointed arched windows with trefoils and chamfered corners. One (FHH2) bottle is also molded with a gothic cathedral design but is represented by an applied wide mouth one-part bead finish

(Jones and Sullivan 1989:87; Fike 1997:8; Lindsey 2014). One (FHH1) bottle is represented by a wide mouth bottle finish measuring 2.75 inches in diameter, made of aqua glass and decorated with a large ball neck (Jones and Sullivan 1989:98). One (FHH1) bottle is made of aqua glass and is represented by rolled/folded-out wide mouth finish measuring 3.25 inches in diameter. Although the exact contents of these bottles are unknown their general decoration and finish types are consistent with bottles that contained pickled foods (Lindsey 2014; Zumwalt 1980).

Condiments

Relish

One (FYH1) relish jar was recovered. The jar is represented by several fragments of the lid and finish. The jar is made of aqua glass with a large mouth finish with a ground lip and molded lugs. The lid of the jar is also made of aqua glass and is embossed “HARTELL’S GLASS-AIR TIGHT COVER” on the side and “PAT. OCT. 19, 1858” embossed on top. A similar jar was recovered of the *U.S.S. Monitor* which was sunk on December 31, 1862. The recovered jar had a rubber gasket and wax seal in the glass lid. Analysis of the contents determined that it held a relish made of cloves, onions, pepper seeds, cucumbers, mustard seeds, peppercorns, and mushrooms (Grieve 2008:141-142). Polak (2012:187) dates the jar from 1860 to 1870.

Spice/Pepper

Twenty-six (FYH1=12, FHH1=4, FYH2=5, FHH2=2, FYH3=2, FHH3=1) spice/pepper bottles were recovered. Two (FHH1) spice/pepper bottle are made of aqua glass and measures 7.01 inches tall, 2.47 inches wide and 1.63 inches thick. The bottle is molded in the *Fluted Oblong, Variant 1* pattern with an empontiled blow pipe base and a one-part, patent/packer type finish (Fike 1987:8, 10). Identical finishes are found on J. W. Hunnewell and Company, Boston bottles (Lindsey 2014). John W. Hunnewell of Boston was a manufacturer of spices, mustards and relishes in the 1860s and 1870s (Fike 1987:167; Zumwalt 1980:253). One (FHH3) spice/pepper bottle is made of aqua glass and measures 7.00 inches tall, 2.50 inches wide and 1.60 inches thick. The body of the bottle is molded in the *Fluted Oblong, Variant 1* pattern with an empontiled blow pipe base and rolled/folded-in finish (Fike 1987:10; Jones and Sullivan 1989:90). Three (FHH1=2, FHH2=1) spice/pepper bottle is made of aqua glass and measures 6.82 inches tall, 2.71 inches wide and 1.79 inches thick. The body of the bottle is molded in the *Fluted Oblong, Variant 1* pattern with an empontiled blow pipe base and rolled/folded-in finish (Fike 1987:10; Jones and Sullivan 1989:90). One (FHH2) spice/pepper bottle is made of colorless glass and measures 6.61 inches tall, 2.61 inches wide and 1.76 inches thick. The body of the bottle is molded in the *Fluted Oblong, Variant 1* pattern with an empontiled blow pipe base and rolled/folded-in finish (Fike 1987:10; Jones and Sullivan 1989:90). One (FYH1) spice/pepper bottle is made of aqua glass and measures 6.62 inches tall, 2.50 inches wide and 1.50 inches thick. The body of the bottle is molded in the

Fluted Oblong, Variant 1 pattern with an empontiled blow pipe base and rolled/folded-in finish (Fike 1987:10; Jones and Sullivan 1989:90). One (FYH1) spice/pepper bottle is made of aqua glass and measures 6.62 inches tall, 2.50 inches wide and 1.50 inches thick. The body of the bottle is molded in the *Fluted Oblong, Variant 1* pattern with a diagonal hinge mold seam base and rolled/folded-in finish (Fike 1987:10; Jones and Sullivan 1989:90). One (FYH1) spice/pepper bottle is made of aqua glass and measures 6.56 inches tall, 2.44 inches wide and 1.57 inches thick. The body of the bottle is molded in the *Fluted Oblong, Variant 1* pattern with a diagonal hinge mold seam base and rolled/folded-in finish (Fike 1987:10; Jones and Sullivan 1989:90). Three (FYH1=2, FYH2=1) spice/pepper bottle is made of aqua glass and measures 6.50 inches tall, 2.37 inches wide and 1.50 inches thick. The body of the bottle is molded in the *Fluted Oblong, Variant 1* pattern with a diagonal hinge mold seam base and rolled/folded-in finish (Fike 1987:10; Jones and Sullivan 1989:90). The side panels of the bottles are also embossed “G. VENARD // SAN FRANCISCO”. G. Venard of San Francisco was a manufacturer of mustard, spices and saucers from 1856 to 1876 (Zumwalt 1980:412). One (FYH1) spice/pepper bottle is made of aqua glass and measures 6.50 inches tall, 2.37 inches wide and 1.50 inches thick. The body of the bottle is molded in the *Fluted Oblong, Variant 1* pattern with one-part patent/extract/flat finish (Fike 1987:10; Jones and Sullivan 1989:90; Lindsay 2014). One (FYH3) spice/pepper bottle is made of aqua glass and is represented by only a base that measures 2.37 inches wide and 1.50 inches thick. The body of the bottle is molded in the *Fluted Oblong, Variant 1* pattern with a diagonal hinge mold seam base. One side panel of the bottle is embossed “SAN FRANCISCO”. Several condiment manufacturers were located in San Francisco including G. Venard and H. C. Hudson and Company (Lindsey 2014; Zumwalt 1980:412). This body shape is commonly found on spice/pepper bottles (Lindsey 2014) and on several spice bottles described above. Two (FYH1=1, FYH3=1) spice/pepper bottle is made of aqua glass and is represented by only a base that measures 2.37 inches wide and 1.50 inches thick. The body of the bottle is molded in the *Fluted Oblong, Variant 1* pattern with a diagonal hinge mold seam base. This body shape is commonly found on spice/pepper bottles (Lindsey 2014) and on several spice bottles described above. One (FYH1) spice/pepper bottle is made of aqua glass and is represented by a one-part, patent/packer type finish (Fike 1987:8). Identical finishes are found on J. W. Hunnewell and Company, Boston bottles (Lindsey 2014). John W. Hunnewell of Boston was a manufacturer of spices, mustards and relishes in the 1860s and 1870s (Fike 1987:167; Zumwalt 1980:253). One (FYH1) spice/pepper bottle is made of aqua glass and is represented by a one-part, patent type finish (Fike 1987:8). Identical finishes are found on H. C. Hudson and Company, San Francisco bottles (Lindsey 2014). H. C. Hudson and Company of San Francisco began manufacturing mustard and spices in 1861 (Zumwalt 1980:252). Three (FYH1=2, FYH2=1) spice/pepper bottles are made of aqua glass and is represented by a one-part, rolled/folded-in finish (Jones and Sullivan 1989:90). One (FHH1) of the finishes measures 2.75 inches in diameter. Identical finishes are found on several types of spice/pepper bottles including the *Fluted Oblong, Variant 1* pattern (Fike 1987:10) spice bottles described above. Three (FHH1=1, FYH2=2) spice/pepper bottles are made of aqua glass and is represented by a one-part, rolled/folded-out

finish (Jones and Sullivan 1989:90). Identical finishes are found on several types of spice/pepper bottles including the *Fluted Oblong, Variant 1* pattern (Fike 1987:10) spice bottles described above.

Two (FYH1=1, FYH2=1) spice/pepper bottle is made of aqua glass and is represented by a large body fragment in the *Fluted Oblong, Variant 1* pattern (Fike 1987:10).

This body shape is commonly found on spice/pepper bottles (Lindsey 2014) and on several spice bottles described above.

London Club Sauce

One (FHH1) London club sauce bottle is made of aqua glass and measures 7.37 inches tall and 2.00 inches in diameter, estimated. The bottle finish and part of the base are missing but the body of the bottle is embossed "LONDON CLUB SAUCE" in a font and style similar to Parker Brothers London club sauce bottles. Club sauce, a generic brand of Worcestershire Sauce, was intended to be put on meats (Lindsey 2014).

Mustard

Three (FYH1=1, FHH3=2) mustard bottle is made of colorless glass and is represented by a wide mouth cracked-off and ground finish. Two (FYH1=1, FHH3=1) of finishes measures 1.75 inches in diameter and one (FHH3) measures 2.00 inches in diameter. The bottles are identical to mustard bottles by William Schotten and Brothers of St. Louis reported in Russell (1988:102). Two (FHH2=1, FHH3=1) mustard bottles are made of aqua glass and are represented by body shard that is molded with four horizontal ribs that are close together. The molded ribs are very similar to non-embossed four-band mustard jars depicted in Russell (1988:102).

Pepper Sauce

Four (FHH1=2, FHH2=1, FHH3=1) pepper sauce bottles are made of aqua glass and molded in a cathedral bottle pattern. The bottles have a hexagonal horizontal cross-section and molded with a cathedral bottle pattern of six inset gothic panels/windows around the body of the vessel and six inset gothic panels/windows topped with trefoils around the shoulder of the vessel. Identical pepper sauce bottles are reported in Switzer (1978:58).

Olive Oil/Salad Dressing

Four (FHH1) olive oil/salad dressing bottles are made of aqua glass and measures 7.32 to 7.47 inches tall, 2.31 to 2.33 inches wide and 1.62 to 1.76 inches thick. The bottles have a sided with chamfered corners body, indented *Blake, Variant 1* base (Fike 1987:10) and a two-part packer finish (Fike 1987:8; Lindsey 2014). Bottles of this type commonly contained vegetable oil and salad dressing (Lindsay 2014; Zumwalt 1980:450). Four (FHH2) olive oil/salad dressing bottles are made of aqua glass and measure 8.56 inches tall and 1.92 inches in diameter. The bottles are

octagonal in horizontal cross-section with inset panels, molded with a gothic-esque neck ring and have an applied two-part flared ring finish (Fike 1997:8; Jones and Sullivan 1989:87, 91 and 95; Lindsay 2014). Bottles of this type commonly contained vegetable oil and salad dressing (Lindsay 2014) and sometimes other sauces, ketchup and vinegar (Zumwalt 1980:450). Three of the bottles are complete and one is fragmented and represented by the finish, neck and part of the shoulder.

Flavoring Extract

One (FYH1) flavoring extract bottle is made of colorless glass and is represented by a one-part, patent/extract/flat finish with a neck ring (Fike 1987:8; Lindsey 2014). Neck rings were a common feature on flavoring extract bottles.

Sauce

Two (FHH1=1, FHH3=1) generic sauce bottles are made of aqua glass and represented by a large neck/shoulder/body shards molded with a vertical ribbed/fluted pattern. The pattern consists of ten vertical ribs/flutes around the body of the bottle with three horizontal neck rings. One (FHH3) bottle has a packer finish (Fike 1987:8; Lindsey 2014). An identical ribbed/fluted sauce bottle was reported by Lindsey (2014).

Indeterminate Condiment

One (FYH1) indeterminate condiment bottle is made of aqua glass and is molded in a cathedral bottle pattern consisting of a quatrefoil body with convex rectangular panels and lobe corners with two short horizontal ribs alternating with larger hourglass-like shapes. Identical bottles in McKearin and Wilson (1978:274) describe the bottles as measuring 5.62 inches tall and 1.62 inches square. The same authors called these bottles sauce or pepper sauce bottles but they were also used for catsup, ketchup, juices, syrups, essences and capers. Two (FYH1=1, FYH2=1) indeterminate condiment bottle is made of cobalt blue glass and is represented by a down tooled, one-part ring or oil finish (Jones and Sullivan 1989:87, 92; Fike 1997:8). Lindsay (2014) identifies an identical cobalt blue bottle as a “food bottle”.



Figure D.18 Food and Condiment Bottles, Representative Sample: A) Cobalt Blue “Food” Bottle (FYH1); B) *Hartell’s Glass Air-Tight Cover* [Relish Bottle] (FYH1); C) Spice/Pepper Bottle (FYH1); D) Pepper Sauce Bottle (FHH2); E) Olive Oil Bottle (FHH1); F) Cathedral Pickle Bottle (FHH2)

Home Maintenance

Twenty-three (FYH1=2, FHH1=7, FYH2=1, FHH2=10, FYH3=3) artifacts from the Home Maintenance Class were recovered. The Home Maintenance Class contains artifacts pertaining to the general home maintenance and repair of the house as well as the household contents such clothing and is represented by scissors, thimbles, straight pins and glue. The Home Maintenance Class has two artifact types: Sewing and General Repair.

Sewing

Needlework Clamp

One (FHH1) needlework clamp was recovered. The clamp is made of silver and stamped in the form of a bird. The clamp is designed so that the bird grasps the fabric with its bill which opens when the tail of the bird is pressed downward. The body and wings of the bird are decorated with a stamped feather texture and one wing is stamped “PATENTED” the other stamped “FEB. 15, 1853”. The sewing bird was manufactured by Charles Waterman of Meriden, Connecticut (Beaudry 2006:161).

Scissors

Three (FYH1=1, FHH2=1, FYH3=1) scissors were recovered. One (FHH2) pair of scissors are sewing scissors made of iron and complete measuring 4.57 inches long with flat bows, an elaborate shank and a rapier blade (Beaudry 2006:127). One (FYH1) pair of scissors are either tailor or dress making sheers made of iron and represented by an offset oval bow (Beaudry 2006:128). One (FYH3) pair of scissors are sewing scissors made of iron and are represented by a blade measuring 4.53 inches long (Beaudry 2006:128).

Thimble

Four (FYH1=1, FHH1=2, FYH2=1) thimbles were recovered. One (FYH1) thimble is a closed-type thimble made of iron and measures 0.88 inches tall with a 0.51 inch interior diameter. The thimble is a United States Size 4 (child) (Beaudry 2006:106). One (FHH1) thimble is a closed-type thimble made of brass and measures 0.80 inches tall with a 0.63 inch interior diameter. The thimble is a United State Size 8 (small) (Beaudry 2006:106). The thimble is also stamped “THO ABSENT, EVER DEAR” on band around the base. One (FHH1) thimble is a closed-type thimble made of silver and measures 0.64 inches tall with a 0.53 inch interior diameter. The thimble is a United States Size 2 (child) (Beaudry 2006:106). The thimble is also stamped with a number “2” on a band near base. One (FYH2) thimble is an open-type thimble made of brass and measures 0.57 inches tall with a 0.613 interior diameter. The thimble is a United States Size 7-8 (small) (Beaudry 2006:106).

Safety Pin

Four (FHH1=2, FYH3=2) safety pins were recovered. All four of the safety pins are nearly complete and made of a single piece of brass wire (one-piece wire type). The wire is bent into the shape required to make the pin with a pointed shank on one end, a coil for the spring action in the middle and a loop to fasten the pin closed on the other end. This type of pin was patented by Walter Hunt on April 19, 1849 under patent number US 6281 A (Hunt 1849). Three (FHH1=2, FYH3=1) of the safety pins measure 1.76 inches long and one (FYH3) measures 1.87 inches long.

Straight Pin

Nine (FHH2) straight pins were recovered. One (FHH2) of the pins is made of a iron and measures 1.23 inches (32.50 mm) long with a 0.034 inch (0.88 mm) diameter. One (FHH2) of the pins is made of a copper alloy, probably brass, and measures 1.07 inches (27.20 mm) long with a 0.028 inch (0.72 mm) diameter. One (FHH2) of the pins is made of a copper alloy, probably brass, and measures 1.03 inches (26.10 mm) long with a 0.03 inch (0.77 mm) diameter. One (FHH2) of the pins is made of a copper alloy, probably brass, and measures 0.75 inches (19 mm) long with a 0.025 inch (0.65 mm) diameter. One (FHH2) of the pins is made of a copper alloy, probably brass, and measures 0.31 inches (8.1 mm) long with a 0.019 inch (0.48 mm)

diameter. Three (FHH2) pins are represented by only a head fragments made of brass, one pin measuring 0.017 inches (0.44 mm) in diameter, one measuring 0.34 inches (0.87 mm) in diameter and one measuring 0.089 inches (0.35 mm) in diameter. Another complete straight pin was also recovered from FHH2 but is missing from the collection and therefore positive identification of the pin was taken from Bowyer (1992b). Lills are tiny pins less than half an inch in length and less than four hundredths of an inch in diameter. Lills could be used in pinning fine fabrics before stitching them together but were more commonly used to pin veils and other elements of women's garb in place. In the archaeological literature these tiny pins are called dress pins (Beaudry 2006:25). Common sewing pins tended to be just over one inch long and about one sixteenth of an inch in diameter. Middlings were pins of medium size between the short whites of 1 inch (24-30 mm) in length and 1 mm diameter and long whites of 1-3 inches (3-7 mm) in length and 1.5 mm in diameter. Middling were typically among the pins kept ready to hand. Middlings, therefore, were general-purpose pins used for various tasks (Beaudry 2006:25). Lace pins (for making bobbin



Figure D.19 Sewing Related Items, Representative Sample: A) Brass 'THO ABSENT, EVER DEAR' Thimble (FHH1); B) Silver Closed-Type Thimble (FHH1); C) Brass Open-Type Thimble (FYH2); D) Silver "Sewing Bird" Clamp (FHH1); E) Brass Straight Pin (FHH2); F and G) Iron Sewing Scissors (FHH2); H) Brass Safety Pin (FHH1)

lace) were of fine brass wire. The size of the pin chosen for making a particular lace pattern was the fineness of the thread (the finer the thread, the smaller the pin). Lace pins were used to mark the beginning point of a repeating motif in the lace pattern (Beaudry 2006:27).

General Repair

Cement

One (FHH1) cement bottle was recovered. The bottle is made of colorless glass and measures 3.00 inches tall and 0.86 inches in diameter. The bottle has a round horizontal cross-section with a hinge mold seam across the base and probably a wide prescription/flared finish (Lindsey 2014). The bottle is embossed "HODGSON'S // DIAMOND / CEMENT". An 1857 advertisement describes Dr. Wm. Hodgson as a chemist and druggist who produced Saratoga Salt, Citric Fever Powders, Improved Diamond Cement, Vermin Poison, Liquid Court Plaster, Meigs and Evan's Gutta-Percha-Coated Annular Steel Spring Pessaries, etc. (Procter 1857:597)

MILITARY GROUP

One hundred and twenty-three (FYH1=11, FHH1=28, FYH2=7, FHH2=48, FYH3=8, FHH3=21) artifacts from the Military Group were recovered. The Military Group contains objects associated with the primary function of the U. S. Army to conduct war and includes the tools to do so such as clothing, weapons and associated objects. The Military Group contains three artifact classes: Uniforms, Arms and Ammunition and Accouterments.

Uniform

Thirty-two (FYH1=3, FHH1=15, FYH2=2, FHH2=3, FYH3=4, FHH3=5) artifacts from the Uniform Class were recovered. The Uniform Class contains artifacts pertaining to the military uniform prescribed for soldiers in the *United States Army Regulations* and is represented by uniform buttons, chin strap buckles and branch, regiment and company insignia. The Uniform Class has three artifact types: Buttons, Headwear and Insignia.

Buttons

Military Academy

Two (FYH1) United States Military Academy (U.S.M.A.) buttons were recovered. Both buttons are two-piece struck Sanders-type buttons made of brass (Albert 1976:7; Tice 1997:7; Wuckoff 1984:xxi). The front devices of the buttons are plain and in the shape of ball or high convex dome (Tice's MA100). The back of both buttons are blank. Ball buttons were used on the U.S.M.A. cadet uniform from 1816 till at least 1857 (Jacobsen 1972, 1973; Tice 1997:99). Tice (1997:99) also mentions the use of

ball buttons on the officer uniforms of the General Staff (GS200) between 1821 and 1832 and used by militia units and on the Zouave uniform from the 1820s until modern times (Tice 1997:179). Both buttons are large-sized measuring 0.73 inches (18.60 mm) and 1.00 inches (25.40 mm) in diameter.

Infantry

One (FHH1) United States Infantry button was recovered. The button is a two piece struck Sanders-type button made of brass (Albert 1976:7; Tice 1997:7; Wuckoff 1984:xxi). The front device of the button is convex and struck with an “American” spread eagle with its head looking to the right and holding an olive branch in its right talon and three arrows in its left. The eagle has a union shield upon its chest with a capital letter “I” on the inside (Tice’s GI215). The back of the button is struck with a depressed maker’s mark that reads “• SCOVILLS & CO • / EXTRA”. The front device of the button was used by soldiers and officers of infantry regiments from c. 1845 until about 1854 and then only by the commissioned officers until c. 1884 (Brinckerhoff 1972:5, Jacobsen 1973: Smithsonian 1961:10-11; Tice 1997:127). Scovills and Company used this backmark from 1840 until 1850 (Tice 1997:31). The button is small-sized and measures 0.50 inches (15 mm) in diameter.

Dragoon

Three (FHH1=1, FYH2=2) United States Dragoon buttons were recovered. The buttons are of the two-piece Sanders-type and made of brass (Albert 1976:7; Tice 1997:7; Wuckoff 1984:xxi). The front device of the button is convex and struck with an “American” spread eagle with its head looking to the right and holding an olive branch in its right talon and three arrows in its left. The eagle has a union shield upon its chest with a capital letter “D” on the inside (Tice’s DR215). The front device of the button was used by soldiers and office of dragoon regiments from the 1840s until about 1854 and then only by commissioned officers until 1861(Jacobsen 1973: Smithsonian 1961:10-11; Tice 1997:127). One (FHH1) button is large-sized and measures 0.75 inches (20 mm) in diameter. Two (FYH2) buttons are small-sized buttons and measures 0.58 inches (14.72 mm) in diameter. All three buttons are struck with a depressed maker’s mark that reads “• SCOVILLS & CO • / EXTRA”. Scovills and Company used this backmark from 1840 until 1850 (Tice 1997:31).

Artillery

Six (FHH1=1, FHH3=5) United States Artillery buttons were recovered. The buttons are of the two-piece Sanders-type and made of brass (Albert 1976:7; Tice 1997:7; Wuckoff 1984:xxi). The front device of the button is convex and struck with an “American” spread eagle with its head looking to the right and holding an olive branch in its right talon and three arrows in its left. The eagle has a union shield upon its chest with a capital letter “A” on the inside (Tice’s AY215). The front device of

the button was used by soldiers and office of artillery regiments from about 1845 until about 1854 and then only by commissioned officers until 1884 (Brinckerhoff 1972:5, Jacobsen 1973: Smithsonian 1961:10-11; Tice 1997:127). Three (FHH1=1, FHH3=2) buttons are small-sized buttons and measures 0.50 inches (15 mm) in diameter. One (FHH1) small-sized button is struck with a raised mark in a depressed channel that reads “• >>> SCOVILLS & CO <<<”. Two (FHH3) small-sized buttons are struck with a depressed mark that reads “∞ SCOVILLS & CO ∞”. Scovills and Company used these backmarks from 1840 until 1850 (Tice 1997:31). Three (FHH3) of the buttons are large-sized buttons and measure 0.75 inches (19 mm) in diameter. One (FHH3) large-sized button is struck with a raised mark in a depressed channel that reads “•W•H•HORSTMANN & SONS• / PHI”. Two (FHH3) large-sized buttons are struck with a depressed mark that reads “•W•H•HORSTMANN & SONS• / PHI”. Scovills and Company manufactured military buttons for the W. H. Horstmann and Sons, a military goods dealer in Philadelphia, between 1845 and 1869 (Tice 1997:38).

General Service

Eight (FHH1=4, FHH2=3, FYH3=1) United States Army General Service buttons were recovered. The general service buttons are of two types including one (FHH1) one-piece pewter button (Tice's GEN207) and seven (FHH1=3, FHH2=3, FYH3=1) two-piece brass button (Tice's GEN215). One (FHH1) general service button is of the one-piece cast-type and made of pewter (Albert 1976:7; Tice 1997:7; Wuckoff 1984:xxi). The front device of the button is convex and cast with an “American” spread eagle with its head looking to the right, a line shield upon its breast and holding an olive branch in its right talon and three arrows in its left (Tice's GEN207). This button type was used in the general service from the 1820s into the early 1830s and adopted for militia and unofficial general service use during the 1840s (Tice 1997:140). The button is small-sized and measures 0.50 inches (15 mm) in diameter. The back of the button is blank. Seven (FHH1=3, FHH2=3, FYH3=1) general service buttons are of the two-piece Sanders-type and made of brass (Albert 1976:7; Tice 1997:7; Wuckoff 1984:xxi). The front device of the button is convex and struck with an “American” spread eagle with a lined union shield upon its breast, with its heads looking to the right and holding an olive branch in its right talons and three arrows in its left (Tice's GEN215). The front device of the button was used by only the enlisted soldiers of all regiments from about 1854 until about 1884 (Brinckerhoff 1972:5; Tice 1997:140). Five (FHH1=1, FHH2=3, FYH3=1) buttons are large-sized and measures 0.75 inches (20 mm) in diameter. One (FHH2) of the small-sized buttons is struck with a raised mark in a depressed channel that reads “• HORSTMANN & ALLIAN • / N Y”. The Scovill Manufacturing Company made military buttons for Horstmann Brothers & Allien, a military goods dealer in New York, from 1850 to 1865 (Tice 1997:38). One (FHH2) large-sized button is struck with a depressed mark that reads “• SCOVILLS & CO • / EXTRA”. Scovills and Company used these backmarks from 1840 until 1850 (Tice 1997:31). One (FYH3) large-sized button is struck with a raised mark in a depressed channel that reads “★ STEELE ★ / JOHNSON”. The Steele and Johnson Button Company used this

backmark in the 1860s (Tice 1997:43). Two (FHH1=1, FHH2=1) of the large-sized buttons have backmarks that are unreadable. Two (FHH1) buttons are small-sized and measure 0.50 inches (15 mm) in diameter. One (FHH1) small-sized button is struck with a depressed mark that reads “• SCOVILLS & CO • / EXTRA”. Scovills and Company used these backmarks from 1840 until 1850 (Tice 1997:31). One (FHH1) small-sized button is struck with a depressed mark that reads “W. LANG • / BOSTON •”. Scovills and Company manufactured military buttons for William Lang, an Army contractor, in Boston between 1857 and 1858 (Tice 1997:38).

Indeterminate

Three (FHH1) indeterminate United States military buttons were recovered. All three buttons are of the two-piece struck Sanders-type button made of brass (Albert 1976:7; Tice 1997:7; Wuckoff 1984:xxi). All three buttons are small-sized and measures 0.50 inches (15 mm) in diameter. One button has a depressed mark that reads “• SCOVILLS & CO • / EXTRA”. Scovills and Company used this backmark from 1840 until 1850 (Tice 1997:31). One button has a depressed backmark that reads “• EXTRA / QUALITY •”. Scovills & Company was known to use this mark during the 1860s (Tice 1997:36). One of the indeterminate small-sized buttons has a backmarks that is unreadable.

Headwear

Shako Chin Strap

Two (FHH1=1, FYH3=1) M1851 shako chinstrap buckles were recovered. One (FHH1) buckle measures 0.90 inches (23 mm) long, 0.74 inches (18.70 mm) wide and 0.04 inches (1.08 mm) thick. Both buckles are made of brass and have a characteristic groove on the bar to attach the tongue (the tongue is missing). The buckle was designed as the chin strap buckle for the M1851 and M1854 shako (Albert hat) and it has been suggested that the tongues were later removed from the old style buckles so that they could be used on the new M1858 forage cap which did not have a tongue on its chinstrap buckle (Masich, Bies and Sprague 1979:34). The chinstrap buckle recovered from FYH3 is missing from the collection and therefore positive identification of the pin was taken from the artifact catalog.

Insignia

Branch

One (FHH1) M1832 United States Infantry branch insignia was recovered. The insignia is of a curved hunting horn hanging by two strings tied to the horn at both ends and knotted at the top with three loops from which four tassels are suspended. The insignia is represented by the lead back filling in the shape of the hunting horn that would have originally been covered by a plate made of stamped silver. The insignia was designed for the M1832/M1833 Infantry officer's shako (Albert hat) and

was the regulation insignia for the United States Infantry until 1851 (Emerson 1996:39).

Regimental

One (FHH1) M1832/M1851 United States Army regimental number insignia was recovered. The insignia is of the number “6” or “9” and made of stamped brass and measures 1.09 inches (28 mm) tall. At different times the uniform regulations required that the one inch long regimental numbers be worn on different parts of the uniform including on the hat/cap, on the collar and on the epaulettes (Emerson 1996:161-164). Regimental numbers were worn on the front of the M1832 shako (Albert hat) below the eagle from 1832 until 1851. Between 1851 and 1858 uniform regulations called for enlisted men to wear a regiment number “in yellow metal one inch long” near the front of each collar on the coat. Regimental numbers were also worn by officers on the M1855 cavalry hats. In 1832 infantry and artillery dress uniform regulations introduced officer’s epaulettes with bullion numbers. Although not regulation many soldiers wore regimental numbers on the forage cap during the American Civil War (1861-1865).

Company

One (FYH1) M1851 United States Army company letter insignia was recovered. The insignia is of the letter “G” and made of stamped brass and measures 1.20 inches (30.60 mm) tall. Similar to the regimental numbers above company letters were worn on the uniform in different places that change over time. Company letters were worn on the front of the M1832 shako (Albert hat) in conjunction with the regimental number until 1851, when a new cap with only a company letter and eagle was introduced. Company letters continued to be worn as regulation (and non-regulation) insignia throughout the American Civil war until 1872 when they were replaced by the smaller ½ inch high company letters on the forage cap (Emerson 1996:161).



Figure D.20 Military Uniform Parts, Representative Sample: A) Pewter Infantry Horn Insignia (FHH1); B) Company Letter “G” Insignia (FYH1); C) Regimental Number “9 or 6” Insignia (FHH1); D) Shako Chinstrap Buckle (FHH1); E and H) Military Academy Cadet/General Staff “Ball” Buttons (FYH1; F and I) Artillery “A” Buttons (FHH1); G and J) General Service Buttons (FHH1); L) Infantry “I” Button (FHH1); K and M) Dragoon “D” Buttons (FYH2); Note C, F and K are not gilded but the golden color is a result of being treated by electrolytic reduction.

Arms and Ammunition

Eighty-six (FYH1=8, FHH1=14, FYH2=5, FHH2=49, FYH3=3, FHH3=18) artifacts from the Arms and Ammunition Class were recovered. The Arms and Ammunition Class contains artifacts pertaining to military weaponry and is represented by revolvers, bayonets, bullets and percussion caps. The Arms and Ammunition Class has three artifact types: Arms, Projectiles and Ignition System.

Arms

Revolvers

One (FHH1) Colt revolver was recovered. The revolver is represented by part of a back strap measuring 1.64 inches long, .345 inches wide and .110 inches thick. The strap is stamped with the serial number “27226”. The serial number corresponds to at

least six possible Colt revolvers of three calibers (0.28, 0.36 and 0.44) manufactured between 1852 and 1865. These include a M1849 .36 Caliber Pocket Revolver manufactured in 1852, a M1851 .36 Caliber Navy Revolver manufactured in 1853, a M1855 .28 Caliber Sidehammer Revolver manufactured in 1861, a M1860 .44 Caliber Army Revolver manufactured in 1862, a M1862 .36 Caliber Police and Pocket Pistol manufactured in 1864, and a M1861 Navy Revolver manufactured in 1865 (Colt 2015). According to the Colt Manufacturing Company Serial Number database the M1849 Pocket Revolver was decorated with a stagecoach scene on the cylinder and the M1851 Navy, M1860 Army and the M1861 Navy revolvers were all decorated with a naval engagement scene on the cylinder. The backstrap is currently missing from the collection and therefore positive identification and transcription of the serial number was taken from Bowyer (1992a; 1992b).

Bayonet

One (FHH2) bayonet was recovered. The bayonet is represented by a bayonet scabbard tip that is made of brass and measures 3.34 inches (84.90 mm) long. The socket of the scabbard has the triangular horizontal cross-section attributed to the .58 caliber M1855 Springfield Musket (Lewis 2010:83).

Projectiles

.28 Caliber

Six (FHH1=4, FHH3=2) .28 caliber projectiles were recovered. One (FHH1) of the projectiles is made of lead and was cast in the form of a conical bullet. The conical bullet projectile measures 0.298 inches in diameter and 83 GN (5.39 g) in weight. The bullet has three “crimping” grooves around the base and it appears to have been fired. Five (FHH1=3, FHH3=2) of the projectiles are made of lead and were cast in the form of round balls. The round ball projectiles range in size from 0.294 to 0.307 inches in diameter and from 32 to 41 GN (2.05 to 2.47 g) in weight. None of the .28 caliber round ball projectiles displays evidence that they have been fired.

.31 Caliber

Ten (FYH2=2, FHH2=7, FHH3=1) .31 caliber projectiles were recovered. All of the .31 caliber projectiles are made of lead and were cast in the form of round balls. The round ball projectiles range in size from 0.292 to 0.328 inches (7.42 to 8.33mm) in diameter and from 34.0 to 47.8 GN in weight. None of the .31 caliber round ball projectiles displays evidence that they have been fired.

.36 Caliber

Thirty-three (FYH1=6, FHH1=5, FYH2=3, FHH2=13, FYH3=2, FHH3=4) .36 caliber projectiles were recovered. One (FYH1) of the projectiles is made of lead and was cast in the form of a conical bullet. The conical bullet projectile measures 0.380

inches in diameter, 0.54 inches long and 113 GN (7.35 g) in weight. The bullet has a flat base and a single indented ring around the circumference. The bullet is probably a Hazard Patent Pistol bullet manufactured by Hazard Powder Company c. 1862 (Thomas and Thomas 1996:6). The bullet displays no evidence that they have been fired. The remaining thirty-two projectiles are made of lead and were cast in the form of a round ball.

Twenty-three (FYH1=2, FHH1=4, FYH2=2, FHH2=11, FHH3=4) of these projectiles appear to have been molded as .36 caliber round balls measuring 0.377 to 0.384 inches (9.58 to 9.77 mm) in diameter and 69.8 to 81.6 GN (4.58 to 5.28 g) in weight. Seven (FYH1=1, FHH1=1, FHH2=3, FHH3=2) of the .36 caliber projectiles have impact marks and may have been fired. Eight (FHH2) of the projectiles are distorted.

Nine (FYH1=3, FHH1=1, FYH2=1, FHH2=2, FYH3=2) of these projectiles appear to have been molded as .38 caliber round balls and then later “crimped” down to diameters more consistent with .36 caliber projectiles. The .38 caliber round balls measure 0.384 to 0.406 (9.77 to 10.31 mm) in diameter and 70.8 to 80.4 GN (4.58 to 5.21 g) in weight. All of these projectiles have a series of indented lines around the circumference along one axis. On average this crimping reduced the diameter of the projectiles by 0.031 inches changing their calibers from .38 to .36. One (FHH2) of the .36 caliber crimped projectiles may have been fired.

.44 Caliber

One (FHH2) .44 caliber projectile was recovered. The .44 caliber projectile is made of lead and was cast in the form of a round ball. The round ball projectile measures 0.46 inches (11.70 mm) in diameter and 135 GN (8.75 g) in weight. The projectile displays no evidence that it had been fired.

Indeterminate

Six (FHH2) lead projectiles of indeterminate caliber were recovered. All of the projectiles are made of lead with three of them cast in the form of a conical bullet, one is cast in the form of a round ball and two are too distorted to determine if they were cast as conical bullets or round balls. All of indeterminate projectiles are distorted and therefore accurate calibers could not be determined but weights suggest they are smaller calibers (less than .44 caliber). The three conical cast bullets are all fragments and measure 0.258 inches (6.57 mm), 0.260 inches (6.73 mm) and 0.31 inches (7.91 mm) in diameter and 16.6 GN (14.3 g), 163 GN (10.5 g) and 221 GN (14.3 g) in weight, respectively. The two indeterminate shaped projectiles are highly distorted and represented by fragments. These fragments measure 156.6 GN (10.1 g) and 178 GN (11.5 g) in weight. One indeterminate round ball projectile was also recovered. The projectile is missing from the collection and therefore positive identification was taken from Bowyer (1992b).

Ignition Systems

Percussion Cap

Twenty-four (FYH1=1, FHH2=15, FYH3=1, FHH3=7) pistol percussion caps were recovered. All of the caps are made of brass and stamped with a corrugated surface around the circumference of the cap. The caps are smaller than those used in muskets and rifles and measure 0.21 to 0.24 inches tall and 0.018 to 0.20 inches in diameter. Four (FYH1=1, FYH3=1, FHH3=2) of the percussion caps is intact and does not appear to have been fired, and twenty (FHH2=15, FHH3=5) of the percussion caps are “splayed” and appear to have been fired.

Percussion Cap Box

Four (FYH1=1, FHH1=1, FHH2=1, FHH3=1) percussion cap boxes were recovered. All four cap boxes are made of tinned iron, round in horizontal cross-section and have a friction closure lid. One (FYH1) cap box is complete and measures 2.09 inches (53.20 mm) in diameter and 0.61 inches (15.40 mm) high. The top and bottom ends of the canister are rusted together. One (FHH1) cap box is represented by only a top end (lid) that measures 2.00 inches (51.00 mm) in diameter and 0.46 inches (12.50 mm) tall. One (FHH2) cap box is represented by only a bottom end (cap) that measures 2.00 inches (51.00 mm) in diameter and 0.15 inches (3.79 mm) tall. One (FHH3) cap box is represented by only a top end (lid) that measures 1.50 inches (38 mm) in diameter and 0.22 inches (5.76 mm) tall.

Accouterments

Five (FHH1=2, FHH2=1, FYH3=1, FHH3=1) artifacts from the Accoutrement Class were recovered. The Accoutrement Class contains artifacts pertaining to miscellaneous items of the soldier’s outfit not pertaining to clothing or weapons and is represented by a canteen stopper, buckle and a triangle loop. The Accoutrements Class has three artifact types: Canteen, Cartridge Box and Knap Sack.

Canteen

Stopper/Stopper Chain

Three (FHH1=1, FHH2=1, FYH3=1) canteen stoppers were recovered. One (FYH3) canteen is represented by a stopper. The stopper is made of an iron wire that measures 2.67 inches (68.01 mm) long with one end bent into an eye that measures 1.02 inches (26.01 mm) in diameter. The cork and iron washers are missing. Two (FHH1=1, FHH2=1) canteen stoppers are represented by fragments of the stopper chain that attached the stopper to the canteen. One (FHH1) chain is comprised of two figure-8 links made of iron with a lead washer on one link. One (FHH2) chain is comprised of an unknown number of iron links and measures 1.50 inches long and

0.25 inches in diameter. This stopper chain is missing from the collection and therefore positive identification was taken from Bowyer (1992b).

Cartridge Box

Buckle

One (FHH1) cartridge box buckle was recovered. The buckle is made of iron and measures 1.12 inches (28.4 mm) wide. Buckles of this type were used on the U.S. M1860 Universal and M1864 cartridge boxes (Lewis 2009:51).

Knap Sack

Triangular Loop

One (FHH3) knap sack loop was recovered. The loop is made of brass, triangular in shape and measures 1.50 inches (37.0 mm) wide and 1.25 inches (32 mm) tall. Triangle loops of this type were used on the M1853 double bag knap sack (Lewis 2009:61).



Figure D.21 Military Arms, Ammunition and Accoutrements, Representative Sample: A and B) Percussion Cap Boxes (FYH1 and FHH3); C) Triangular Knapsack Ring (FHH3); D) Iron Cartridge Box Buckle (FHH1); E) Iron Canteen Stopper Chain (FHH1); F) Brass Bayonet Scabbard Tip (FHH2); G) Side Arm Percussion Cap (FHH2); H) .36 Caliber Bullet (FHH1); I) .36 Caliber Round Ball (FHH1); .44 Caliber Round Ball (FHH2).

PERSONAL GROUP

Seven hundred and forty-nine (FYH1=140, FHH1=206, FYH2=100, FHH2=182, FYH3=66, FHH3=55) artifacts from the Personal Group were recovered. The Personal Group contains items that would have been owned and primarily used by an individual such as the officer who lived in the house or one of his family members. The Personal Group contains seven artifact classes: Indulgences, Health, Adornment, Administration, Recreation, Pocket Tools and Transportation.

Indulgences

One hundred and thirteen (FYH1=20, FHH1=33, FYH2=19, FHH2=13, FYH3=12, FHH3=16) artifacts from the Indulgences Class were recovered. The Indulgences Class contains artifacts that are used in the act of doing something that is enjoyed but

that is thought of as wrong, against Army regulations or unhealthy and is represented by alcohol bottles, tobacco pipes and non-alcoholic beverage bottles. The Indulgence Class has three artifact types: Alcoholic Beverages, Tobacco and Non-Alcoholic Beverages.

Alcoholic Beverage

Champagne

Sixteen (FYH1=4, FHH1=4, FYH2=2, FHH2=3, FYH3=2, FHH3=1) champagne bottles were recovered. All of the champagne bottles are made of light to medium olive glass and mold-blown. The bottles have a large diameter (3.00-3.75 inches) base, with a large iron empointed kick-up, round horizontal cross section, tall gently sloping shoulders, long neck and a tooled, two-part flat-top champagne finish (Fike 1997:8). All of the champagne bottles are similar in size and shape to champagne bottles recovered from the steamboat *Bertrand* (Class III, Type 2) (Switzer 1974:23-24). One (FHH2) complete champagne bottle was recovered and measures 9.25 inches tall with a 3.00 inch base diameter. One (FYH1) nearly complete champagne bottle measures 10.00+ inches tall with a 3.50 inch base diameter and is missing only its finish. Six (FYH1=1, FHH1=1, FYH2=1, FHH2=2, FHH3=1) champagne bottles are represented by a champagne-type finishes. Eight (FYH1=2, FHH1=3, FYH2=1, FYH3=2) champagne bottles are represented by large diameter bases with high iron empointed kick-ups. One (FYH1) champagne bottle is represented by a 3.75 inch diameter base and seven (FYH1=1, FHH1=3, FYH2=1, FYH3=2) champagne bottles are represented by 3.50 inch diameter bases. One (FHH1) foil alcohol bottle seal in the “formed” in the shape of a champagne finish was also recovered.

Wine

Two (FYH1=1, FYH3=1) wine bottles were recovered. All of the wine bottles are made of medium olive glass and mold-blown. The bottles have a smaller diameter (3.00 inch) base, with a smaller iron empointed kick-up, round horizontal cross section, short steeply sloping shoulders, shorter neck with unknown (missing) finishes. Both wine bottles are similar in size and shape to wine bottles recovered from the steamboat *Bertrand* (Class III, Type 3) (Switzer 1974:28-29). One (FYH1) nearly complete wine bottle measures 9.00+ inches tall with a 3.00 inch base diameter and is missing only its finish. One (FYH3) wine bottle is represented by a 3.00 inch diameter base.

Brandy

One (FYH2) brandy bottle was recovered. The brandy bottle is made of dark olive glass and mold blow in a three-part rickets-type mold. The bottle measures 10.75 inches tall with a 3.25 inch base diameter with an iron empointed kick-up, round horizontal cross section, short steeply sloping shoulders, shorter bulbous neck with a tooled, two-part double-ring finish (Jones and Sullivan 1989:87; Fike 1997:8). The

finish also has lead residue from a foil seal. The bottle is similar in size and shape to brandy bottles recovered from the steamboat *Bertrand* (Class III, Type 5) (Switzer 1974:29-32).

Whiskey

One (FHH3) definitive whiskey bottle was recovered. The bottle is made of aqua glass and mold blown. The bottle is represented by a large shoulder fragment molded with curving ribs. Identical bottles depicted in McKearin and Wilson (1978:664-665) are referred to as “calabash flasks”. These bottles have an iron empontiled base, an oval horizontal cross section, short steeply sloping shoulders, a long straight neck with a tooled two-part double-ring finish (Fike 1987:8; Lindsey 2014). The bottles are also molded with a scalloped collar design on the neck-shoulder joint and usually with a sheaf of grain on the front.

Ale/Stout/Porter

Seven (FYH1=1, FHH1=1, FHH2=1, FYH3=3, FHH3=1) ale/stout/porter bottles were recovered. Six (FYH1=1, FHH1=1, FYH3=3, FHH3=1) of the ale/stout/porter bottles are made of medium to dark olive glass and mold-blown. One (FYH3) ale/stout/porter bottle is complete and measures 9.00 inches tall and 2.67 inches in diameter. The bottle was molded in a three-piece rickets-type mold with a round horizontal cross section, short steeply sloping shoulder, long bulbous neck and a tooled, two-part double oil/mineral finish (Jones and Sullivan 1989:87; Fike 1997:8). Similar to ale bottles recovered from the Steamboat *Bertrand* (Class I, Type 3e) except that the finish is shorter and more straight (Switzer 1974:18-19). Three (FHH3=2, FYH3=1) of the bottles are represented by the tooled, two-part mineral/double oil finish (Fike 1997:8). Two (FYH1=1, FHH1=1) of the bottles have a variant of the tooled, two-part mineral/double oil finish with a rounded upper part. Lindsey (2014) notes that this mineral/double oil finish variant was found on beer (ale, stout, porter) bottles recovered from the Johnson’s Island Civil War Prison, c. 1863-1864. Similar bottles with this finish and remnants of a lead seal were recovered from the steamboat *Bertrand* and identified as ale bottles (Switzer 1974:16). One (FYH1=1) finish also has residue from the original foil seal. One (FHH2) ale/stout/porter bottles is made of beige stoneware with a tan slip. The bottle is represented by a large shoulder/body fragment.

Spirits/Ale/Porter/Wine

Seventeen (FYH1=3, FHH1=4, FYH2=6, FHH2=3, FHH3=1) spirit/ale/porter/wine bottles were recovered. Fourteen (FYH1=3, FHH1=4, FYH2=3, FHH2=3, FHH3=1) of the bottles were made of a medium to dark olive glass and mold-blown. Three (FYH2) of the bottles are made of other shades of olive glass including green olive, yellow olive and amber olive bottle. Seven (FHH1=3, FYH2=2, FHH2=2) of the bottles are represented by tooled finishes. Six (FHH1=2, FYH2=2, FHH2=2) of the bottles have a tooled, two-part mineral/double oil finish (Fike 1987:8). One (FHH1)

of the bottles have a tooled, two-part ring/oil finish (Fike 1987:8). Five (FYH1=3, FHH1=1, FHH2=1) of the bottles are represented by molded bases with a round horizontal cross section. One (FYH1) base measures 3.50 inches in diameter. Three (FYH1=2, FHH1=1) bases measures 3.00 inches in diameter. One (FYH1) of 3.00 inch diameter bases is embossed with “P A T” on the base. One (FHH1) of the 3.00 inch diameter bases is embossed “3 P [with four raised dots]”. Legg and Smith (1989:120) after Switzer (1974:16-21) identifies these “3 P” bottles as containing ale. One (FHH2) base measures 2.50 inches in diameter. Two (FYH2=1, FHH3=1) bottle is represented by a 3.00 inch diameter base with an iron empontiled kick-up and a round horizontal cross section. Three (FYH2) of the spirit/ale/porter/wine bottles are represented by body fragments made of different shades of olive glass including one green olive, one yellow olive and one amber olive.

Alcohol Accessory

Flask

One (FHH1) alcohol flask was recovered. The flask is represented by fragment of the finish. The finish is made of pewter and is distorted by measures 0.30 inches (7.52 mm) high and 0.89 inches (22.80 mm) in diameter. The finish it also threaded with at least four threads. The finish is similar to pewter finishes on glass and pewter whiskey flasks seen on Ebay and in Lord (1963:113).



Figure D.22 Alcoholic Beverage Bottles, Representative Sample: A) Brandy Bottle (FYH2); B) Ale or Porter Bottle (FYH3); C and D) Large and Small Champagne Bottles (FYH1 and FHH2); E) Wine Bottle (FYH1)

Tobacco

Sixty-three (FYH1=11, FHH1=20, FYH2=8, FHH2=6, FYH3=16, FHH3=11) tobacco related artifacts were recovered. These items including sixty-two (FYH1=11, FHH1=20, FYH2=9, FHH2=6, FYH3=16, FHH3=11) smoking pipes and one (FYH2) spittoon.

Pipe

Sixty-two (FYH1=11, FHH1=20, FYH2=8, FHH2=6, FYH3=6, FHH3=11) tobacco smoking pipes were recovered. These pipes were made of three materials (hard rubber, porcelain and earthenware) and in two construction types (one-piece and two piece or composite pipes). Tobacco pipes of one-piece construction are pipes that have the bowl and stem molded together as one piece. Two-piece, or composite, pipes are pipes where the bowl was molded, as a single piece, with a shank for the attachment of the stem which was made of a different material such as reed or hard rubber. The tobacco pipes were also decorated in a variety of motifs including effigy, symbolic, naturalistic, stylistic, geometric, plain and indeterminate. The decorative motif for each pipe was based in the decoration of the tobacco pipe bowl not the stem. The classification and description of the tobacco pipes was based on Bradley (2000).

Hard Rubber

One (FHH1) hard rubber tobacco pipe was recovered. The hard rubber pipe is a two-piece (composite) pipe represented by a fragment of the bowl/rim. The bowl of is carved with a geometric pattern of raised vertical ribs that encircle the perimeter of the bowl and come to a point at the base. A similar pipe was recovered from Johnson's Island, a Union Civil War prison for Confederate Officers, in operation from 1861 to 1865 (Bush 2000).

Porcelain

One (FYH1=1) porcelain tobacco pipe was recovered. The porcelain pipe is a two-piece (composite) pipe, made of a white fabric and decorated in a geometric pattern. The pattern consists of a plain (white) upper field and a brown slip decorated lower field. The pipe is also glazed. Bradley (2000:121) dates the introduction of porcelain pipes of this type to the 1850s.

Earthenware

Fifty-eight (FYH1=10, FHH1=18, FYH2=8, FHH2=6, FYH3=6, FHH3=10) earthenware tobacco pipes were recovered.

Twenty-three (FYH1=3, FHH1=5, FYH2=5, FHH2=5, FYH3=3, FHH3=2) earthenware two-piece (composite) tobacco pipes were recovered.

Effigy Decoration

One (FYH1) two-piece effigy pipe is made of a red fabric, unglazed and molded with the effigy of the English monarch Queen Victoria. The pipe is represented by a single fragment of the pipe bowl with curly hair and a laurel wreath with berries. Pfeiffer, Gartley and Sudbury (2007:8-9) identify this effigy as Queen Victoria and date this pipe to the 1850s.

One (FHH1) two-piece effigy pipe is made of a red fabric, glazed and molded with the effigy of a United States of America presidential candidate Henry Clay. The pipe is represented by a fragment of the pipe bowl with wavy hair and a laurel wreath. Pfeiffer, Gartley and Sudbury (2007:12) identify this pipe as Henry Clay who was a prominent politician between 1803 and 1852. Clay entered and lost three presidential elections, one in 1824 as a Democratic Republican, one in 1832 as a National Republican and another in 1844 as a Whig (Pfeiffer, Gartley and Sudbury 2007:12).

One (FYH2) two-piece effigy pipe is made of a red fabric, glazed and molded with the effigy of United States of America president Zachary Taylor. The pipe is represented by a fragment of the shank and is decorated with a shirt collar and “[unreadable] // ROUGH / AND READY” molded in raised relief. The slogan was used in the presidential campaign of Zachary Taylor in 1848 who, after winning the election, was the 12th President of the United States and held that office from 1849 until 1850 (Pfeiffer, Gartley and Sudbury 2007:19).

Two (FHH1=1, FHH2=1) two-piece effigy pipe is made of a brown fabric, unglazed and molded with the effigy of an unidentified male face. The effigy is of an unidentified male face with a mustache and wearing a turban headdress. The shank of the pipe is decorated with a shirt collar and wrinkles. Pipes of this type are frequently found at historic sites throughout the United States including Camp Floyd, Utah (Type III, Variety C, Subvariety 1; Figure 8C) (Jensen 1991:58). Wilson (1971:9) states that these pipes were manufactured in imitation of a “Jacob” pipe made by Gambier of Paris around the middle of the 19th Century. Sudbury (1983:73) suggests that this pipe was manufactured in France. Several pipes of this type were found at a nineteenth century pottery kiln at Point Pleasant, Ohio that was in operation from 1848 to 1880 (Thomas and Burnett 1971:20). These pipes have also been recovered from Fort Union, New Mexico (1851-1891) and on the Union gunboat Cairo sunk near Vicksburg, Mississippi in 1862 (Wilson 1966:39).

Naturalistic Decoration

One (FHH2) two-piece earthenware pipe is made of a beige fabric, unglazed and molded with a naturalistic floral pattern. The bowl is decorated with at least one five-petal flower and leaves in raised relief.

Stylistic Decoration

One (FHH3) two-piece earthenware pipe is made of a red fabric, unglazed and molded with a stylistic floral or filigree pattern. The stylistic motif is divided into two fields (upper and lower) separated by a raised beaded line. The upper field is plain or undecorated and the lower field is textured by small raised dots and dashes in a filigree-like pattern. The design is similar to pipes recovered from Fort Vancouver (Figure II.2j, Caywood 1955:59).

Geometric Decoration

Five (FHH1=1, FYH2=2, FHH2=1, FYH3=1) two-piece earthenware pipes are molded with a geometric pattern of raised knobs known as a knobby pipe. Three (FHH1=1, FHH2=1, FYH3=1) pipe bowl is made of a brown fabric with dark brown slip and is glazed. One (FYH2) pipe bowl is made of a gray fabric with a dark brown slip and is glazed. One (FYH2) pipe bowl is made of a red fabric with a dark brown slip and is glazed. All the pipes have a series of knobs arranged in rows and columns around the bowl with single raised band around circumference of the bowl near the rim. Tobacco pipes of this pattern are referred to as a “knobby” or “imitation corncob” pipes. Similar pipes have been recovered at numerous military sites such as Camp Floyd, 1858-1862 (Type III, Variety C, Subvariety 2, Figure 10A) (Jensen 1991:63-64). Pfeiffer in Sudbury (1983:41) reports a knobby pipe from Nebraska, and mentions others from Washington, Oregon and Idaho. Sudbury (1979:170-170) identified this subvariety as an imitation corncob produced by the John Tabor Pottery in East Alton, New Hampshire, and gives the date of manufacture as 1864 to 1872. Schulz and Schultz in Sudbury (1986:57-58) take issue with the claim that this pipe shape imitates a corncob, since corncob pipes were not mass produced until about 1869.

One (FYH2) two-piece earthenware pipe is made of a beige fabric and molded with a geometric pattern of vertical ribs in raised relief around the exterior of the bowl. The exterior of the bowl is also decorated with a dark green glaze.

One (FHH1) two-piece earthenware pipe is made of a red fabric, unglazed and molded with a single band in raised relief around the exterior circumference of the bowl near the rim.

One (FYH3) two-piece earthenware pipe is made of a beige fabric, unglazed and molded with a single impressed line around the exterior circumference of the bowl near the rim.

One (FHH3) two-piece earthenware pipe is made of a brown fabric, glazed and molded with a simple raised band around the exterior circumference of the bowl near the rim.

Plain Decoration

Four (FHH1=1, FYH2=1, FHH2=2) two-piece earthenware pipes are represented by bowl fragments made of a red fabric, unglazed and plain in decoration.

Indeterminate Decoration

One (FYH1) two-piece earthenware pipe is made of a red fabric with a brown slip and a colorless glaze. The tobacco pipe is represented by a fragment of the shank.

One (FYH1) two-piece earthenware pipe is made of a beige fabric with a gray/slate slip and a colorless glaze. The tobacco pipe is represented by a fragment of the shank is decorated with unreadable text in raised relief.

One (FYH3) two-piece earthenware pipe is made of a red fabric, molded with an indeterminate pattern and unglazed. The pipe is represented by a fragment of the bowl/shank with the molded decoration in raised relief. The surface of the bowl is heavily weathered making the description and identification of the pattern impossible.

Thirty-three (FYH1=7, FHH1=13, FYH2=1, FHH2=1, FYH3=3, FHH3=8) earthenware pipes are one-piece pipes.

Effigy Decoration

One (FYH2) one-piece earthenware pipe is made of a white fabric, unglazed and molded with the effigy of an unidentified male face. The effigy is of a bearded man wearing a keffiyeh with an agal composed of three ropes. The eyes, mustache and edge of the keffiyeh are highlighted with white paint, the eyebrows with brown and the pupils with black. The pipe is very similar to many "Gambier" pipes (Duco 1986).

Naturalistic Decoration

One (FYH1) one-piece earthenware pipe is made of a gray fabric, unglazed and molded with a naturalistic floral motif. The pipe is represented by a fragment of the bowl and is molded with leaves in raised relief over a raised dot (beaded) background.

Symbolic Decoration

Three (FYH1) one-piece earthenware pipes are made of a white fabric, unglazed and decorated with "T D" surrounded by thirteen stars in raised relief upon proximal side of the bowl and unglazed. One (FYH1) of the "T D" pipes is further decorated with a line of oak leaves in raised relief running from the spur to the rim along the distal seam of the bowl. One (FYH1) of the of the "T D" pipes is further decorated with a line of oak leaves in raised relief running from the spur to the rim along the distal

seam of the bowl and an unknown number of stars in raised relief running around the exterior circumference of the rim. One (FYH1) of the of the “T D” pipes is further decorated with a line of oak leaves in raised relief running from the spur to the rim along the distal seam of the bowl and a line of oak leaves (instead of stars) in raised relief running around the exterior circumference of the rim.

One (FHH1) one-piece earthenware pipe is made of a white fabric, unglazed and decorated with an unidentified ship. The distal side of the pipe bowl is molded in raised relief with an unidentified American steam frigate. The proximal side of the bowl is molded in raised relief with a Union Shield that has thirteen stars over a vertical lined field. The left side of the bowl/stem juncture is molded with “H. SC_ [unreadable]” inside a ribbon and in raised relief. The right side of the bowl/stem juncture is molded with “[unreadable]” also inside a ribbon and in raised relief. The stem appears to be plain.

Geometric Decoration

Nine (FYH1=2, FHH1=4, FYH3=2, FHH3=1) one-piece earthenware pipes are made of a white fabric, unglazed and decorated with simple geometric motif of a raised keel along front seam of bowl running down along the base to the stem. Six (FYH1=2, FHH1=4) pipes have a stem that is molded with a series of bands, lines and a collar that together form a “shank” in imitation of two-piece pipes. One (FYH3) pipe has a plain stem with an impressed maker’s mark that reads “Paris / F & C”.

Five (FHH1=3, FHH2=1, FHH3=1) one-piece earthenware pipe is made of white fabric, unglazed and decorated with a simple geometric motif of a line of incised dashes around the exterior circumference of the bowl just below the rim. The stem of the pipe is molded in raised relief with a series of hatched bands (at least nine) running around the circumference of the stem starting near the bowl and extending toward the mouth piece. The stem is also molded with a maker’s mark in raised relief that reads “A. SPARNAAY / IN GOUDA”. One (FHH2) pipe has an unreadable symbol (possibly a flower) inside of a circle on the proximal side of the pipe bowl. Pipes of this type are Dutch in origin and attributed to the Gouda firm of Sparnaay (Pfeiffer 2006:12). Pipes with identical stem designs were recovered from midden deposits at Fort Guijarros dating c. 1850-1880 (May 1988:15).

One (FHH1) one-piece earthenware pipe is made of white fabric, unglazed and decorated with a simple geometric motif consisting of the bowl divided into two fields (upper and lower) separated by a raised beaded line. The upper field is plain or undecorated and the lower field is textured by small raised dots.

One (FHH1) one-piece earthenware pipe is made of white fabric, unglazed and decorated with a simple geometric motif consisting of a series of convex vertical ribs around the exterior circumference of the bowl converging to a point on the bottom of the bowl.

Plain Decoration

Three (FYH1=1, FHH3=2) one-piece earthenware pipe is made of a white fabric with a plain and unglazed bowl.

One (FYH1) one-piece earthenware pipe is made of a beige fabric with a plain and unglazed bowl. The bowl/stem juncture is 45° and suggests that the pipe is German in manufacture (Pfeiffer, Gartley and Sudbury 2007:9).

Indeterminate Decoration

One (FHH1) one-piece earthenware pipe is made of beige fabric, unglazed and with an indeterminate bowl decoration. The pipe is represented by a fragment of the bowl/stem juncture and the stem. The stem is decorated with an impressed maker's mark that reads "PO_NET / PARIS".

One (FHH1) one-piece earthenware pipe is made of white fabric, unglazed and with an indeterminate bowl decoration. The pipe is represented by a fragment of the stem that is decorated with raised crosshatching on the left and right sides of the stem and with what appears to be a raised maker's mark that reads "F. S. S_ [missing]".

One (FHH3) one-piece earthenware pipe is made of white fabric, unglazed with an indeterminate bowl decoration. The pipe is represented by a fragment of the stem that is decorated with a geometric pattern consisting of several rows of five-pointed stars around the circumference of the stem. The stem is also marked with an "R" in raised relief on the stem near the bowl.

One (FHH3) one-piece earthenware pipe is made of white fabric, unglazed with an indeterminate bowl decoration. The pipe is represented by a fragment of the stem that is molded with a stylistic pattern of repeating fish scales and rings.

One (FHH3) one-piece earthenware pipe is made of white fabric, unglazed with an indeterminate bowl decoration. The pipe is represented by a fragment of the stem that is molded with a geometric pattern of raised dots connected by raised lines in a "ladder" configuration running around the circumference of the stem starting near the bowl and going to the mouth piece. Pattern terminated with a collar near stem mid-point and stem become undecorated.

One (FHH1) one-piece earthenware pipe is made of white fabric, unglazed and with an indeterminate bowl decoration. The pipe is represented by a fragment of the stem that is decorated with a line of hatching along the bottom of the stem designed to obscure the mold line.

One (FYH3) one-piece earthenware pipe is made of white fabric, unglazed and with an indeterminate bowl decoration. The pipe is represented by a fragment of the stem

that that is plain in decoration but is round in cross section but much thicker than all other pipes stems recovered.

Indeterminate Construction Type

Two (FYH2) earthenware pipes are indeterminate in their construction type (one or two-pieces). One earthenware pipe is made of beige fabric and represented by a small fragment of the pipe bowl which appears to be plain in decoration. The other earthenware pipe is made of white fabric and is also represented of a small fragment of the pipe bowl and also appears to be plain in decoration.

Indeterminate (Porcelain or Wood)

Two (FHH1=1, FHH3=1) tobacco pipes of indeterminate fabric were recovered. Both pipes are represented by tobacco pipe spark caps. One (FHH1) spark cap is made of brass and plain in decoration with a simple curled tab. One (FHH3) spark cap is made of brass and struck with an acorn and oak leaf motif on the cover. Spark caps were usually made of copper alloy with a nickel finish and were found on some models of porcelain and wooden pipe bowls (Bradley 2000:122).

Spittoon

Rockingham Ware

One (FYH2) spittoon was recovered. The spittoon is made of beige stoneware and measures approximately 8.00 inches in diameter. The spittoon is decorated with a Rockingham glazed with a random pattern of mottled brown with green and yellow splashes intended to imitate tortoise shell. Tortoise shell decoration was popular in the decorative arts of the rococo revival period in America during the mid-19th century. The use of the tortoise shell pattern on Rockingham ceramics is first attributed to Bennett & Brothers, c. 1846 but was quickly adopted by many potters in the 1840s-1860s (Claney 2004:46-48).



Figure D.23 Tobacco Related Artifacts, Representative Sample: A) Porcelain Pipe Bowl (FYH1); B) Hard Rubber Pipe Bowl (FHH1); C) Brass Spark Cap with Stamped Acorn (FHH1); D and J) Rockingham Ware Spittoon (FYH2); E and F) One-Piece “Geometric” Pipes (FHH1); G) One-Piece Male Effigy Pipe with Painted Features (FYH2); H) Two-Piece Male Effigy Pipe (FHH1); I) Two-Piece Zachary Taylor “ROUGH / AND READY” Presidential Campaign/Commemoration Pipe (FYH2).

Non-Alcoholic Beverages

Gasogene/Siphon (Seltzer) Bottle

One (FHH1) glass gasogene/siphon (Seltzer) bottle was recovered. The seltzer bottle is made of colorless glass, mold blown and represented by one part finish with a ground exterior lip and string rim (Fike 1987:8; Lindsey 2014). The finish that was recovered would have been hidden under the head and the string rim was used to help fasten the head to the bottle. Identical features are seen on several 19th century siphon bottles (Lindsey 2014; Odell 2004).

Carbonated Beverage Bottle

Four (FHH1=2, FYH2=1, FHH3=1) carbonated beverage bottles were recovered. Two (FHH1=2) carbonated beverage bottles are made of very thick aqua glass and represented by a one-part tapered finish. Finishes of this type were commonly found on soda and mineral bottles during the 19th century (Lindsey 2014). Two (FYH2=1,

FHH3=1) beverage bottles are made of very thick glass and are represented by heavy free-blown bases with a very large iron empontiled kick-ups. One (FYH2=1) bottle base measures 2.06 inches in diameter and the other (FHH3) bottle base measures 2.14 inches in diameter.

Health

One hundred and twenty-six (FYH1=29, FHH1=33, FYH2=16, FHH2=26, FYH3=14, FHH3=8) artifacts from the Health Class were recovered. The Health Class contains artifacts that were used to keep the body clean and healthy and for beautification. The Health Class is represented by soap boxes, wash basins, chamber pots, syringes, medicine bottles, cosmetic bottles, combs, mirrors, toothbrushes and toothpicks. The Health Class has three artifact types: Toiletry, Medical Device, Medicine, Cosmetics and Grooming Tools.

Toiletries

Soap Box

Two (FYH1=1, FHH1=1) soap boxes were recovered. One (FYH1) soap box measures 8.00 inches long and 3.50 inches wide and is made of an ironstone fabric and molded in the *Fig Cousin* pattern. The *Fig Cousin* pattern is characterized by four clusters of figs and fig leaves. One cluster on each corner of the rectangular vessel. The lid of the vessel is decorated with molded fig leaves and a fig finial. The *Fig Cousin* was registered by Davenport and Company of Longport on January 14, 1853 (Wetherbee 1996:213). The pattern was shared with John Wedgewood of Tunstall. One (FHH1) soap box measures 4.75 inches long, 3.50 inches wide and 2.25 inches tall, made of an earthenware fabric and decorated with flow blue transfer-printed pattern known as Spode/Copeland pattern *B772*. The *B772* pattern is characterized by four clusters of unidentified flowers with leaves and stems. One cluster is at each corner of the vessel. The rim is decorated with a repetitive pattern of vertical zigzag lines spaced close together so that they create a band that decorates the circumference of the vessel. This band is punctuated in the middle of the two long sides by two medallions of filagris in the shape of an inverted heart. Spode/Copeland and Garrett introduced the pattern in 1839 and it continued to be made by Copeland from until at least 1882 (Sussman 1979:65-66).

Wash Basin

Three (FHH1=2, FYH3=1) wash basins were recovered. All three wash basins are made of white ironstone and decorated with molded patterns. Two (FHH1=1, FYH3=1) basins measure 13.00 inches in diameter and is molded in the *Gothic* pattern. The *Gothic* pattern is a sided-type pattern characterized by multiple sides (usually six to ten) with a simple boarder of one to several lines. The *Gothic* pattern was a common ironstone pattern of the 1840s and 1850s and nearly every ironstone potter of the period made their version of the pattern (Wetherbee 1996:35). The basin

is molded with a dodecagon (twelve-sided) horizontal cross section with inverted ribs and a walled rim. One (FHH1) basin measures 13.00 inches in diameter and is molded in an indeterminate pattern. The pattern consists of three lines around the circumference of the rim, punctuated by five acanthus leaf pairs that are centered on a molded indent on the rim. The pattern is very similar to *Scroll Boarder* (Wetherbee 1996:88). The basin also has an impressed maker's mark that reads "[in figure 8 shape] DAVENPORT / 5 [anchor] 3 / # / IRONSTONE CHINA". The "5 [anchor] 3" indicates that this pattern was registered by Davenport and Company in 1853 as does the impressed registration diamond found on the vessel containing the letter "Y" for the year 1853. Davenport and Company used this mark from the 1850s into the 1870s (Gibson 2011:61; Godden 2001:189-190).

Chamber Pot

Four (FHH1=3, FYH3=1) chamber pots were recovered. All four chamber pots are made of white ironstone and decorated with molded patterns. One (FHH1) chamber pot measures 9.50 inches in diameter and is molded in the *Boote 1851 Octagon* pattern. The *Boote 1851 Octagon* pattern is an ogee-type pattern characterized by a series of ogee shapes end to end with the points outward. The *Boote 1851 Octagon* was registered by T. and R. Boote of Burslem on July 21, 1851 and again on October 10, 1851 (Dieringer and Dieringer 2001:51). One (FHH1) chamber pot measures 8.25 inches in diameter and 5.25 inches in height. The chamber pot also has an intact lid measuring 8.05 inches in diameter and 2.00 inches in height counting the finial. The vessel is molded in the *Gothic* pattern. The *Gothic* pattern is a sided-type pattern characterized by multiple sides (usually six to ten) with a simple boarder of one to several lines. The *Gothic* pattern was a common ironstone pattern of the 1840s and 1850s and nearly every ironstone potter of the period made their version of the pattern (Wetherbee 1996:35). The chamber pot is molded with a decagon (ten-sided) horizontal cross section and has a lid that is decorated with the same *Gothic* pattern including a spire finial accented with acanthus leaves. The bottom of the vessel has printed maker's mark in black ink that reads "[standing Royal Coat of Arms] / IRONSTONE CHINA / E. CHALLINOR & Co.". This mark was used by E. Challinor and Company of Fenton between 1850 and 1862 (Gibson 2011:47). One (FYH3) chamber pot measures 8.75 inches in diameter, 5.25 inches in height and molded in the *Fig Cousin* pattern. The *Fig Cousin* pattern is characterized by a raised fig leaf, branch and bud design running horizontally around the circumference of the vessel. The *Fig Cousin* was registered by Davenport and Company of Longport on January 14, 1853 (Wetherbee 1996:213). The pattern was shared with John Wedgewood of Tunstall. One (FHH1) chamber pot measures 8.00 inches in diameter, 4.25 inches in height and molded in a plain pattern with a round horizontal cross section and handles molded in the form of acanthus leaves.



Figure D.24 Toiletry Artifacts, Representative Sample: A) *Gothic* Chamber Pot with Lid (FHH1); B) Unidentified “Floral” Pattern Wash Basin (FHH1); C) *Plain* Chamber Pot (FHH1); D) Earthenware Spode/Copeland pattern *B772* Soap Dish (FHH1); E) Ironstone *Fig Cousin* pattern Soap Dish (FYH1)

Medical Tool

Irrigating Syringe

Three (FYH1=1, FHH1=2) irrigating syringes were recovered. One (FYH1) syringe is represented by a cranberry glass plunger rod. The plunger is fragmented and measures 3.31 inches (84.30 mm) long and 0.176 inches (4.49 mm) in diameter. The plunger has a disk-shaped molded top with a second molded dish-shape finger rest. One (FHH1) syringe is nearly complete and represented by both the syringe barrel and the plunger rod. The syringe barrel is made of free blow colorless glass and measures 5.52 inches long and 0.72 inches in diameter with one completely open end and the other end closed with four perforations in the end. A colorless glass plunger rod was also found in association with this syringe barrel. Another colorless glass plunger rod was recovered from FHH1.

Medicine

Digestive Ailments

Eight (FYH1=5, FHH1=2, FHH3=1) medicine bottles were recovered that contained medicines used in the treatment of digestive ailments.

One (FYH1) Ayer's Cathartic Pills bottle was recovered. The bottle is made of aqua glass and is represented by a body fragment from a rectangular bottle with indented panels. The bottle is embossed "[AYER'S // PILLS //] LOW[ELL /] MA[SS]". Ayer's Pills were first introduced in 1843 or 1848 and continued to be advertised until 1935 (Fike 1987:201). These bottles have been identified as containing cathartic pills that were used historically to accelerate defecation.

Three (FYH1=2, FHH3=1) Dr. D. Jayne's Tonic Vermifuge bottles were recovered. All three bottles are made of aqua glass. One (FYH1) bottle is represented by a body fragment from an ovoid bottle with indented panels. The bottle is embossed "DR. D. [JAYNE'S /] TON[IC VERMIFUGE /] 84 [CHEST ST PHILA]". One (FYH1) bottle is represented by a body/base fragment from an ovoid bottle with indented panels. The bottle is embossed "[DR. D. JAYNE'S / TONIC VERMIFUGE / 84 CHEST ST PHI] L^A". One (FHH3) bottle is represented by a body fragment from a rectangular bottle with indented panels. The bottle is embossed "[DR.] D. JAYNE'S // [TONIC / VERMIFUGE // PHILADELPHIA // THE STRENGTH-GIVER]". Dr. D. Jayne began producing vermifuge medicines in Philadelphia in 1838 and he moved his business from 20 S. Third St. to 84 Chestnut St. c. 1851. Later the street number was changed from "84" to "242" in 1857 (Fike 1987:141, 168, 234).

One (FYH1) Voldner's Aromatic Schnapps bottle was recovered. The bottle is made of dark olive glass and is represented by base/body fragment molded in a square *French Square* pattern (Fike 1987:10). The bottle has a key mold base. The sides of the bottle are embossed "[VOLDNER'S // [AROMAT]IC / [SCHNA]PPS // [SCHIE]DAM". Polak (2005:85) attributes these bottles to American manufacture dating from 1865 to 1875. The intended purpose of Voldner's schnapps is unknown but a well known competitor, Udolpho Wolfe (Udolpho Wolfe's Aromatic Schnapps), marketed his schnapps as a medicinal gin tonic, diuretic, anti-dyspeptic and invigorating cordial (Fike 1987:187).

One (FHH1) indeterminate aromatic schnapps bottle was recovered. The bottle is made of dark olive glass and is represented by a square base with post-mold seams. Aromatic schnapps was a medicinal gin tonic, diuretic, anti-dyspeptic and invigorating cordial introduced by Udolpho Wolfe [Udolpho Wolfe's Aromatic Schnapps] in 1848 (Fike 1987:187).

One (FYH1) Henry's Calcined Magnesia bottle was recovered. The bottle is made of colorless glass and is represented by several body fragments molded in a *French Square* pattern (Fike 1987:10). The sides of the bottle are embossed "[HENRY'S // CALCI]NED // [MAG]NESIA // MANCH[ESTER]". Henry's Calcined Magnesia was available in the United States by at least 1804 from agents Thomas Dyott and Tarrant & Co. The high import duty on medicinal imports prompted Thomas J. Husband, a Philadelphia chemist, to copy the formula and introduce "Husband's Calcined Magnesia" in 1844. Both products were marketed as cures for acute indigestion, acid stomach, heartburn, dyspepsia, etc (Fike 1987:141).

One (FHH1) Drake's Plantation Bitters bottle was recovered. The bottle is made of amber glass and represented by several body/base fragments molded in the form of a log cabin with rounded corners. The fragment recovered is not embossed but the bottle would have been embossed "ST / DRAKE'S / 1860 / PLANTATION / X / BITTERS // PATENTED / 1862". Drake's Plantation Bitters was marketed with a paper label that read "...Alcohol 38.2%. Contents St. Croix Rum from the Caribbean, Calisaya Bark Roots & Herbs. An effectual Tonic, Appetizer & Stimulant" (Fike 1987:33). Bitters were also marketed as cure-alls (see bitters bottle under *General Ailments* below).

Respiratory Ailments

Two (FYH2) medicine bottles were recovered that contained medicines used in the treatment of respiratory ailments.

One (FYH2) Hall's Balsam for the Lungs bottle was recovered. The bottle is made of aqua glass and represented by several body/base fragments in an *Excelsior/Windsor Oval/Round Cornered Blake* pattern (Fike 1987:10). The base has a key mold seam and measures 3.00 inches long and 0.875 inches wide. The bottle has four indented panels with the side panels embossed "HA[LL'S BALSAM / FOR THE LUNGS // A. L. S]CO[VI]LL [& CO // CINCI]NATTI. O". Fike (1987:24) lists Hall's Balsam for the Lungs but provides little information on the "Hall's" brand but does state that A. L. Scovill was in operation in Cincinnati, Ohio from 1857 until 1862 (Fike 1987:76).

One (FYH2) Ayer's Cherry Pectoral bottle was recovered. The bottle is made of aqua glass and represented by several body fragments of a rectangular bottle with indented panels. The bottle is embossed "A[YER'S // CHERRY // PECTORAL // LO]WELL / MASS". Ayer's Cherry Pectoral was introduced in 1847 as a cure for colds, coughs, sore throat, asthma, bronchitis, hoarseness and the various disorders of the breathing apparatus (Fike 1987:199).

Circulatory Ailments

Four (FHH1=1, FYH2=1, FHH2=1, FHH3=1) medicine bottles were recovered that contained medicines used in the treatment of circulatory ailments.

Two (FHH1=1, FHH2=1) constitutional life syrup bottles were recovered. The bottle is made of aqua glass and represented by a bead/prescription type finish with a flat top similar to the "tapered-down" types in Fike (1987:8) and Lindsey (2014). Identical finishes were also observed on William H. Gregg's "Constitution Life Syrup" bottles in Russell (1988:24). Based in New York, Dr. Gregg introduced his life syrup as a "family remedy for diseases of the blood" in 1859 and continued advertising until at least 1865 (Fike 1987:226).

Two (FYH2=1, FHH3=1) Dr. D. Jayne's Alterative bottles were recovered. Both bottles are made of aqua glass and represented by body fragments from a rectangular bottle with indented panels. One (FYH2) bottle has a flat indented panel and is embossed "D^R D. JA[YNE'S / ALTERATIVE / 242 CHEST^T ST^T PHILA^A]. One (FHH3) bottle has a convex intended panel and is embossed "Dr D JAYNE'S / ALTERATIVE / 84 CHEST ST PHILA". Dr. Jayne introduced his alterative in 1857 (Fike 1987:168) and advertised it as "The Blood Purifier, For Scrofula, King's Evil, Goitre, Scrofulous and Indolent Tumors, White Swellings, Ulcers...and all Diseases Originating from a Deprived and Imperfect State of the Blood or other Fluids of the Body" (Fike 1987:199). Dr. Jayne's medicine business was located at number 84 Chestnut Street from 1851 until 1857 when the address number was changed from "84" to "242" Chestnut Street (Fike 1987:168).

Pain Killer

Four (FYH1=3, FYH2=1) medicine bottles were recovered that contained pain killer medicines.

Three (FYH1=2, FYH2=1) Dr. Davis Vegetable Pain Killer bottles were recovered. One (FYH1) vegetable pain killer bottle is made of aqua glass and represented by a nearly complete vessel measuring 5.00 inches tall, 1.62 inches wide and 1.00 inches thick. The bottle has a tooled two-part double ring finish (Fike 1987:8). The body of the bottle is molded in the *Blake, Variant 1* pattern (Fike 1987:10) with an open glass pontil scar over a diagonal hinge mold seam. The bottle has three indented panels, the front and two sides, embossed "[DA]VI[S] // [V]EGETABLE // PAIN KILLER". Dr. Perry Davis developed his vegetable pain killer in 1840 and it was available in embossed bottles from 1854 until 1895 when the company was sold (Fike 1987:130). Two (FYH1=1, FYH2=1) bottles have identical tooled two-part double ring finishes as the Dr. Davis Vegetable Pain Killer bottle above.

One (FYH1) Mrs. Winslow's Soothing Syrup bottle was recovered. The bottle is made of aqua glass and is represented by a body fragment from a round bottle. The bottle is embossed "MR[S WINSLOW'S] / SOO[THING SYRUP / CURTIS] & P[ERKINS / PROPRIETORS]". Mrs. Charlotte N. Winslow formulated the product in 1835 but it was not distributed widely until 1849 and continued to be until at least 1948. The product was first bottled as a pain reliever for teething babies (Fike 1987:231). Mrs. Winslow's Soothing Syrup became a well-known pain killer for soldiers during the Civil War. As a pain killer it was effective. Priced lower than most competitive products, it was also affordable (Russell 1988:23).

General Ailments

Ten (FYH1=3, FYH2=2, FHH2=3, FYH3=1, FHH3=1) medicine bottle were recovered that contained medicines with either general applications or cure-alls.

Three (FHH2=1, FYH3=1, FHH3=1) H. T. Hembold Genuine Fluid Extracts bottle was recovered. The bottle is made of aqua glass and represented by a finish and several body fragments from a rectangular bottle with indented panels. One (FHH2) bottle has a bead-type finish (Fike 1987:8) and is embossed “[H. T. HEL]MBO[LD] // GEN[UINE] / FLUID EXTRA[CTS] // P[HILADELPHIA]”. One (FYH3) bottle is embossed “[H. T. HELMBOLD // G]ENU[INE] / FLUID EXTRACTS // PHILA]DE[LPHIA]”. One (FHH3) bottle is embossed “[H. T. HELMBOLD // GENUINE / F]LUI[D EXTRACTS // PHILADELPHIA]”. H. T. Hembold introduced his product in c. 1850 as “A Specific Remedy of General Debility, Mental and Physical Depression, Imbecility, Determination of Blood to the Head, Confused Ideas, Hysteria, etc., and All Diseases of the Bladder Kidneys Including Spermatorrhoea, Rheumatism, Consumption, Epilepsy, Paralysis, Spinal Diseases, Female Complaints, etc....” (Fike 1987:119).

Three (FYH1=1, FYH2=1, FHH2=1) sarsaparilla bottles were recovered. All three bottles are made of aqua glass and are represented by a body/base fragments from square or rectangular bottles. One (FHH2) bottle has a square *French Square* shape (Fike 1987:10) with a 3.00 inches square molded base with a key mold seam. The bottle is embossed “[OLD DR / J. TOWNSEND]S // [SARSAPARILL]A // [N]EW [YORK]”. In 1849 Dr. Jacob Townsend placed an advertised for his sarsaparilla that read “CLEANSE THE BLOOD OLD DR. JACOB TOWNSEND’S SARSAPARILLA Is the most Effective Remedy for Skin and Blood Diseases, Pimples, Blotches, &c. Specially recommend for Ladies and Children...” (Fike 1987:220). Two (FYH1=1, FYH2=1) of the rectangular bottles are have indented panels. One (FYH1) bottle is embossed “SA[RSAPARILLA]”. One (FYH2) bottle is embossed “[BRIST]OL’S”. The bottle is probably a Bristol’s Genuine Sarsaparilla (New York) or a Bristol’s Extract of Sarsaparilla (Buffalo) bottle (Russell 1988:29). Many companies sold sarsaparilla during the 19th century. Sarsaparilla was often advertised as a “cure-all” elixir for a number of different ailments in the 1820s (Polak 2005:295). Sarsaparilla was also advertised as a cure for catarrh (Derks 2004:24).

Two (FYH1=1, FHH2=1) Jamaica Ginger bottles were recovered. One (FYH1) Lyons Jamaica Ginger bottle is made of aqua glass and is represented by a body fragment from a rectangular bottle with an indented panel. The bottle is embossed “[LYONS] / JA[MAICA] / [GINGER]”. In 1852 E. Thomas Lyons marketed his Essence of Jamaica Ginger as a cure “For Dyspepsia, Gout, Rheumatism, Cramps, Cholera, Cholera Morbus, Cholic, Fever and Ague, &c.” (Fike 1987:129). One (FHH2) indeterminate Jamaica Ginger bottle is made of aqua glass and is represented by a body fragment from a round or oval shaped bottle (possibly a rectangular bottle with a convex front panel). The bottle is embossed “[missing] R [missing] / ESS [OF] / [JAMA]ICA”. Jamaica ginger was marketed by many producers of medicines, extracts and soda waters as a cure-all medicine (Fike 1987:128-130).

One (FYH1) indeterminate bitters bottle was recovered. The bottle is made of amber olive glass and is represented by a body fragment from a rectangular/square bottle. The bottle is embossed “[Bit]ters”. Bitters were a type of medicine made from bitter

tasting roots (hence the name) added to water, ale or spirits with the intent to cure all types of ailments. Although the exact manufacturer of the bitters bottle recovered from FYH1 is unknown, the best known manufacturer of bitters (Dr. Jacob Hostetter) marketed his as a cure for indigestion, diarrhea, dysentery, chills, fever, liver ailments, and pains and weakness that came with old age (impotence) (Polak 2012:104-105).

One (FYH2) Dr. J. Hostetter's Stomach Bitters bottle was recovered. The bottle is made of dark olive glass and is represented by several body fragments molded in a *French Square* pattern (Fike 1987:10). The sides of the bottle are embossed "[Dr. J. HOS]TE[TT]ER'S / STOMACH BITTER[S]". Dr. J. Hostetter's Stomach Bitters bottles were first embossed in 1858 and continued in the style found on this bottle until at least 1884 (Fike 1987:36). Dr. Jacob Hostetter marketed his stomach bitters as a cure for indigestion, diarrhea, dysentery, chills, fever, liver ailments, and pains and weakness that came with old age (impotence) (Polak 2005:104-105).

Indeterminate

Thirty-one (FYH1=6, FHH1=9, FYH2=5, FHH2=6, FYH3=5) indeterminate medicine bottles were recovered.

One (FYH2) E. R. Squibb medicine bottle was recovered. The bottle is made of a dark aqua glass and is represented by several shoulder/body fragments with a round horizontal cross section. The shoulder of the bottle is embossed "[E]. R. S[QUIBB]". E. R. Squibb owned a pharmaceutical laboratory in New York and was the inventor and developer of the process of percolation which allowed for the introduction of fluid extracts (Fike 1987:182). Squibb was also major provider of biologicals and chemicals during the Civil War (Lewis 2009:224). A colorless glass two-piece disc stopper (Olive and Jones 1989:155) was also recovered from FYH2 of the size and shape that was commonly used with the E. R. Squibb bottles.

Seven (FYH1=2, FHH1=3, FHH2=1, FYH3=1) medicine bottles are represented by bases ovoid in shape with a hinge mold seam across the base. Six (FYH1=2, FHH1=3, FYH3=1) of these bottles are made of aqua glass. One (FHH1) base measures 2.62 inches long and 1.50 inches wide with an open glass pontil scar over a hinge mold seam. One (FYH1) base measures 1.12 inches wide. One (FHH1) base measures 1.50 inches wide. One (FYH3) base measures 1.00 inches long and 0.705 inches wide with an open glass pontil scar over a hinge mold seam. One (FHH1) base is fragmented but has an open glass pontil scar. One (FYH1) base is melted beyond measurement and further identification. One (FHH2) bottle is made of colorless glass and measures 2.14 inches long and 1.36 inches wide with a post-bottom mold seam.

One (FYH1) medicine bottle is made of colorless glass and is represented by a tooled, one-piece flat/patent/extract-type finish (Fike 1987:8; Lindsey 2014).

Five (FYH1=1, FYH2=4) medicine bottles are made of aqua glass and is represented by a body/base fragments from square or rectangular bottles. One (FYH1) bottle is represented by a body fragment embossed “[F]LUID”. One (FYH2) bottle is represented by a body/base fragment embossed “R’S // S” with a square base with a diagonal hinge mold seam.

One (FYH2) medicine bottle is made of aqua glass and is represented by a body/base fragment from a square bottle measuring 1.00 inches square. The lower part of the paneled body is embossed “_S” and the square base has an open glass pontil scar over a diagonal hinge mold seam.

One (FYH3) medicine bottle is made of colorless glass and is represented by finish/body fragments from a rectangular shaped bottle. The bottle is represented by straight, rolled/folded-in finish (Jones and Sullivan 1989:96) and a body fragment with a rectangular horizontal cross section and embossed “_LL”.

One (FYH2) medicine bottle is made of colorless glass and is represented by a body/base fragment from an indeterminately shaped bottle. The bottle is melted and embossed “_5”.

Three (FYH1=1, FYH2=1, FYH3=1) medicine bottles are made of aqua glass and are represented by a body fragments from a decagon (ten-sided) shaped bottle. The bottle diameter is estimated at 1.25 inches. The exact contents of the bottle are unknown but Russell (1988:108) identify these bottles are medicine bottles and common during the American Civil War (1861-1865).

Three (FHH1=2, FHH2=1) medicine bottles are made of aqua glass with a dodecagon (twelve-sided) horizontal cross section. Two (FHH1) bottles are complete and measures 3.33 inches tall and 1.13 inches in diameter with an open glass pontil scar over a hinge mold base with a one-part, wide prescription finish (Fike 1987:8, Lindsey 2014). One bottle (FHH2) is represented by a base fragment measuring 1.69 inches in diameter with post-bottom mold seams. The exact contents of the bottle are unknown but Russell (1988:108) identify these bottles are medicine bottles and common during the American Civil War (1861-1865).

One (FYH1) medicine bottle is made of aqua glass and is represented by a straight, rolled/folded-in finish (Jones and Sullivan 1996:89; Lindsey 2014). The finish diameter is estimated at 0.63 inches.

One (FYH3) medicine bottle is made of colorless glass and is represented by a straight, rolled/folded-out finish (Jones and Sullivan 1996:89; Lindsey 2014). The finish diameter is estimated at 0.669 inches.

Two (FYH2) medicine bottles are made of aqua glass and represented by a one-piece, tooled flat/patent/extract finishes (Fike 1987:8; Lindsey 2014). One (FYH2) finish

measures 1.25 inches in diameter. One (FYH2) finish measures 1.75 inches in diameter.

One (FHH1) medicine bottle is made of aqua glass and is represented by a patent/extract for flat finish (Fike 1987:10; Lindsay 2014). The finish diameter is estimated at 0.768 inches.

Two (FHH2) medicine bottle are made of colorless glass and are represented by a flat/patent finishes (Fike 1987:8; Lindsey 2014). One (FHH2) finish measures 0.768 inches in diameter and has a ball neck (Fike 1987:16). One (FHH2) finish measures 0.58 inches in diameter.

Three (FHH1=2, FHH3=1) medicine bottle is made of colorless glass and is represented by a one-part wide prescription/flared finish (Fike 1987:8; Lindsey 2014). The finish diameter is estimated at 0.563 inches. Wide prescription finishes are primarily and commonly found on medicinal and druggist type bottles and vials that date between 1800 and 1870, though the style dates back to antiquity (Lindsey 2014; Toulouse 1969).

One (FHH2) medicine bottle is made of aqua glass and is represented by a double ring finish (Fike 1987:8). The finish diameter is estimated at 0.542 inches. Double ring finishes were common on a wide array of patent/proprietary medicines from the 1840s until c. 1910 (Lindsay 2014).



Figure D.25 Medical Device and Medicine Artifacts, Representative Sample: A) Irrigating Syringe Tube (FHH1); B) Colorless Glass Syringe Plunger (FHH1); C) Cranberry Glass Syringe Plunger (FYH1); D) *Vegetable Pain Killer* Bottle (FYH1); E) *Burnett's Cocaine* (Cosmetic) Bottle (FHH1); F) *Drake's Plantations Bitters* Bottle (FHH1); G) *Hall's Balsam* Bottle (FYH2); H) Indeterminate Medicine Bottle (FHH1)

Cosmetics

Cologne/Perfume

Three (FYH1=2, FYH3=1) cologne or perfume bottles were recovered.

One (FYH1) figured cologne bottle is made of aqua glass and molded in the *Rococo Corset-Waisted Scroll* pattern was recovered. The bottle is complete and measures 3.41 inches tall, 2.09 inches wide and 1.04 inches thick (about 2.0 ounces in capacity). The bottle is molded in the *Rococo Waisted-Scroll* pattern (McKearin and Wilson 1978:396). The front and back of the bottle, near the base, are two concentric rings within a three-quarter ring and between small scrolls and short leaves transforming to beading following the contour of the sides. The beads contour across the shoulders framing half-pinnate leaves rising from the deep curved rib on the lower body. The neck is decorated with diagonal ribs on lower neck. The bottle has a tooled, one-part bead finish (Fike 1987:8) and an open glass pontil scar over a hinge mold seam. McKearin and Wilson (1978:color plate X) describes these bottle as “fancy” cologne bottles of American manufacture dating c. 1830 to the 1860s.

Two (FYH1=1, FYH3=1) cologne/perfume bottles are made of colorless glass and are represented by finishes with ground interiors designed to fit a glass stopper (Fike 1987:8, Lindsey 2014). One (FYH1) cologne/perfume bottle is represented by a one-part, flat/patent finish (Fike 1987:8) and measures 0.634 inches in diameter. A colorless glass stopper with a disc finial and ground shank was also recovered from FYH1 and most-likely belongs with this cologne/perfume bottle. One (FHH3) cologne/perfume bottle is represented by a bead finish (Fike 1987:8) and measures 0.495 inches in diameter. Glass stoppers are most common in bottle types that were intended to be either re-filled/re-used or the original contents utilized over a long period of time such as perfume and/or cologne bottles (Lindsey 2014).

Hair Product

Four (FYH2=2, FHH2=1, FHH3=1) hair tonic and dye bottles were recovered.

One (FYH2) J. Huel hair dye or hair balm was recovered. The bottle is made of aqua glass and is represented by a body fragment from an oval shaped bottle with at least one indented panel. The bottle is embossed “[JULES H]AUDEL / [PHI]L^A”. Jules Huel advertised his Vegetable Hair Dye in 1846, his French Hair Dye in 1851 and his Eau Lustrale Hair Renovator in 1859. Jules Huel continued to operate in Philadelphia until at least 1865 (Fike 1987:62).

One (FYH2) J. Cristadoro Liquid Hair Dye bottle was recovered. The bottle is made of aqua glass and is represented by a body/base fragment from a rectangular shaped bottle with at least one indented panel. The bottle is embossed “J. CRISTADORO // LIQUID // HAIR DYE / N^o 1”. Joseph Cristadoro advertised his hair dye as early as 1853 but with a “N^o 2” instead of the “N^o 1” found on the bottle recovered from FHH2. Russell (1988:33) reports that J. Cristadoro Liquid Hair Dye bottles with the “N^o 1” have been found at sites dating to the American Civil War (1861-1865).

One (FHH2) Professor Woods Hair Restorative Depots bottle was recovered. The bottle is made of aqua glass and is represented by the finish and several body fragments from a rectangular shape bottle with at least two indented panels. The bottle is embossed “PROF[ES]SO[R WOODS // HAIR RESTORATIVE / DEPOTS // S]T. LOUIS [& NEW YORK]”. Orlando J. Wood introduced his hair restorative c. 1854 at the same time he opened a new branch office in New York (hence St. Louis and New York embossed on the bottle). Advertisements for the hair restorative date as late as 1862 (Fike 1987:213). A ring/oil finish (Fike 1987:8) was also recovered of the same color, size and shape consistent with Professor Woods Hair Restorative Depots bottles described in Fike (1987:213).

One (FHH3) Burnett’s Cocaine bottle was recovered. The bottle is made of aqua glass and is represented by the finish, several body fragments and the base from a rectangular shaped bottle. The bottle has a one-part, flat/patent finish and a *Blake, Variant 1* base with a diagonal hinge mold seam (Fike 1987:8, 10). One the front and

two side panels the bottle is embossed “[BURN]ETT / [COC]OAINÉ // BURNETT’S // [BOS]TON”. Joseph Burnett introduced his “cocaine for the hair” in 1847 with advertisements that read “Burnett’s Cocaine, A Perfect Hair Dressing, A Promoter of the Growth of the Hair. A Preparation Free From Irritating Matter. Alcohol 50%. Cocoa-nut Oil. Entered According to Act of Congress in 1857 by Joseph Burnett & Co” (Fike 1987:157).

Hair, Tooth and Skin

Four (FYH1=1, FHH1=2, FYH2=1) Burnett’s Cocaine for the Hair, Oriental Tooth Wash and Kalliston for the Skin bottles were recovered. All of the bottles are made of colorless glass, rectangular in shape with two indented side panels. One (FHH1) complete bottle measures 3.86 inches tall, 1.58 inches wide and 0.97 inches thick, with a one-part flat/patent finish and rectangular base with a diagonal hinge mold seam. The side panels are embossed “BURNETT // BOSTON”. Two (FYH1=1, FYH2=1) bottles are represented by a body/base fragments with a diagonal hinge mold seams. One (FYH1) bottle is embossed “BURN[ETT // BOSTON]” in an indented side panel and the other (FYH2) is embossed “BU[RNETT] // B[OSTON]”. One (FHH1) bottle is represented by a body fragment with an indented side panel embossed “[BURNETT] // BOSTON”. Joseph Burnett opened an apothecary in 1845 and established Joseph Burnett & Co. in 1856 where he produced his *Cocaine For The Hair, Oriental Tooth Wash and Kalliston For the Skin*. Company was manufacturing flavoring extracts exclusively by 1937 (Fike 1987:156).

Indeterminate

Two (FYH2=1, FHH2=1) indeterminate cosmetic jars was recovered. Both jars are made of earthenware ceramic. One (FYH2) cosmetic jar is represented by a fragment of the jar lid and measures 2.75 inches in diameter and 0.50 inches tall. One (FHH2) jar is represented by a fragment of the body and mouth of the jar and measures approximately 3.75 inches in diameter. The finish of the jar has an indented lip to accommodate the earthenware lid. Although the exact contents of this jar are unknown they containers such as these often contained cosmetic creams and pulvules (Lewis 2009:224).



Figure D.26 Cosmetic Containers, Representative Sample: A) *Burnett's Hair, Tooth and Skin* Bottle (FHH1); B) *Rococo Corset-Waisted Scroll* Cologne/Perfume Bottle (FYH1); C) Earthenware Cosmetic Jar Lid (FYH2)

Grooming Tools

Dressing Comb

Fourteen (FYH1=4, FHH1=4, FYH2=1, FHH2=1, FYH3=3, FHH3=1) dressing combs were recovered.

All fifteen combs are made of black hard rubber and represented by fragments, no complete combs were recovered. Individual combs were identified based on the thickness of the comb on the bridge and/or at the base of the teeth. Thickness is defined as the dimension between the front and the back of the bridge and/or tooth. For all the samples in this report the thickness of the bridge and the teeth on the same comb (n=) were nearly equal. Therefore, it is assumed that if the thickness dimension between any two comb fragments were not equal then they were classified as different combs.

Eight (FYH1=3, FHH1=2, FHH2=1, FYH3=2) combs are represented by a fragment of the bridge and teeth. One (FYH1) comb is represented by a bridge/teeth fragment with the bridge measuring 0.387 inches (9.83 mm) tall and 0.143 inches (3.64 mm) thick and the teeth measuring 0.859 inches (21.82 mm) tall, 0.034 inches (0.88 mm) wide and 0.142 inches (3.61 mm) thick. One (FYH1) bridge measures 0.074 inches

(1.88 mm) thick and the teeth measure 0.776 inches (19.72 mm) tall, 0.054 inches (1.39 mm) wide and 0.076 inches (1.93 mm) thick. One (FYH1) bridge measures 0.38 inches (9.65 mm) tall and 0.115 inches (2.96 mm) thick and the teeth measure 0.792 inches (20.13 mm) tall, 0.057 inches (1.45 mm) wide and 0.115 inches (2.96 mm) thick. One (FHH1) bridge measures 0.31 inches (3.53 mm) thick and teeth measures 0.05 inches (1.43 mm) wide and 0.13 inches (3.51 mm) thick. The comb is also stamped with a maker's mark that reads "[missing] KER N Y". The maker's mark was unidentified. One (FHH2) bridge measures 0.053 inches (1.36 mm) thick and teeth measures 0.95 inches (24.20 mm) tall, 0.048 inches (1.23 mm) wide and 0.053 inches (1.36 mm) thick.

One (FYH3) comb is a double sided comb represented by a complete bridge (missing all teeth) measuring 2.73 inches (69.43 mm) long, 0.794 inches (20.18 mm) tall and 0.081 inches (2.08 mm) thick.

Two (FYH3=1, FHH1=1) combs are represented by bridge fragments. One (FYH3) bridge fragment measures 0.31 inches (7.87 mm) tall and 0.060 inches (1.54 mm) thick. One (FHH1) bridge fragment measures 0.109 inches (2.77 mm) thick.

Six (FYH1=1, FHH1=2, FYH2=1, FYH3=1, FHH3=1) combs are represented by tooth fragments. One (FYH1) measures 0.489 inches (12.42 mm) tall, 0.035 inches (0.90 mm) wide and 0.178 inches (4.53 mm) thick. One (FHH1) measures 0.91 inches (23 mm) tall, 0.036 inches (0.92 mm) wide and 0.12 inches (3.24 mm) thick. One (FHH1) measures 0.86 inches (22 mm) tall, 0.032 inches (0.82 mm) wide and 0.14 inches (3.56 mm) thick. One (FYH2) measures 0.812 inches (20.63 mm) tall, 0.050 inches (1.27 mm) wide and 0.116 inches (2.94 mm) thick. One (FYH3) measures 1.01 inches (25.61 mm) tall, 0.063 inches (1.62 mm) wide and 0.166 inches (4.22 mm) thick. One (FHH3) measures 0.81 inches (20.50 mm) tall, 0.036 inches (0.93 mm) wide and 0.13 inches (3.3 mm) thick.

Mirror

Ten (FYH1=3, FHH1=2, FYH2=1, FHH2=1, FYH3=2, FHH3=1) mirrors were recovered.

All mirrors are made of aqua-tinted flat glass with tarnished silver backing. The number of individual mirrors was determined by measuring the thickness of all mirror shards within each feature to the nearest 1/1000th of an inch. The standard deviation for mirror thickness for each feature was then calculated and any mirror shards measuring more than two standard deviations ($\mu \pm 2\sigma$) away from the mean were counted as originating from different mirrors than those mirror shards measuring less than two deviations away from the mean. This analysis resulted in the identification of a total of ten mirrors. Three mirrors were recovered from FYH1 including one mirror (one fragment) measuring 0.029 inches thick, one mirror (thirty-six fragments) measuring 0.036 to 0.057 inches thick and one mirror (one fragment) measuring 0.078 inches thick. Two mirrors were recovered from FHH1 including one (one

fragment) measuring 0.034 inches thick and one (thirteen fragments) measuring 0.043 to 0.062 inches. One mirror was recovered from FYH2 including one (eight fragments) measuring 0.053 to 0.075 inches thick. One mirror was recovered from FHH2 including one (one fragment) measuring 0.045 inches thick. Two mirrors were recovered from FYH3 including one (three fragments) measuring 0.038 to 0.042 inches thick and one (thirty-four fragments) measuring 0.055 to 0.067 inches thick. One mirror was recovered from FHH3 including one (one fragment) measuring 0.075 inches thick.

Toothbrush

Four (FHH1=3, FYH3=1) toothbrushes were recovered. All toothbrushes were made of carved bone, probably bovine, and represented by either a head or handle fragment. No complete toothbrushes were recovered. One (FHH1) toothbrush is represented by a nearly complete bone handle measuring 4.70 inches (120 mm) long, 0.58 inches (14.80 mm) wide and 0.26 inches (6.83 mm) thick. The handle of the toothbrush is plain. One (FHH1) toothbrush is represented by a fragment of the bone handle measuring 3.70 inches (94.20 mm) long, 0.75 inches (19.10 mm) wide and 0.26 inches (7.40 mm) thick. The handle of the toothbrush is decorated with a 0.25 inch (6.3 mm) wide band with a 0.04 (1 mm) wide groove in the middle running the length of both the front and back of the handle and connecting at the handle end to create a “notch”. One (FHH1) toothbrush is represented by the bone head measuring 2.04 inches (51.87 mm) long, 0.52 inches (13.26 mm) wide and 0.215 inches (5.46 mm) thick. The head is also carved with grooves and drilled holes to accommodate five rows of bristles. One (FYH3) toothbrush is represented by a fragment of the bone head too fragmented and burned for accurate measurement. The head is also carved with grooves and drilled holes to accommodate at least four rows of bristles.

Toothpick

Fourteen (FHH2=13, FHH3=1) toothpicks were recovered. All fourteen toothpicks were made of carved bone, probably bovine, and varied greatly in length, width and thickness within and between toothpicks. Therefore, only complete toothpicks were counted and used in this analysis. The average toothpick measures 1.69 inches (43 mm) long, 0.078 inches (2 mm) wide and 0.027 inches (0.70 mm) thick.



Figure D.27 Grooming Tools, Representative Sample: A-C) Mirror Fragments (FHH1); D) Bone Toothpicks (FHH2); E and G) Bone Toothbrush Handles (FYH3 and FHH1); F) Bone Toothbrush Head (FHH1); H-J) Hard Rubber Dressing Combs (FYH1, FHH1 and FYH3)

Adornment

Two hundred and eight-four (FYH1=58, FHH1=99, FYH2=50, FHH2=43, FYH3=29, FHH3=5) artifacts from the Adornment Class were recovered. The Adornment Class contains artifacts that were used to adorn the human body and is represented by head bands, hair pins, clothing (buttons and other closures), waist belts, suspenders, corsets, necklaces, bracelets, rings, beads, pocket watches and shoes/boots. The Adornment Class has three artifact types: Hair Accessory, Button, Buckle, Clothing Fastener, Jewelry, Miscellaneous Accessory and Footwear.

Hair Accessories

Headband

Two (FYH2=1, FYH3=1) headbands were recovered. Both head band are made out of molded and carved hard rubber. One (FYH2) headband is represented by a fragment of the bridge and measures 1.16 inches (29.55 mm) long, 0.423 inches

(10.76 mm) wide and 0.063 inches (1.59 mm) thick. The head band is carved with a wavy profile on top of the bridge opposite the teeth. One (FYH3) headband is represented by a fragment of the bridge/teeth with the bridge measuring 0.224 inches (5.71 mm) tall and 0.061 inches (1.55 mm) thick and the teeth measure 0.895 inches (22.70 mm) tall, 0.032 inches (0.82 mm) wide and 0.060 inches (1.54 mm) thick. The headband has a curved shape with a molded linear design along the top of the bridge opposite the teeth.

Hair Pin

Five (FYH1=3, FYH2=1, FHH2=1) hair pins were recovered. All five hair pins are made of molded and carved hard rubber. Three (FYH1=3) hair pins are represented by fragments of the body/tine. One (FYH1) measuring 1.73 inches (44.09 mm) tall, 0.38 inches (9.83 mm) wide and 0.093 inches (2.36 mm) thick. The hair pin is U-shaped, plain in decoration with the tine carved to a point. One (FYH1) measuring 2.37 inches (60.29 mm) tall, 0.38 inches (9.83 mm) wide and 0.092 inches (2.32 mm) thick. The hair pin is U-shaped, plain in decoration with the tine carved to a point. One (FYH1) measuring 2.88 inches (73.26 mm) tall, 0.038 inches (9.83 mm) wide and 0.10 inches (2.54 mm) thick. The hair pin is U-shaped, plain in decoration with the tine carved to a point. Two (FYH2=1, FHH2=1) hair pins are represented by tine fragments. One (FYH2) tine measures 0.71 inches (17.99 mm) tall, 0.10 inches (2.59 mm) wide and 0.092 inches (2.33 mm) thick. The tine is carved to a point and has a rounded horizontal cross section. One (FHH2) tine measures 1.01 inches (25.80 mm) tall, 0.96 inches (2.44 mm) wide and 0.078 inches (1.98 mm) thick. The tine is carved to a point.



Figure D.28 Hair Accessories, Representative Sample: A and B) Hard Rubber Hair Pins (FYH1); C-E) Hard Rubber Head Bands (FYH2 and FYH3)

Button

Shank Buttons

Brass

Nineteen (FYH1=9, FHH1=1, FYH2=5, FHH2=2, FYH3=1, FHH3=1) shanked brass buttons were recovered.

Inlaid Brass

Four (FYH1=2, FYH2=1, FHH2=1) brass buttons inlaid with either quartz stone or glass and plain iron backplates with a brass alpha shanks were recovered. Two (FYH1=1, FYH2=1) buttons are two-piece Sanders-types measuring 0.73 inches (18.60 mm) in diameter with a convex brass front inlaid with a white quartz stone. One (FYH1) button is a two-piece Sanders-type measuring 0.80 inches (20.50 mm) in diameter with a convex brass front inlaid with an amber glass ball. One (FHH2) button is a two-piece Sanders-type measuring 0.45 inches (11.00 mm) in diameter with a convex glass bead inlaid into a brass frame. The bead is made of blue glass with two white lines and one dark blue line through the middle of the dome.

Gilded Brass

Ten (FYH1=7, FHH1=1, FYH3=1, FHH3=1) gilded brass buttons were recovered. Nine (FYH1=7, FHH1=1, FYH3=1) of the buttons are two-piece Sanders-type buttons. One (FYH1) button measures 0.49 inches (12.60 mm) in diameter with a convex brass front stamped and gilded with a floral motif. The motif consists of a single five-petal star-shaped flower in the center. The button has a corroded and indeterminate iron backplate and is missing the shank. One (FYH1) button measures 0.55 inches (14.10 mm) in diameter with a convex brass front stamped and gilded with a buckle motif. The motif consists of a single double-D type buckle without a tongue. The button has a corroded and indeterminate iron backplate and is missing the shank. One (FYH1) button measures 0.49 inches (12.60 mm) in diameter with a convex brass front stamped and gilded with diamond a fleur de lis motif. The motif consists of a diamond in center with a fleur de lis at the top and bottom and one “c” scroll on each side. The button has a corroded and indeterminate iron backplate and is missing the shank. Five (FYH1=4, FYH3=1) buttons measure 0.52 inches (13.20 mm) in diameter with a convex brass front stamped, gilded and chased with geometric motif. The motif is divided into three fields. The top field has small six-leaved plant inside a dashed circle surrounded by curved dashed lines. The middle field has a row of five five-pointed stars between two dash lines. The bottom field is the same as top field. The buttons have corroded and indeterminate iron backplates and are all missing their shanks. One (FHH1) button measures 0.50 inches (14.00 mm) in diameter with a convex brass front stamped and gilded with a stylistic flower motif. The motif consists of a single four lobed “flower”. The button has brass alpha shank and backplate struck with a depressed mark that reads “* • TREBLE GILT •”. Quality marks such as these were most commonly used from the 1830s to the 1850s (Luscomb 1967:17, 89 and 163). One (FHH3) button measures 0.62 inches (16.00 mm) in diameter with a convex brass front cast and gilded with a stylistic flower motif. The motif consists of five petal flower in raised relief with a single raised dot between each of the flower petals. The button has a brass alpha shank and backplate cast with a raised mark that reads “★ IVES SCOTT & CO. ★ / [unreadable]”. Ives, Scott and Company manufactured plain and fancy gilt buttons in Waterville, Connecticut from 1837 until 1847 (Luscomb 1967:106, 220).

Stamped Brass

Six (FYH2=5, FHH2=1) stamped and non-gilded brass buttons were recovered. All of the buttons are two-piece Sanders-type buttons. One (FYH2) button measures 0.40 inches (10.21 mm) in diameter with a convex brass front stamped with geometric hour-glass motif. The motif consists of two raised “hour-glass” shapes separated by three raised dots, surrounded by a circle of recessed dashed lines and that surrounded by a series of seventeen recessed diamonds. The button has a corroded and indeterminate iron backplate and is missing the shank. Two (FYH2) buttons measure 0.25 inches (6.29 mm) in diameter with a plain convex brass front. The buttons have a brass backplate with a slot where the shank should be. Two (FYH2=1, FHH2=1) buttons are missing their front plates and have heavily corroded and indeterminate

iron backplates. One (FYH2) button measures 0.79 inches (20 mm) in diameter and has a brass alpha shank. One (FHH2) button measures 0.61 inches (15 mm) in diameter and is missing its shank.

Glass

Eight (FYH2=4, FHH2=1, FYH3=2, FHH3=1) shanked glass buttons were recovered. Four (FYH2) glass buttons are one-piece buttons made of black glass with a U-shaped brass wire shanks. Two (FYH2) buttons measure 0.71 inches (17.98 mm) in diameter and is molded in the form of a flat square with ground faceted edges. One (FYH2) button measures 0.49 inches (12.46 mm) in diameter and is molded in the form of a flat circle with ground faceted edges. One (FYH2) button measures 0.434 inches (11.04 mm) in diameter and is molded in the form of a sphere or ball with ground facets. One (FHH2) glass button is a one-piece thread bound button made of green glass with a white stripe around the circumference of the button and an iron alpha-type shank. The button measures 0.41 inches (10 mm) in diameter. One (FHH3) button is molded of blue glass with an iron shank. One (FYH3) button is a one-piece type measuring 0.43 inches (11.00 mm) in diameter and is molded in the form of a sphere or ball with an iron alpha shank. One (FYH3) glass button is indeterminate in type, shape and size. The button is missing from the collection and therefore positive identification of the pin was taken from the 2005 Fort Yamhill House 3 Catalog.

Ceramic

Six (FYH2=1, FYH3=5) buttons are one-piece buttons with a porcelain dome front and plain back. Five (FYH2=1, FYH3=4) of the buttons have a threaded shank hole that is stained green and suggests that the buttons had brass shanks. Three (FYH2=1, FYH3=2) buttons measure 0.41 inches (10.30 mm) in diameter. One (FYH3) button measures 0.39 inches (10.06 mm) in diameter. One (FYH3) button measures 0.41 inches (10.38 mm) in diameter. One (FYH3) button has a ceramic birdcage shank and measures 0.41 inches (10.46 mm) in diameter.

Fabric

One (FHH3) shanked fabric covered buttons were recovered. The button is a two-piece Sanders-type with a low convex front covered in an indeterminate fabric and measures 0.50 inches (13.00 mm) in diameter.

Iron

Six (FYH1=3, FHH1=1, FYH3=2) shanked iron buttons were recovered. Five (FYH1=3, FHH1=1, FYH3=1) of the buttons are of the two-piece Sanders-type with a flat and undecorated front and a corroded iron backplate and an iron alpha shank. One (FYH1) button measures 0.53 inches (13.40 mm) in diameter. One (FYH1) button measures 0.87 inches (22.10 mm) in diameter. One (FYH1) button measures

0.79 inches (20.10 mm) in diameter. One (FYH3) button measures 0.75 inches (19.16 mm) in diameter. One (FYH3) iron button is indeterminate in type, shape and size. The button is missing from the collection and therefore positive identification of the pin was taken from the 2006 Fort Yamhill House 3 Catalog.

Leather-Covered

Two (FYH1=1, FHH1=1) shanked leather-covered buttons were recovered. Both buttons are two-piece Sanders-type buttons. One (FYH1) button measures 0.55 inches (14.00 mm) in diameter with a flat undecorated leather front. The core of the button appears to be made of iron and covered with leather. The button has a corroded and indeterminate iron backplate with an iron alpha shank. One (FHH1) button measures 0.75 inches (20.00 mm) in diameter with a convex undecorated leather front. The core of the button appears to be made of iron and covered with leather. The button has a corroded and indeterminate iron backplate and the shank is missing.

Mineral

Nine (FHH2) shanked mineral buttons were recovered. All nine buttons are one-piece buttons made of an indeterminate white mineral (possibly quartz) with a brass pin-shank with an alpha eye and measure 0.47 inches (12 mm) in diameter.

Bone

One (FYH2) shanked bone button was recovered. The button is a one-piece button and measures 0.37 inches (9.41 mm) in diameter. The front of the button is decorated with a carved motif consisting of a knob in raised relief in the center of the button with an asterisk shape “*” carved in the top and surrounded by a carved scallop pattern around the circumference of the button. The back of the button is unmarked but has a hole in the center for the eye. Green staining around the whole suggests that the shank was brass.



Figure D.29 Shanked Buttons, Representative Sample: A) Porcelain Dome Button (FYH3); B) Mineral Ball Button with a Pin Shank (FHH2); C) Iron Button (FYH1); D) Leather Covered Button (FHH1); E) Square Black Glass Button (FYH2); F) Circular Black Glass Button (FYH2); G) Spherical Black Glass Button (FYH2); H) Brass Mounted Blue Glass Button with Black and White Streaks (FHH2); I) Translucent Blue Glass Button (FHH3); J) Gilded Brass One-Piece Button (FHH1); K-N) Gilded Brass Two-Piece Buttons (FYH1, FYH1, FYH1 and FYH1); O) Brass Two-Piece Button (FHH1). Note the golden color of button labeled “O” is the result of being treated with electrolytic reduction.

Sew-Through Buttons

Hard Rubber

Two (FYH2=1, FYH3=1) sew-through hard rubber buttons were recovered. Both buttons measure 1.14 inches (29.15 mm) in diameter and have raised maker’s marks that read “NOVELTY RUBBER C^o / GOODYEAR’S / PATENT. / 1851.”. One (FYH2) button is molded with three concentric circles in a bulls-eye pattern. One (FYH3=1) button is plain or undecorated.

Shell

Four (FHH1=3, FYH2=1) sew-through shell buttons were recovered. All four buttons are four-hole buttons with a recessed well and carved from abalone shell. One (FYH3) button measures 0.34 inches (8.61 mm) in diameter. Two (FHH1) buttons measure 0.35 inches (9.00 mm) in diameter. One (FHH1) button measures 0.39 inches (10 mm) in diameter.

Pewter

Thirteen (FYH1=1, FHH1=8, FHH2=2, FYH3=1, FHH3=1) sew-through pewter buttons were recovered. All buttons are cast with a recessed well and four sew-through holes. Three (FYH1=1, FHH1=2) buttons measure 0.52 inches (13 mm) in diameter. Eight (FHH1=6, FHH2=2, FHH3=1) buttons measure 0.72 inches (18.00 mm) in diameter. One (FHH2) button measures 0.74 inches (19.00 mm) in diameter. One (FHH2) button measures 0.80 inches (20.00 mm) in diameter.

Iron

Six (FHH1=4, FHH2=2) sew-through iron buttons were recovered. All buttons are struck with a recessed well and four sew-through holes. Two (FHH1) buttons measure 0.54 inches (14.00 mm) in diameter. One (FHH1) button measures 0.65 inches (16.00 mm) in diameter. Three (FHH1=1, FHH2=2) buttons measure 0.69 inches (18.00 mm) in diameter.

Bone

Five (FHH1=2, FYH2=1, FHH2=2) sew-through bone buttons were recovered. All buttons are turned with a recessed well and four sew-through holes. One (FHH2) button measures 0.41 inches (10.00 mm) in diameter. One (FYH2) button measures 0.51 inches (13.00 mm) in diameter. Three (FHH1=2, FHH2=1) buttons measure 0.63 inches (16.00 mm) in diameter.

Brass

Two (FYH1=1, FYH3=1) sew-through brass button was recovered. One (FYH1) button is a four-hole button struck with a recessed well and decorated with a cross-hatched pattern. The button measures 0.52 inches (13.00 mm) in diameter. The back of the button is blank. One (FYH3=1) button is a two-hole button, struck, plain in decoration and measures 0.21 inches (5 mm) in diameter.

Ceramic Prosser

Ninety-seven (FYH1=22, FHH1=33, FYH2=20, FHH2=15, FYH3=7) sew-through ceramic prosser-type buttons were recovered.

Calico

Five (FYH1=2, FHH1=2, FHH2=1) buttons are decorated with transfer-printed patterns known as calico buttons. All of the buttons are made of a white porcelain fabric and have recessed wells. Three (FYH1=1, FHH1=2) buttons measure 0.43 inches (11.00 mm) in diameter. One (FYH1) button is decorated with a design consisting of a repetitive pattern of dots and squiggle lines in pink ink. One (FHH1) button is decorated with a design consisting of an unidentified pattern in pink ink. One (FHH1) button is decorated with a design consisting of a checkerboard pattern in brown ink. One (FHH2) button measures 0.38 inches (10.00 mm) in diameter. One (FHH2) button is decorated with a design consisting of dots and straight lines in an alternating pattern in black ink. One (FYH1) calico button is indeterminate in size and decoration. The button is missing from the collection and therefore the limited identification of the button was taken from the 2007 Fort Yamhill House 1 Catalog.

Colored

Six (FYH1=1, FHH1=1, FYH2=3, FYH3=1) buttons are made of a colored (non-white) fabric. Two (FYH1=1, FHH1=1) buttons are four-hole buttons made of black clay with a colorless glaze and a recessed well. One (FHH1) button measures 0.51 inches (13.00 mm) in diameter. One (FYH1) button measures 0.41 inches (10.00 mm) in diameter. One (FYH2) button is a four-hole button made of brown clay with a colorless glaze and a recessed well and measures 0.43 inches (11.00 mm) in diameter. Two (FYH2=1, FYH3=1) buttons are four-hole buttons made of green clay with a colorless glaze and a recessed well measure 0.41 inches (10.00 mm) in diameter.

Painted

Three (FYH2=2, FHH2=1) buttons are made of a white fabric with recessed wells and painted. Two (FYH2) buttons have four sew-through holes, painted with violet colored paint and measure 0.43 inches (11.00 mm) in diameter. One (FHH2) button has two sew-through holes, painted with fuchsia colored paint and measures 0.51 inches (13.00 mm).

Plain

Eighty (FYH1=18, FHH1=28, FYH2=16, FHH2=12, FYH3=6) buttons are made of a white fabric and are plain or undecorated. Seventy-two (FYH1=17, FHH1=23, FYH2=15, FHH2=12, FYH3=5) buttons have four sew-through holes and recessed wells. One (FYH2) button measures 0.63 inches (16.00 mm) in diameter. Six (FYH1=1, FHH1=5) buttons measure 0.55 inches (14.00 mm) in diameter. Two (FHH1) buttons measure 0.52 inches (13.00 mm) in diameter. Forty-two (FYH1=10, FHH1=12, FYH2=13, FHH2=6, FYH3=1) buttons measure 0.45 inches (11.00 mm) in diameter. Twelve (FYH1=2, FHH1=4, FHH2=4, FYH3=2) buttons measure 0.37 inches (10.00 mm) in diameter. Three (FHH1=1, FHH2=2) buttons measure 0.35

inches (9.00 mm) in diameter. One (FYH2) button measures 0.33 inches (8.00 mm) in diameter. Six (FYH1=4, FYH3=2) buttons are indeterminate in size. The buttons are missing from the collection and therefore the limited identifications and descriptions of the buttons were taken from the 2005, 2006, 2011 and 2013 Fort Yamhill House 1 Catalogs. Seven (FHH1=5, FYH2=1, FYH3=1) buttons have three sew-through holes and recessed wells. Two (FHH1) buttons measure 0.41 inches (11.00 mm) in diameter. Four (FHH1=3, FYH3=1) buttons measure 0.33 inches (8.00 mm) in diameter. One (FYH2) button measures 0.23 inches (6.00 mm) in diameter. One (FYH1) button has two sew-through holes and is of an indeterminate in size. The button is missing from the collection and therefore the limited identification of the button was taken from the 2011 Fort Yamhill House 1 Catalog.



Figure D.30 Sew-Through Buttons, Representative Sample: A and B) Hard Rubber Buttons (FYH2 and FYH3); C) Pewter Cast Button (FYH1); D) Iron Button (FHH2); E and F) Turned Bone Buttons (FHH1 and FYH2); G-H) Carved Shell Buttons (FHH1); I, M and N) Calico Porcelain “Prosser” Buttons (FYH1, FHH1, and FHH2); J) Green Porcelain “Prosser” Button (FYH2); K and L) Black Porcelain “Prosser” Buttons (FYH1); O-Q) Four-Hole White Porcelain “Prosser” Buttons (FHH1); R and S) Three-Hole White Porcelain “Prosser” Buttons (FHH1 and FYH2)

Buckle

Waist Belt

One (FHH1) waist belt buckle was recovered. The buckle is a two-piece tongue and frame type made of stamped brass. The buckle measures 2.28 inches (58.00 mm) tall and 3.26 inches (83.00 mm) wide and is stamped with “[a British crown in the center surrounded by] / * F. C. BENNETT * / 60 Gt. BOURKE ST. EAST MELBOURNE”. In the 1850s F. C. Bennett was an importer and wholesale dealer of boots, shoes, clothing and haberdashery on Bourke St. East in Melbourne, Australia (Hill 1857:426).

Braces (Suspenders)

Four (FYH1=2, FHH1=1, FYH2=1) braces or suspenders were recovered. One (FYH2) braces buckle is represented by a frame made brass, gilded and stamped with a British crown. The buckle measures 0.88 inches (22.56 mm) tall and 1.21 inches (30.94 mm) wide. Three (FYH1=2, FHH1=1) braces buckles are plain or undecorated. One (FYH1) braces buckle is complete and represented by a frame and tongue made of stamped brass and measures 0.75 inches (19.20 mm) long and 1.65 inches (42.00 mm) wide. One (FYH1) braces buckle is fragmented and represented by a partial tongue made of stamped brass and measures 0.79 inches (20.15 mm) long and 0.95 inches (24.20 mm) wide. One (FHH1) braces buckle is fragmented and represented by one-half of the buckle including the tongue/spike and roller and measures 0.90 inches (23.00 mm) long and 1.48 inches (37.60 mm) wide.

Slide

Five (FYH1=1, FHH1=2, FHH2=2) slide buckles were recovered. All buckles are plain or undecorated. Three (FHH1=1, FHH2=2) slide buckles are made of brass. One (FHH1) measures 2.00 inches (50.60 mm) long and 0.92 inches (23.50 mm) wide. One (FHH2) is fragmented and measures 2.08 inches (53.00 mm) long. One (FHH2) buckle is made of brass but too incomplete for accurate measurements. One (FHH1) slide buckle is made of iron and measures 1.62 inches (41.30 mm) long and 0.58 inches (14.90 mm) wide. One (FYH1=1) slide buckle is indeterminate in material, size and decoration. The buckle is missing from the collection and therefore the limited identification of the buckle was taken from the 2013 Fort Yamhill House 1 Catalog.

Clothing Fastener

Corset Busk

Three (FHH1=1, FYH2=1, FHH2=1) corset busks were recovered and represented by a fragment of an iron frame with brass eyelets. One (FYH2) eyelet measures 0.72 inches (18.19 mm) long and 0.49 inches (12.67 mm) wide. One (FHH1) eyelet

measures 0.72 inches (18.19 mm) long and 0.59 inches (15.10 mm) wide. One (FHH2) is missing from the collection and therefore the limited identification of the corset busk was taken from Bowyer (1992b).

Hook-and-Eye

Four (FYH2=1, FHH2=3) hook-and-eye garment closures were recovered. All closures are made of bent brass wire. The hooks are comprised of brass wire bent into a J-like shape two wires thick. The eyes are also made of brass wire bent into a shape with three lobes, one for the hook and two for sewing the eye onto a garment. Three (FHH2) hooks and one (FYH2) eye were recovered. The (FYH2) eye measures 0.34 inches (8.69 mm) long, 0.35 inches (9.05 mm) wide and 0.03 inches (0.92 mm) thick. One (FHH2) measures 0.42 inches (10.70 mm) long, 0.24 inches (6.10 mm) wide and 0.02 inches (0.62 mm) thick. One (FHH2) hook measures 0.50 inches (12.80 mm) long, 0.24 inches (6.11 mm) wide and 0.03 inches (0.82 mm) thick. One (FHH2) hook measures 0.53 inches (13.50 mm) long, 0.34 inches (8.80 mm) wide and 0.03 inches (0.89 mm) thick.

Aglet (Aiguillette)

Two (FYH1=1, FYH3=1) aglets were recovered. Both aglets are made of brass and stamped with vertical ribs. Both aglets measure 0.37 inches (9.35 mm) long, 0.31 inches (8.00 mm) wide and 0.15 inches (3.81 mm) thick.

Rivet

One (FHH1) clothing rivet was recovered. The rivet is complete and made of brass. The rivet is missing from the collection and therefore the limited identification of the corset busk was taken from Bowyer (1992b).

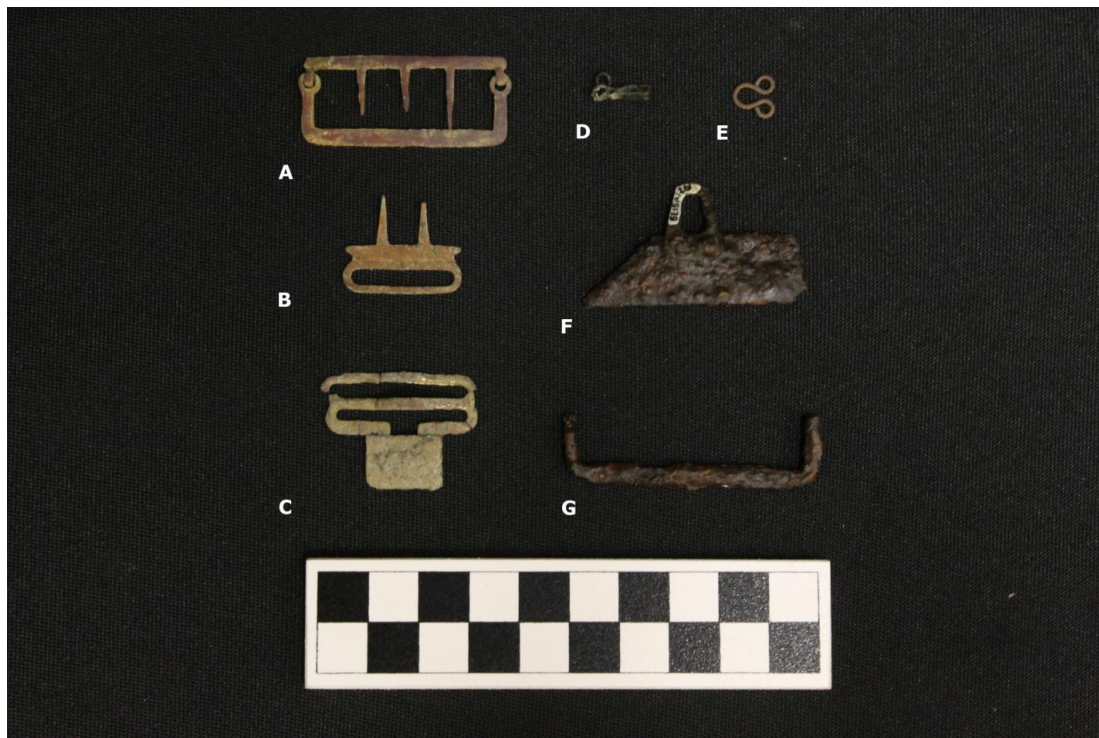


Figure D.31 Buckles and Clothing Fasteners, Representative Sample: A-C) Brass Suspender “Braces” Buckles (FYH1, FYH1 and FYH2); D and E) Hook-and-Eye Garment Closures (FHH2 and FYH2); F) Iron Corset Busk with Brass Eyelets (FHH1); G) Iron Slide Buckle (FHH1)

Jewelry

Pendant

Four (FYH1=4, FYH2=1, FHH3=1) pendants were recovered. One (FYH1) pendant is represented by a fragment of cranberry glass in the form of a Greek cross. The pendant fragment is just one of the ends of the cross bar or top and has cut beveled edges. Three (FYH1) pendant is represented by a fragment of opaque white glass in the form of a teardrop. The pendant fragment measures 0.88 inches long and 0.27 inches in diameter. One (FYH2) pendant is a coin with a hole pierced through the top for attachment to a string or chain. The coin is an American dime (10 cents) and measures 0.73 inches (18.73 mm) in diameter and 0.03 inches (0.90 mm) thick. The dime is struck with bust of Lady Liberty surrounded by 13 six pointed stars with “1836” at the bottom on the front and American eagle with a lined Union shield on its chest and “E PLURMIS UNUM” inside banner with “UNITED STATES OF AMERICA / 10 C.” stamped around the edge of the dime on the back. The dime is highly worn and suggests heavy use. One (FHH3) pedant is a gold locket. The locket is round in shape and measures 0.61 inches (15.70 mm) in diameter and 0.11 inches (2.77 mm) thick. The locket is chased with a pattern of scales arranged in circles radiating out from the center of the locket. The locket contains a lock of human hair under a pane of colorless glass.

Bracelet

Two (FYH2=1, FYH3=1) bracelets were recovered. One (FYH2) bracelet is represented by a porcelain charm. The charm is molded in the form of a human hand. The charm is only a fragment broken at both the fingers and mid-forearm and measures 0.71 inches (18.11 mm) in diameter. The jewelry authority M. Harding (Bryant 2014:205) identified the charm as symbolizing “friendship” and may have been received by the lady of the house from a friend during as part of the 19th century ritual of calling. One (FYH3) bracelet is represented by a hard rubber link. The link is molded in the shape of a trapezoid with one rounded side. The link measures 0.34 inches (8.62 mm) long, 1.31 inches (33.47 mm) wide and 0.32 inches (8.00 mm) thick. The link also has two holes drilled all the way through the link to be strung on like a bead on the bracelet. Circular abrasion marks around the holes suggests that the links were spaced apart by smaller and probably round beads.

Finger Ring

Three (FYH1=1, FHH2=2) finger rings were recovered. One (FYH1) ring is made of silver plate brass and measures 0.73 inches (18.61 mm) interior diameter, 0.21 inches (5.35 mm) wide and 0.05 inches (1.33 mm) thick. The ring is a United States Size 8.5 (18.6 mm interior diameter) and is plain or undecorated. One (FHH2) ring is made of stamped brass and measures 0.63 inches (16.20 mm) interior diameter, 0.11 inches (3.10 mm) wide and 0.03 inches (1.00 mm) thick. The ring is a United States Size 5.5 (16.1 mm interior diameter) and is decorated with a texture of raised bumps. One (FHH2) ring is made of carved hard rubber and measures 0.80 inches (20.30 mm) interior diameter, 0.15 inches (3.89 mm) wide and 0.08 inches (2.00 mm) thick. The ring is a United States Size 10.5 (20.2 interior diameter) and is plain or undecorated.

Bead

Fifty-six (FYH1=7, FHH1=40, FYH2=7, FHH2=1, FYH3=1) glass beads were recovered of two types: standard beads and seed beads. Bead type categories were primarily based on the size of the bead after White (2005:82). Standard beads are classified as measuring greater than 6 mm in diameter. Standard beads had a variety of uses in jewelry such as elements of necklaces, bracelets and other composite jewelry pieces. Seed beads are classified as measuring less than 6 mm in diameter. Seed beads were primarily used as decorative elements that were sewn onto textiles or leather but were also sometimes strung together to decorated small pieces of jewelry (White 2005:82). Tube beads were classified under “seed” beads because of their similar function as decorative elements on textiles, leather and small pieces of jewelry.

Standard Beads

Thirteen (FYH1=2, FHH1=3, FYH2=6, FHH2=1, FYH3=1) standard beads were recovered. One (FHH2) standard bead is an agate bead made of white quartz with brown streaks is fragmented and measures 0.46 inches (11.79 mm) in diameter. Nine (FYH1=2, FHH1=1, FYH2=6) cylindrical glass beads with ground facets were recovered. One (FYH1) bead is made of opaque blue glass and measures 0.30 inches (8 mm) long and 0.29 inches (7.45 mm) in diameter. One (FYH1) bead is made of translucent blue glass and measures 0.37 inches (9 mm) long and 0.29 inches (7.45 mm) in diameter. Six (FHH1=1, FYH2=5) beads are made of amber glass. One (FHH1) bead measures 0.36 inches (9 mm) long and 0.41 inches (10.60 mm) in diameter. Five (FYH2) beads measure 0.41 inches (11 mm) long and 0.45 inches (11.55 mm) in diameter. One (FYH2) amber glass bead is missing from the collection and therefore the limited identification of the bead was taken from the 2006 Fort Yamhill House 2 Catalog. One (FYH2) bead is made of black glass measures 0.27 inches (7 mm) long and 0.21 inches (5.27 mm) in diameter. One (FHH1) ellipsoidal bead is made of black glass and measures 0.73 inches (19 mm) long and 0.30 inches (7.60 mm) in diameter. Two (FHH1=1, FYH3=1) spherical glass beads were recovered. One (FHH1) bead is made of light blue glass with ground facets and measures 0.31 inches (8 mm) in diameter. One (FYH3) bead is made of white glass and measures 0.32 inches (8 mm) in diameter.

Seed Beads

Forty-three (FYH1=5, FHH1=37, FYH2=1) seed beads were recovered. Forty-one (FYH1=4, FHH1=37) of the seed beads are cylindrical in shape while two (FYH1=1, FYH2=1) of the beads are tube in shape. Eleven (FYH1=4, FHH1=7) seed beads are made of white glass. Nine (FYH1=3, FHH1=6) beads measures 0.04-0.05 inches (1.00 mm) long and 0.06-0.08 inches (1.59-2.04 mm) in diameter. Two (FYH1=1, FHH1=1) beads measures 0.09 inches (2 mm) long and 0.11 inches (2.83 mm) in diameter. Three (FHH1) seed beads are made of red glass and measure 0.04-0.05 inches (1.00 mm) long and 0.06-0.08 inches (1.59-2.04 mm) in diameter. Ten (FHH1) seed beads are made of red glass with a white heart and measure 0.04 inches (1 mm) long and 0.06 inches (1.59 mm) in diameter. Seventeen (FHH1) seed beads are made of blue glass and measures 0.04-0.05 inches (1 mm) long and 0.06-0.08 inches (1.59-2.04 mm) in diameter. Two (FYH1=1, FYH2=1) seed beads are tube in shape and made of black glass. One (FYH1) bead measures 0.37 inches (9 mm) long and 0.05 inches (1.34 mm) in diameter. One (FYH2) bead measures 0.15 inches (4 mm) long and 0.16 inches (4.02 mm) in diameter.



Figure D.32 Jewelry and Miscellaneous Accessories, Representative Sample: A-D) Various “Standard” Beads (FYH1, FHH1, FYH2 and H1); E) Various “Seed” Beads (FHH1); F) Gold Locket with Human Hair (FHH3); G) Silver Dime Pendant (FYH2); H) Opaque Colorless Drop Pendants (FYH1); I) Porcelain Human Hand Charm (FYH2); J) Brass Finger Ring (FHH2); K) Hard Rubber Finger Ring (FHH2); L) Silver Wedding Band (FYH1); M) Hard Rubber Bracelet Link (FYH3); N) Brass Watch Key (FYH1)

Miscellaneous Accessories

Pocket Watch

Two (FYH1=1, FYH2=1) pocket watches were recovered. One (FYH1) pocket watch is represented by a watch key and six fragments of colorless watch crystal. The watch key made of brass and measures 1.06 inches (27.15 mm) long, 0.050 inches (12.84 mm) wide at the bow with a 0.09 inches (2.31mm) diameter blade. One (FYH2) pocket watch is represented by two colorless fragments of the watch crystal.

Footwear

Miscellaneous Parts

Ten (FYH1=3, FHH1=1, FYH2=1, FYH3=5) shoes/boots were recovered. All of the shoes/boots are represented by various elements including a nearly complete boot/shoe, a complete heel, fragment of heels/soles, brass grommets and a brass toe

tap. One (FYH3) boot/shoe is represented by a nearly complete sole including the toe/toe tap, heel and several grommets attached to large sections of the quarter. The heel and sole are nearly complete and measure 1.36 inch (34.62 mm) long, 1.41 inch (35.98 mm) wide, and 0.779 inch (19.84 mm) thick. The toe measures 1.82 inches (46.32 mm) wide and 0.61 inches (15.41 mm) thick. The attached toe tap measures 1.85 inch (47.06 mm) wide, 0.455 inch (11.57 mm) wide, 0.032 inch (0.83 mm) thick. A large portion of the leather quarter is present and contains five brass grommets in a line that measure 0.162 inch (4.13 mm) in diameter. The heel is composed of six layers of leather fastened together by sixteen brass hob nails arranged in a "D" around the circumference with one brass hob nail in the center. The toe is composed of at least three layers of leather fastened together by thirteen brass hob nails arranged around the circumference of the toe. The toe tap is made of brass fastened to the toe with ten brass hob nails around the circumference of the toe tap. All hob nails are square in cross-section. The relatively small size of the sole suggests that this was a woman's or child's boot/shoe.

Seven (FYH1=3, FYH3=4) boots/shoes are represented by fragments of leather heels/soles. One (FYH3) complete heel measures 1.37 inches (34.83 mm) long, 1.41 inches (35.86 mm) wide and 0.51 inches (12.92 mm) thick. The heel is composed of at least three layers of leather fastened together by nineteen iron hob nails arranged in an arch around the circumference with two iron hob nail in the center. One (FYH1) heel/sole fragment measures 1.32 inches (33.59 mm) long, 1.48 inches (36.48 mm) wide and 1.06 inches (27.03 mm) thick at the heel. The heel/sole is composed of six layers of leather fastened together by sixteen (16) brass hob nails arranged in an arch around the circumference with one brass hob nail in the center. One (FYH1) heel fragment measures 1.497 inches (38.04 mm) long and 1.183 inches (30.06 mm) wide. The heel is composed of multiple layers of leather fastened together by sixteen (16) brass hob nails arranged in an arch around the circumference with one brass hob nail in the center. One (FYH3) heel fragment measures 1.22 inches (31.17 mm) long, 1.24 inches (31.55 mm) wide and 0.78 inches (19.88 mm) thick. The heel is composed of at least five (5) layers of leather fastened together by fifteen (15) iron hob nails arranged in an arch around the circumference with two (2) iron hob nail in the center. The small size of heel suggests a women's or children's boot/shoe. One (FYH3) heel fragment measures 1.84 inches (46.94 mm) long, 1.65 inches (42.11 mm) wide and 0.49 inches (12.53 mm) thick. The heel is composed of at least five (5) layers of leather fastened together by nineteen (19) iron hob nails arranged in an arch around the circumference. All hob nails are square in cross-section. An additional six (6) larger iron hob nails are randomly distributed in the interior of the heel. These may represent repair of the heel. Larger size of the heel suggests a men's boot/shoe. One (FYH3) heel fragment measures 1.47 inches (37.46 mm) long, 1.21 inches (30.88 mm) wide and 0.24 inches (6.11 mm) thick. The heel is composed of at least one (1) layer of leather fastened together by fifteen (15) iron hob nails arranged in an arch around the circumference with one (1) iron hob nail in the center. All hob nails are square in cross-section. Several fragments of hair are attached to the interior of the heel. The small size of heel suggests a women's or children's boot/shoe. One (FYH1) heel fragment is composed of multiple layers of leather fastened together by brass hob nails. The heel is missing from the collection

and therefore the limited identification of the heel was taken from the 2011 Fort Yamhill House 1 Catalog.

One (FHH1) boot/shoe is represented by several shoe/boot grommets. All of the grommets are made of brass and measures 0.27 inches (6.91 mm) in diameter and 0.09 inches (2.30 mm) thick. A total of twenty grommets were recovered from FHH1. One (FYH2) boot/shoe is represented by a toe tap. The toe tap is made of brass and measures 1.85 inches (47.20 mm) long, 0.52 inches (13.27 mm) wide and 0.03 inches (0.85 mm) thick. The toe tap was attached to the boot/shoe with ten hobnail holes around the circumference of the sole with three hobnail holes on the interior, one on each side of the toe tap.

Administration

Forty-two (FYH1=10, FHH1=10, FYH2=8, FHH2=4, FYH3=5, FHH3=5) artifacts from the Administration Class were recovered. The Administration Class contains artifacts that were used in the activities that relate to running the military organization and the duties associated with its administration including bookkeeping, report writing and military correspondence. The Administration Class is represented by ink pens, inkpots and bottles, graphite pencils, slate pencils and tablets and sealing wax. The Administration Class has one artifact type: Office Supplies.

Office Supplies

Pen

Three (FHH1=1, FHH3=2) dip ink pens were recovered. One (FHH1) nib measures 1.27 inch (32.3 mm) long, 0.23 inch (5.98 mm) wide, and 0.01 inch (0.30 mm) thick. The nib is iridium-tipped and gold plated and stamped “RENDELL <<< & >>> FAIRCHILD”. John Rendell was a very successful dip ink pen manufacturer during the last half of the 19th century. Mr. Rendell was a partner in several major dip pen ink manufacturing firms one of which, Spencer & Rendell, was awarded the silver medal for the best gold pen in 1847 and received the gold medal award in 1848. Rendell partnered with Leroy W. Fairchild in 1853 and the firm dominated the gold pen market well into the 1870s (David 2012, 2016). One (FHH3) nib is made of iron complete and measures 0.86 inches (21.80 mm) long, 0.30 inches (7.77 mm) wide at the head and 0.22 inches (5.60 mm) wide at the prong. One (FHH3) nib is made of iron fragmented and measures 0.22 inches (5.80 mm) wide and 0.01 inch (0.39 mm) thick.

Inkpot

One (FYH1) inkpot was recovered. The inkpot is represented by several fragments of the porcelain inkpot body as well as the brass lid. The inkpot is of the Parisian-style pump type where the ink was pumped from an interior chamber of the pot into a small reservoir on the front of the vessel from which to dip the pen. The pump mechanism was composed of a series of pulleys and pumps operated by turning a knob on the lid

of the pot. From the fragments recovered the inkpot measures 4.75 inches in diameter at the base that was dish-shaped from which a cylindrical pot would have extended to an unknown height. The porcelain base is marked with an impressed “4” on the interior of the vessel. The lid of the pot is made of brass and is composed of the lid proper and a brass knob used to operate the pump mechanism. When the lid was recovered a small fragment of cotton-based thread was still attached to the brass knob on the interior of the lid. The knob was also embossed in French with “ENCRIER BOQUET / INVENTEUR RGT PARIS / MEDALLIE D’ARGENT / 1839”. An attempt at translating this from French to English the embossing reads “inkwell fragrant / inventor patent Paris / silver medal / 1839”. Inkpots with almost identical lids are attributed to French manufacture and date from the 1850s to the 1860s (Badders 1998a:8, 1998b:35; Jaegers and Jaegers 2000:18; Rivera and Rivera 1973:153).

Individual Ink Bottle

Twelve (FYH1=4, FHH1=3, FYH2=1, FHH2=1, FYH3=1, FHH3=2) individual ink bottles were recovered. Eight (FYH1=2, FHH1=3, FYH2=1, FYH3=1, FHH3=1) ink bottles are made of aqua glass and is molded in the eight-sided conical paneled/umbrella pattern. Three (FHH1) bottle are complete and has rolled/folded-in finish (Jones and Sullivan 1989:90) and a 2.50 inch diameter base with post mold seams. One (FYH2) bottle is represented by an eight-sided conical paneled/umbrella body fragment. Two (FYH1=1, FYH3=1) bottle is represented by a complete base that measures 2.50 inches in diameter with post mold seams. One (FHH3) bottle is represented by a one-piece rolled/folded-in finish (Jones and Sullivan 1989:90). Two (FYH1=1, FHH3=1) ink bottles are made of colorless glass and is molded in a round pattern with horizontal ribs. One (FYH1) bottle has a one-part, straight finish with a ground lip (Fike 1987:8). One (FHH3) bottle has a one-part straight finish that was cracked-off and fire polished (Lindsey 2014). One (FHH2=1) ink bottles are made of olive glass and is molded in the eight-sided conical paneled/umbrella pattern. The bottle is complete and has rolled/folded-in finish (Jones and Sullivan 1989:90) and a 2.50 inch diameter base with post mold seams. One (FYH1) ink bottle is made of gray/beige stoneware with a light brown/tan slip. The bottle is round in horizontal cross section and measures 2.00 inches in diameter.

Bulk Ink Bottle

Three (FYH1=1, FYH3=1, FHH3=1) bulk ink bottles were recovered. One (FYH1) bulk ink bottle is complete, made of olive glass and measures 7.75 inches tall and 2.62 inches in diameter. The bottle has a round horizontal cross section, a tooled, two-part double oil/mineral finish with a pouring lip (Covill 1971:219; Jones and Sullivan 1989:87; Fike 1997:8). One (FHH3) bulk ink bottle is made of olive glass and represented by a tooled, two-part double oil/mineral finish with a pouring lip (Covill 1971:219; Jones and Sullivan 1989:87; Fike 1997:8). One (FYH3) bulk ink bottle is made of stoneware and represented by a body fragment of gray stoneware

with a tan/light brown slip. The diameter of the bottle is estimated between 2.00 and 3.00 inches.

Slate Pencil

Thirteen (FYH1=1, FHH1=4, FYH2=4, FHH2=3, FYH3=1) slate writing pencils were recovered. Six (FYH1=1, FYH2=2, FHH2=2, FYH3=1) slate pencils are complete. Five (FYH1=1, FYH2=2, FHH2=2) pencils are round in horizontal cross section. One (FYH2) pencil measures 0.81 inches (20.51 mm) long and 0.20 inches (5.17 mm) long and is decorated with a single incised line carved around the circumference of the pencil. One (FHH2) pencil measures 1.69 inches (43.04 mm) long and 0.22 inches (5.87 mm) in diameter and is decorated with very fine carved grooves that run from tip to end and completely around the pencil creating a fine line pattern. One (FYH2) pencil measures 1.25 inches (31.77 mm) long and 0.20 inches (5.11 mm) in diameter. One (FYH1) pencil measures 1.15 inches (29.39 mm) long and 0.19 inches (5.00 mm) in diameter. One (FHH2) pencil measures 0.94 inches (24.03 mm) long and 0.23 inches (5.94 mm) in diameter. One (FYH3) pencil is rectangular in horizontal cross section and measures 2.42 inches (61.69 mm) long and 0.33 inches (8.53 mm) wide and 0.13 inches (3.49 mm) thick.

Five (FHH1=4, FHH2=1) slate pencils are represented by tip fragments. One (FHH2) tip fragment measures 0.90 inches (22.90 mm) long and 0.22 inches (5.70 mm) in diameter and is decorated with very fine carved grooves that run from tip to end and completely around the pencil creating a fine line pattern. One (FHH1) tip fragment measures 1.84 inches (46.70 mm) long and 0.23 inches (5.80 mm) in diameter. One (FHH1) tip fragment measures 1.68 inches (42.70 mm) long and 0.22 inches (5.78 mm) in diameter. One (FHH1) tip fragment measures 1.15 inches (29.30 mm) long and 0.23 inches (5.98 mm) in diameter. One (FHH1) tip fragment measures 0.85 inches (21.60 mm) long.

Two (FYH2) slate pencils are represented by end fragments. One (FYH2) end fragment measures 0.92 inches (23.38 mm) long and 0.18 inches (4.73 mm) in diameter. One (FYH2) end fragment measures 1.12 inches (28.54 mm) long and 0.18 inches (4.67 mm) in diameter.

Slate Tablet

Four (FYH1=2, FYH3=2) slate writing tablets were recovered. All writing tables are represented by fragments of slate varying in color and thickness. Two (FYH1=1, FYH3=1) tablets are represented by fragments of reddish slate that measure 0.14 inches (3.61 mm) thick. One (FYH1) tablet is represented by twenty-five fragment of gray slate that measure 0.08 inches (2.08 mm) thick. One fragment has a beveled edge along one side for insertion into a wood frame. One (FYH3) tablet is represented by three fragments of gray slate that measure 0.12 inches (3.12 mm) thick. One fragment has an edge that was sawn.

Graphite Pencil

Four (FHH1=1, FYH2=3) graphite pencils were recovered. All four pencils are represented by the rectangular graphite core fragments. One (FHH1) graphite core measures 1.87 inches (47.56 mm) long, 0.08 inches (2.11 mm) wide and 0.06 inches (1.53 mm) thick. One (FYH2) graphite core measures 0.73 inches (18.72 mm) long, 0.08 inches (2.18 mm) wide and 0.06 inches (1.74 mm) thick. One (FYH2) graphite core measures 0.54 inches (13.92 mm) long, 0.09 inches (2.37 mm) wide and 0.06 inches (1.67 mm) thick. One (FYH2) graphite core measures 0.61 inches (15.51 mm) long, 0.07 inches (2.00 mm) wide and 0.06 inches (1.51 mm) thick.

Sealing Wax

Two (FYH1=1, FHH1=1) fragments of sealing wax were recovered. Both fragments are red in color and measures less 0.50 inches (<10 mm) in diameter.



Figure D.33 Office Supplies, Representative Sample: A) Glass Bulk Ink Bottle (FYH1); B) Stoneware Bulk Ink Bottle (FYH3); C) Stoneware Individual Ink Bottle (FYH1); D) Glass Individual Ink Bottle (FYH1); E) Gold Plated Pen Nib (FHH1); F) Sealing Wax (FYH1); G) Graphite Pencil Core (FHH1); H) Slate Writing Pencil (FHH1); I) Slate Writing Tablet (FYH1); J) Brass Lid to Porcelain Inkpot (FYH1)

Recreation

One hundred and sixty-seven (FYH1=18, FHH1=28, FYH2=5, FHH2=93, FYH3=4, FHH3=19) artifacts from the Recreation Class were recovered. The Recreation Class contains artifacts that were associated with activities that were done for enjoyment and/or relaxation by all members of the household including the officers and their wives and children. The Recreation Class is represented by tea sets, dolls, game pieces, musical instruments and firearms and ammunition. The Recreation Class has three artifact types: Toys and Games, Musical Instruments and Hunting.

Toys and Games

Tea Set

Six (FYH1=1, FHH1=2, FYH2=1, FHH2=1, FYH3=1) ceramic vessels from children's tea sets were recovered. One (FYH2) toy tea cup was recovered. One (FYH2) ironstone tea cup is represented by a handle fragment. The handle is identical to handles on the tea cups of a children's tea set produced by Davenport and Company of Longport c. 1850 (Empirical Observation). Four (FYH1=1, FHH1=1, FHH2=1, FYH3=1) toy tea saucers were recovered. Two (FYH1=1, FYH3=1) saucers measures 2.50 inches in diameter and are plain in decoration. One (FHH1) saucer measures 2.00 inches in diameter and is molded with simple ribbed pattern. One (FHH2) saucer measures 1.75 inches in diameter and is molded with a simple ribbed pattern. One (FHH1) toy tea pot was recovered. One (FHH1) tea pot is represented by lid. The lid measures 2.00 inches in diameter and is molded with an unidentified pattern.

Doll

Six (FYH1=1, FHH1=1, FHH2=3, FYH3=1) toy dolls were recovered. Three (FYH1=1, FHH1=1, FHH2=1) dolls are made of porcelain. One (FHH2) doll is represented by a fragment of the head. The fragment is glazed and molded with the face and tightly curled hair of a little girl. An arm fragment was also recovered from FHH2 and may be part of the same doll. The arm is fragmented and measures 0.73 inches (18.70 mm) from wrist to elbow and 0.28 inches (7.23 mm) in diameter. One (FYH3) doll is represented by a fragment of the shoulder plate. The fragment is glazed and has a pierced hole for attachment of the shoulder plate to the cloth body. One (FHH1) doll is represented by a fragment of a glazed arm measuring 0.72 inches (18.40 mm) long from finger to elbow and 0.20 inches (5.10 mm) in diameter at the mid-forearm. One (FYH1) doll is represented by a fragment of an unglazed leg measuring 1.43 inches (36.39 mm) long from ankle to the knee end and 0.48 inches (12.40 mm) wide at the calf. The proximal end of the leg has a molded groove for tying the leg to a cloth body. One (FHH2) doll is made of wood. The doll is represented by a fragment of the arm which was turned and carved to have an articular wrist joint. The fragment measures 1.35 inches (34.40 mm) in length from wrist to elbow and 0.38 inches (9.88 mm) in diameter. The wooden arm has a square

iron peg inserted into the center of the arm. One (FHH2) doll is made of leather. The doll is represented by only the body (top of the shoulders to the hem of the dress) and measures approximately 2.00 inches tall. The doll is missing from the collection and is not recorded in the Bowyer (1992b) catalog. Artifact description is taken from photographs of the doll and from personal communication with David Brauner (2015).

Marble

Ten (FYH1=3, FHH1=5, FYH2=1, FHH2=1) marbles were recovered. Five marbles were made of glass (FYH1=2, FHH1=3), four marbles were made of porcelain (FYH1=1, FHH1=2, FYH2=1) and one marble was made of crockery (FHH2).

Glass Marbles

Five (FYH1=2, FHH1=3) glass marbles were recovered. Four (FYH1=2, FHH1=2) glass marbles are made in an onionskin swirl pattern with a colorless glass body and colored swirls. One (FHH1) onionskin swirl marble measures 1.00 inches (25.40 mm) in diameter and has red, white and blue swirls. Two (FYH1=1, FHH1=1) onionskin swirl marbles measures 0.86 inches (21.90 mm) in diameter. One (FYH1=1) has red and blue swirls. One (FHH1) has red, white and blue swirls. One (FYH1) onionskin swirl marble is represented by a fragment and has red and yellow swirls. Onionskin swirl marbles date between 1850 and 1920 (Baumann 1970:66). One (FHH1) glass marble is solid blue in color. The marble measures 0.82 inches (20.80 mm) in diameter and is heavily chipped.

Porcelain Marbles

Four (FYH1=1, FHH1=2, FYH2=1) porcelain marbles were recovered. One (FYH1) porcelain marble is glazed and decorated with a hand-painted floral design of pink flowers with green foliage over the glaze. The marble measures 0.73 inches (18.54 mm) in diameter and has three “eyes” (small spots without glaze) in a triangular configuration where the marble was supported while the glaze was being fired. Three (FHH1=2, FYH2=1) porcelain marbles are unglazed. One (FYH2) marble measures 0.73 inches (18.60 mm) in diameter. The marble is decorated with a hand-painted floral design of pink flowers with green foliage and a band of three black lines around the circumference of the marble. Two (FHH1) marbles are decorated with a hand-painted geometric design comprised three sets of four colored lines (red, green and black) around the circumference of the marble. Each set of lines are set at 90° to the others. One (FHH1) marble measures 0.69 inches (17.70 mm) in diameter. One (FHH1) marble measures 0.73 inches (18.70 mm) in diameter. Bauman (1970) calls these marbles “Chinas”.

Crockery Marble

One (FHH2) crockery marble was recovered. The marble is made of beige fabric, uneven/imperfectly sphere shaped, measures 0.80 inches (20.30 mm) in diameter and is decorated with a Bennington-type mottled brown glaze. The marble has three “eyes” (small spots without glaze) in a triangular configuration where the marble was supported while the glaze was being fired. The presence of eyes and the uneven/imperfect sphere shape of the marble suggest that it was hurriedly and carelessly produced, probably in large quantities without much time being wasted on careful workmanship (Baumann 1970:30). This suggests that these marbles were “common” and of lesser quality and probably value than the more carefully made glass and china marbles.

Domino

One (FHH1) domino was recovered. The domino is made of ebony wood with a bone veneer secured with brass brads. The domino measures 12.30 inches (31.20 mm) long, 0.60 inches (15.30 mm) wide and 0.31 inches (8.00 mm) thick. The front of the domino is decorated with the game piece numbers (four dots / two dots).

Musical Instruments

Harmonica

One (FHH1) harmonica was recovered and is represented by fragments of a blow reed plate and a draw reed plate. Both reed plates are made of brass with iron reeds. The blow reed plate measures 0.91 inches (23.10 mm) long, 0.72 inches (18.50 mm) wide and 0.03 inches (0.97 mm) thick. The draw reed plate measures 0.63 inches (16.10 mm) long, 0.73 inches (18.60 mm) wide and 0.03 inches (0.77 mm) thick.

Mouth Harp

Three (FYH1=2, FYH3=1) mouth harps were recovered. All mouth harps are made of iron and represented by fragments of the frames. One (FYH3) frame measures 1.34 inches (34.26 mm) long, 1.02 inches (26.10 mm) wide and 0.26 inches (6.66 mm) thick. One (FYH1) frame measures 1.61 inches (41.09 mm) long, 1.07 inches (27.20 mm) wide and 0.26 inches (6.80 mm) thick. One (FYH1) frame measures 1.79 inches (45.70 mm) long, 1.27 inches (32.30 mm) wide and 0.28 inches (7.11 mm) thick.

Indeterminate Chordophone

One (FHH2) indeterminate chordophone was recovered and is represented by a single tuning key. The tuning key is made of iron and measures 1.29 inches long and 0.21 inches in diameter. The tuning key is missing from the collection and therefore positive identification and description was taken from Bowyer (1992b).

Indeterminate Aerophones

One (FYH1) indeterminate aerophone (probably a flute/piccolo-like instrument) was recovered and is represented by a single key. The key is made of iron and round in shape and measures 0.68 inches (17.31 mm) in diameter and 0.13 inches (3.32 mm) thick.



Figure D.34 Toys, Games and Music Artifacts, Representative Sample: A-C) Porcelain Doll Parts (FHH2, FHH1); D) Wooden Doll Leg (FHH2); E) Toy Tea Saucer (FHH2); F) Toy Tea Cup Handle (FYH2); G) Domino (FHH1); H) Flute Key (FYH1); I) Mouth Harp (FYH3); J) Harmonica Reed Plate (FHH1); K-M) Glass Marbles (FYH1, FHH1, FHH1); N and O) Porcelain Marbles (FYH1, FHH1); P) Bennington “Crockery” Marble (FHH2)

Hunting and Fishing

Firearms

Six (FHH1=2, FHH2=4) firearms were recovered.

One (FHH1) U. S. Model 1816 .69 caliber flintlock musket is represented by a top jaw and a fragment of a top jaw screw. The top jaw is ellipsoidal in shape with a rectangular notch in the rear and a round screw hole and measures 1.41 inches (36.00 mm) long, 1.01 inches (25.70 mm) wide and 0.36 inches (9.19 mm) thick. The top jaw screw is also made of iron, but fragmented and has a round head with hole and

measures 0.50 inches (12.70 mm) in diameter. This type of top jaw screw is consistent with the M1861 flintlock musket (Empirical Observation).

One (FHH2) U. S. Model 1842 musket or Model 1855 rifled musket conversion is represented by a fragment of a ramrod thimble (fusil entry pipe with skirt). The thimble measures 1.73 inches (43.00 mm) long with a 0.43 inches (11.00 mm) interior diameter. Being made of iron (instead of brass) and having a smaller interior diameter than older models, the thimble most-likely belongs to either a re-tooled M1842 musket/rifled musket or a M1855 rifled musket (Bowyer 1992:104-105).

One (FHH2) M1853 .577 caliber British Enfield rifle musket is represented by the fragment of a long range rear sight. The site is made of iron, measures 2.70 inches (69.00 mm) long, 0.66 inches (16.90 mm) wide and 0.37 inches thick and the base and 0.16 inches thick at the top. The sight has a large rectangular base with beveled top corners and a long vertical sight slot. Similar rear sights were observed on many M1853 Enfield rifle muskets (Lewis 2009; Empirical Observations).

One (FHH2) M1816 Pennsylvania rifle (Kentucky long rifle) is represented by a fragment of the patch box hinge support. The hinge support is made of brass and measures 2.60 inches (66.00 mm) long, 1.75 inches (44.00 mm) wide at the hinge and 0.07 inches (2.00 mm) thick. As a decorative element the hinge support is cut in the shape of a symmetrical floral design that is pierces and terminating in a pointing quadfoil. This style is attributed to the gunsmiths of Allentown and Bethlehem, Pennsylvania (Madaus 1981:69-70). A nearly identical patch box plate hinge support was observed on an octagonal barrel .54 cal smooth bore musket made by Bucks Co., c. 1800 (Johnston 1976:28-29).

One (FHH1) indeterminate .58/.577 caliber rifle/rifled musket is represented by a fragment of a tompion. The tompion fragment is made of wood with a brass collar and iron shank and measures 0.57 inches (14.50 mm) in diameter.

One (FHH2) indeterminate sporting rifle is represented by a fragment of a trigger guard. The guard is made of brass in a long serpentine shape terminating in a single curl at the rear. The guard measures 3.97 inches (101.00 mm) long, 0.66 inches (16.90 mm) wide and 0.12 inches (3.00 mm) thick and decorated with an incised eight-pointed star or sun burst on bottom near trigger loop. The trigger guard is very similar to guards on several sporting percussion rifles dating between 1850 and 1860 (Madaus 1981:129-132). The guard is also very similar to trigger guards observed on several Hawken "Plains" rifles (Johnson 1976; Shumway 2002). The size of the firearm is unknown but is probably between .44 and .55 caliber.

Percussion Caps

Fifty-nine (FYH1=5, FHH1=4, FYH2=1, FHH2=38, FYH3=1, FHH3=10) rifle/musket percussion caps were recovered. All of the rifle/musket percussion caps are made of stamped brass and were made in the characteristic "top hat" shape of

percussion caps used by long arms (rifles and rifle/muskets). Although slight variation in size does exist, most of the caps measure 0.25 inches in height and 0.25 inches wide. Forty-seven (FYH1=3, FHH2=34, FHH3=10) of the percussion caps are “splayed” and appear to have been fired.

Powder Flasks

Four (FYH1=1, FHH1=2, FHH3=1) black powder flasks were recovered.

One (FYH1) flask is represented by a lead alloy spout. The spout is made of cast pewter in the form of a one-part bead finish and measures 0.48 inches (12.20 mm) tall with a 0.76 inch (19.50 mm) exterior diameter and 0.51 inch (13.00 mm) interior diameter.

One (FHH1) flask is represented by a lead alloy cap. The cap is made of cast pewter with external threads and measures 0.30 inches (7.76 mm) tall and 0.83 inches (21.20 mm) in diameter. The cap is also cast with a maker’s mark that reads “DUPONT / [unreadable]”. DuPont first started manufacturing black powder in 1804 and by 1810 DuPont was the largest supplier of black powder in the Americas. During the American Civil War DuPont was the largest supplier of black powder to the Union Army (Gilbert 2015:21).

One (FHH1) flask is represented by a lead alloy cap. The cap is made of cast pewter with internal threads. The flask cap is missing from the collection and therefore positive identification and description was taken from Bowyer (1992b).

One (FHH3) flask is represented by a carrying ring. The ring is made of brass wire and measures 0.43 inches (11.06 mm) in diameter and 0.07 inches (1.95 mm) thick. The ring is still attached to the brass flask eyelet. This type of carrying ring/eyelet was used on several types of powder flasks (Empirical Observations; Lewis 2010).

Large Caliber Projectiles

Fifteen (FHH1=6, FHH2=6, FHH3=3) large caliber lead projectiles were recovered.

.50 Caliber

One (FHH2) .50 caliber round ball projectile was recovered. The projectile measures 0.50 inches in diameter and 167 GN (10.80 g) in weight and is cast in a spherical form. Projectiles of this type were used in a variety of firearms including the M1816 Pennsylvania rifle (Kentucky long rifle).

.54 Caliber

Three (FHH1=1, FHH2=2) .54 caliber projectiles were recovered. Two (FHH1=1, FHH2=1) .54 caliber minie ball projectiles were recovered. The projectiles measure

0.54 inches in diameter, 1.02 inches long, 323 to 375 GN (21 to 24.0 g) in weight and is pressed in a conical form with three concentric rings and a conical indented base. Projectiles of this type were used by the U. S. Army between 1855 and 1866 and were intended for the U. S. model .54 caliber rifle, .54 and .55 caliber foreign rifle muskets (Enfield) and the M1841 Mississippi rifle (Thomas and Thomas 1996:31). The projectile is distorted and may suggest that it was fired. One (FHH2) .54 caliber round ball projectile was recovered. The projectile measures 0.54 inches in diameter and 388 GN (25 g) in weight and is cast in a spherical form.

.58 Caliber

Eight (FHH1=2, FHH2=3, FHH3=3) .58 caliber minie ball projectiles were recovered. The projectiles measure 0.584 to 0.588 inches in diameter, 477 to 517 GN (31 to 33 g) in weight and are pressed in a conical form with three concentric rings and a conical indented bases. Projectiles of this type were used by the U. S. Army between 1855 and 1866 and were intended for the use in a variety of firearms such as the M1855 Springfield Rifled Musket, M1861/M1863 Springfield Rifle Muskets or the .577 caliber Enfield Rifle Musket (Thomas and Thomas 1996:39). One (FHH2) projectile has a human bite mark with impressions from the 1st and 2nd premolars. One (FHH3) projectile has been cut into at least four sections with one dissection on each side and a third dissection removing the tip of the projectile. Two (FHH1=1, FHH2=1) projectiles are distorted and may suggest that it was fired.

.69 Caliber

Three (FHH1) .69 caliber round ball projectiles were recovered. The projectiles measure 0.64 to 0.66 inches in diameter, 386 to 406 GN (25 to 26 g) in weight and are cast in spherical form. Projectiles of this type were made for variety of smoothbore and rifled muskets going back to the early 18th century. The projectiles recovered were most-likely used in the U.S. M1816 Flintlock Musket or the M1842 Springfield Percussion Lock Musket.

Shot or Pellet Projectiles

Fifty-four (FYH1=4, FHH1=4, FYH2=2, FHH2=39, FHH3=5) shot or pellet projectiles were recovered. For hunting, preferred shot size was chosen not only for the range, but also for the type of game being hunted. In effect the shot must reach the target with enough energy to penetrate to a depth sufficient to kill the game. Because of this the preferred shot size depended on at least two factors including the size of the game animal (larger diameter shot for larger animals and smaller diameter shot for smaller animals) and the range distance (smaller diameter shot for shorter ranges and larger diameter for longer ranges). In general shot size No. BBB (.190 inches in diameter) is considered “birdshot” and was used for small game and birds and shot size No. T (0.200 inches in diameter) is considered “buckshot” and was used for medium to large game.

Fifty-three (FYH1=4, FHH1=4, FYH2=2, FHH2=39, FHH3=4) birdshot projectiles were recovered. Three (FYH1=2, FHH2=1) No. 9 shot projectiles were recovered. The projectiles measure 0.08 inches in diameter. One (FHH2) No. 8 shot projectile was recovered. The projectile measures 0.09 inches in diameter. No. 8 shot is recommended for hunting quail or dove. Four (FHH2) No. 7 shot projectiles were recovered. The projectile measures 0.10 inches in diameter. No. 7 shot is recommended for hunting quail, dove and rabbit. Nine (FHH2) No. 6 shot projectiles were recovered. The projectiles measure 0.11 inches in diameter. No. 6 shot is recommended for hunting rabbit, pheasant, turkey, squirrel and ducks at low altitude. Sixteen (FHH2=13, FHH3=3) No. 5 shot projectiles were recovered. The projectiles measure 0.12 inches in diameter. No. 5 shot is recommended for hunting pheasant, turkey and ducks at low altitude. One (FHH2) No. 4 shot projectile was recovered. The projectile measures 0.13 inches in diameter. No. 4 shot is recommended for hunting pheasant, turkey, ducks a low altitude and ducks at high altitude. Ten (FYH1=1, FHH1=1, FYH2=2, FHH2=6) No. 1 shot projectiles were recovered. The projectile measures 0.16 inches in diameter and. No. 1 shot is recommended for hunting geese. Eight (FHH1=3, FHH2=4, FHH3=1) No. BB shot projectiles were recovered. The projectiles measure 0.18 inches in diameter and 8.20 to 9.00 GN in weight. No recommendations for this shot size was found but they were probably used for hunting large water fowl such as geese and smaller terrestrial game such as deer. One (FYH1) No. BBB shot projectile was recovered. The projectile measures 0.19 inches in diameter. No recommendations for this shot size was found but they were probably used for hunting large water fowl such as geese and smaller terrestrial game such as deer. One (FHH3) buckshot, a No. T shot, projectile was recovered. The projectile measures 0.20 inches in diameter. No. T shot was recommended for hunting large to medium-sized animals such as deer and elk.



Figure D.35 Hunting Artifacts, Representative Sample: A) .58 Caliber Minie Ball (FHH3); B) .69 Caliber Round Ball (FHH1); C) Various Lead “Shot or Pellet” Projectiles (FHH2); D) Powder Flask Carrying Ring (FHH3); E) Long Arm Percussion Caps (FHH2); F) M1853 Enfield Long Range Rear Sight (FHH2); G and H) M1816 Springfield Musket Top Jaw Screw and Top Jaw (FHH1); I) .58 Caliber Tompion (FHH1); J) Brass Patch Box Hinge Plate Frame (FHH2); K) Brass Sporting Rifle Trigger Guard (FHH2); L) Model 1842 Musket or Model 1855 Rifled Musket Conversion Ramrod Thimble (FHH2)

Fish Hook

One (FHH1) fish hook was recovered. The hook is made of a copper alloy, probably brass, and measures 0.63 inches (16 mm) long with a 0.02 inch (0.50 mm) diameter. The hook has a flat head to secure the line instead of an eye.

Pocket Items

Nine (FYH1=2, FHH1=1, FYH2=1, FHH2=3, FYH3=1, FHH3=1) artifacts from the Pocket Item Class were recovered. The Pocket Item Class contains artifacts that were owned and usually used by only one individual and could be stored in one’s pocket. The Pocket Items Class is represented by spectacles, pocket knives and coinage. The Pocket Items Class has two artifact types: Pocket Tools and Currency.

Tools

Spectacles

Two (FHH2) spectacles were recovered. Both frames were made in the oblong frame style with small horizontally elongated frames and lenses. One (FHH2) pair of spectacles is made of brass and is represented by fragments of the head piece and hinge. The frame is too distorted for accurate measurement. One (FHH2) pair of spectacles is made of iron and is represented by the fragments of the bridge and locker and represents approximately one-half of the spectacles. The distance from the locker to the center of the bridge is 2.55 inches (64.90 mm) and suggests that the width of the completed spectacles would have been 5.10 inches (130.00 mm). The oblong frame style was common in spectacles dating between 1835 and 1880 (McBrayer and Valenza 2012).

Pocket Knife

Five (FYH1=2, FHH1=1, FYH2=1, FHH3=1) folding “pocket” knives were recovered.

Pocket Knife

Three (FYH1=1, FYH2=1, FHH3=1) folding pocket knives were recovered. A pocket knife is a foldable knife, greater than 3.00 inches in length, with one or more blades that fit inside the handle and is small enough to fit inside the pocket. Two (FYH1=1, FYH2=1) knives are nearly complete with iron frames (liners) and brass bolsters and are only missing the side plates. One (FYH1) knife measures 3.13 inches (79.65 mm) long, 0.489 inches (12.43 mm) wide and 0.39 inches (9.92 mm) thick. One (FYH2) knife is complete and measures 3.50 inches long. One (FHH3) knife is represented by fragments of the frame (liner), bolster and side plate and measures 3.50 inches (89.40 mm) long and 0.556 inches (14.28 mm) wide. The liner of the knife is made of iron, the bolster of brass and the side plates of Mother of Pearl (abalone shell).

Pen Knife

Two (FYH1=1, FHH1=1) folding pen knives were recovered. Pen knives tend to be smaller in length (generally 2.00 inches or less) than pocket knives and usually with only one or two folding blades. Pen knives were originally intended for sharpening quills, hence the name, but they were also used for fine or delicate work as well. One (FYH1) knife is represented by fragments of the iron frame (liner) and brass bolsters and measures 2.64 inches (67.30 mm) long, 0.46 inches (11.90 mm) wide and 0.030 inches (7.78 mm) thick. One (FHH1) knife is represented by a fragment of an iron blade and measures 1.48 inches (37.70 mm) long, 0.23 inches (5.92 mm) wide and 0.02 inches (0.59 mm) thick at the blade back.

Currency

Two (FHH2=1, FYH3=1) coins were recovered. One (FHH2) coin is an 1864 United States dime (10 cents). The coin is made of silver and measures 0.70 inches in diameter. The front of the coin is struck with a seated liberty figure surrounded by “UNITED STATES OF AMERICA / [seated liberty figure] / 1864”. The reverse is struck with “ONE DIME” in a wheat surround. One (FYH3) coin is an 1833 Colombia real. The coin is made of silver and measures 0.77 inches (19.58 mm) in diameter. The front of the coin is struck “REPUBLICA DE COLOMBIA / • 1833 • [surrounding an upright halberdier crossed by three arrows and a bow, between two upright cornucopias]”. The reverse is struck “B / 1. REAL / R. S. [inside an olive wreath opening at the top and “LIBERTAD” [in ribbon with a bow]]”. The real is extremely worn probably as a result of heavy use.



Figure D.36 Personal Pocket Items, Representative Sample: A) Iron Spectacles Frame (FHH2); B) Brass Pocket Knife Frame with Mother of Pearl Side Plates (FHH3); C) 1864 United States Dime (FHH2); D) 1833 Colombian Real (FYH3)

Transportation

Eight (FYH1=3, FHH1=2, FYH2=1, FYH3=1, FHH3=1) artifacts from the Transportation Class were recovered. The Transportation Class contains artifacts that are associated with activities such as travel and is represented a carpet bag and horse related items such as bits, saddles, bells and shoes. The Transportation Class has two artifact types: Luggage and Horse Furniture.

Luggage

Carpet Bag

One (FYH1) carpet bag was recovered. The bag is represented by numerous iron fragments of the carpet bag frame. The frame is made of strap iron and measures 17.00 inches long and 11.00 inches wide when open. The bag also has a brass escutcheon over the locking mechanism with a stamped rope motif around its boarder. A carpet bag with identical escutcheon style and frame dimensions was made of wool with a muslin lining and the inner compartment divided in two sections. The exterior of the bag is decorated in a geometric pattern of red, blue, green, orange and black bands and chevrons. The bag has two leather handles fastened to the frame with brass rivets. The bottom of the bag is made of gutta percha (Empirical Observation). The frame was found in situ in an open position but broke into several fragments during removal.

Horse Furniture

Bit

One (FYH1) horse bit was recovered. The bit is a snaffle-type bit made of brass plated iron and is represented by one part of the two-part mouth piece and the rein ring. The distance from the ring to the center of the mouth piece is 3.85 inches (97.94 mm) long and suggests that the width of a complete bit would have been 7.71 inches (195.88 mm). Snaffle bits are a specific type of horse bit that allows the rider to apply more leverage to the bit with less pressure required from the rider's hands.

Stirrup

One (FHH3) stirrup was recovered. The stirrup is of the cavalry-type, made of iron and represented by a fragment of the eye, arm/side and platform. The stirrup is pear-shaped and measures 4.05 inches (103 mm) tall and 4.00 inches (102 mm) wide.

Saddle Girth

One (FHH1) saddle girth was recovered. The girth is represented by an iron roller buckle that measures 1.50 inches long and 1.00 inches (25.40 mm) wide.

Crotal/Sleigh Bell

One (FHH1) crotal or sleigh bell was recovered. The bell is made of brass and measures 0.75 inches in diameter. The bell has a u-shaped shank with a plain upper hemisphere and plain with a single slit on the lower hemisphere. Crotals were commonly found adorning animal tack, carriages and sleighs, hence the name sleigh bell (BBC 2014; Noel-Hume 1969).

Horseshoe

Three (FYH1=1, FYH2=1, FYH3=1) horseshoes were recovered. One (FYH1) actual horseshoe was recovered. The shoe is made of iron and measures 4.952 inch (125.78 mm) long, 4.538 inch (115.27 mm) wide and 0.363 inch (9.22 mm) thick at toe. The shoe is probably a No. 00 hind shoe as the length is greater than the width and measures approximately 5 inch (125 mm) long. The No. 00 size horse shoe is one of the smallest of the United States horse shoe sizes and therefore was probably used on a small horse.

Two (FYH2=1, FYH3=1) horseshoes are represented by horseshoe nails made of iron. One (FYH2) nail is fragmented and the other (FYH3) nail measures 1.75 inches long.



Figure D.37 Transportation Items, Representative Sample: A) No. 00 Horseshoe (FYH1); B) Iron Stirrup (FHH3); C) Brass Plated Snaffle Bit (FYH1); D) Saddle Girth Buckle (FHH1); E) Brass “Sleigh” Bell (FHH1)

APPENDIX E: MILLER CC INDEX CALCULATIONS FOR CERAMICWARE
VESSELS

In this appendix you will find the tables used to calculate the Miller CC Index (Miller 1980, 1991) values for the ceramicware assemblages recovered from the six commissioned officers' houses used in this study. Each of the ceramicware assemblages are provided in separate tables corresponding to the officer's house from which they were recovered (FYH1, FYH2, FYH3, FHH1, FHH2 and FHH3). Each table is divided by vessel form (teas, flatware and bowls) to correspond with Miller's vessel forms with counts for each vessel type recovered and the associated index year and the corresponding vessel value used to calculate the index value for each vessel form. The products for each vessel type and the subtotals for each vessel form are also provided in each table as well as the mean for each vessel form (Table E.1 – Table E.6).

Table E.1 Miller CC Index Calculations for FHH1 Ceramic Vessels

Form	Type (Miller 1991)	Index Year	#		Value	=	Product
Teas	Porcelain, Decorated	1836	1	x	4.20	=	4.20
	Porcelain, Gilded	1823	1	x	14.50	=	14.50
	Porcelain, White	1871	9	x	3.01	=	27.09
	White Granite, Unhandled	1846	15	x	2.08	=	31.20
Teas Subtotals			26		-		76.99
Teas Mean			76.99 / 26 =		2.96		
Flatware	White Granite, Dish, 14"	1858	2	x	3.27	=	6.54
	White Granite, Plate, 10"	1846	6	x	1.93	=	11.58
	White Granite, Plate, 8"	1858	2	x	2.00	=	4.00
	White Granite, Plate, 7"	1858	2	x	1.93	=	3.86
	White Granite, Plate, 6"	1858	3	x	1.98	=	5.94
	ABC Printed, Plate, 6"	1871	1	x	6.94	=	6.94
	Printed Ware, Plate, 8"	1855	1	x	1.50	=	1.50
	Printed Ware, Plate, 5"	1855	1	x	1.67	=	1.67
	Shell Edge Ware, Plate, 8"	1853	2	x	1.11	=	2.22
	Shell Edge Ware, Dish, 14"	1853	2	x	1.64	=	3.28
	Porcelain, Plate, 7"	1871	15	x	4.00	=	60.00
Flatware Subtotals			37		-		107.53
Flatware Mean			107.53 / 37 =		2.90		
Bowls	Dipt	1854	7	x	1.14	=	7.98
	White Granite	1858	5	x	2.49	=	12.45
	White China Porcelain	1871	2	x	2.54	=	5.08
	Printed	1855	1	x	2.00	=	2.00
Bowls Subtotals			15		-		27.51
Bowls Mean			27.51 / 15 =		1.83		
All Vessels	All Vessels Subtotals		78		-		212.03
	All Vessels Mean		212.03 / 78 =		2.72		

Table E.2 Miller CC Index Calculations for FHH2 Ceramic Vessels

Form	Type (Miller 1991)	Index Year	#		Value	=	Product
Teas	Porcelain, Decorated	1836	1	x	4.20	=	4.20
	Porcelain, White	1871	1	x	3.01	=	3.01
	Printed, Unhandled	1848	1	x	2.89	=	2.89
	White Granite, Unhandled	1846	5	x	2.08	=	10.40
	Cream Colored, Unhandled	1859	2	x	1.00	=	2.00
	Teas Subtotals		10		-		22.50
	Teas Mean		$22.50 / 10 =$		2.25		
Flatware	Porcelain, Plate, 7"	1871	1	x	4.00	=	4.00
	White Granite, Plate, 10"	1846	4	x	1.93	=	7.72
	Flatware Subtotals		5		-		11.72
	Flatware		$11.72 / 5 =$		2.34		
Bowls	Dipt	1854	2	x	1.14	=	2.28
	Bowls Subtotals		2		-		2.28
	Bowls Mean		$2.28 / 2 =$		1.14		
All Vessels	All Vessels Subtotals		17				36.50
	All Vessels Mean		$36.50 / 17 =$		2.15		

Table E.3 Miller CC Index Calculations for FHH3 Ceramic Vessels

Form	Type (Miller 1991)	Index Year	#		Value	=	Product
Teas	White Granite, Handled	1846	1	x	2.54	=	2.54
	White Granite, Unhandled	1846	3	x	2.08	=	6.24
	Cream Colored, Unhandled	1859	1	x	1.00	=	1.00
	Teas Subtotals		5		-		9.78
	Teas Mean		$9.78 / 5 =$		1.95		
Flatware	Porcelain, Plate, 6"	1871	1	x	3.92	=	3.92
	White Granite, Plate, 10"	1846	2	x	1.93	=	3.86
	White Granite, Twiffler, 8"	1858	2	x	2.00	=	4.00
	White Granite, Muffin, 6"	1858	1	x	1.98	=	1.98
	White Granite, Dish, 14"	1858	1	x	3.27	=	3.27
	Flow Printed, Plate, 10"	1855	1	x	2.40	=	2.40
	Flatware Subtotals		8		-		19.43
	Flatware Mean		$19.43 / 8 =$		2.43		
Bowls	Dipt	1854	2	x	1.14	=	2.28
	White Granite	1858	1	x	2.49	=	2.49
	Bowls Subtotals		3		-		4.77
	Bowls Mean		$4.77 / 3 =$		1.59		
All Vessels	All Vessels Subtotals		16				33.98
	All Vessels Mean		$33.98 / 16 =$		2.12		

Table E.4 Miller CC Index Calculations for FYH1 Ceramic Vessels

Form	Type (Miller 1991)	Index Year	#		Value	=	Product
Teas	Sponged, Handled	1858	2	x	2.17	=	4.34
	Sponged, Unhandled	1858	1	x	1.50	=	1.50
	Printed, Handled	1846	2	x	2.77	=	5.54
	Printed, Unhandled	1848	1	x	2.89	=	2.89
	White Granite, Handled	1846	6	x	2.54	=	15.24
	White Granite, Unhandled	1846	28	x	2.08	=	60.32
	Porcelain, Handled, Gilded	1823	3	x	14.50	=	43.50
	Porcelain, Handled, Decorated	1836	1	x	4.20	=	4.20
	Porcelain, Unhandled, White	1871	1	x	2.20	=	2.20
	Painted, Handled	1853	2	x	1.77	=	3.54
	Teas Subtotal		48		-		143.27
	Teas Mean		143.27 / 2.98		2.98		
Flatware	Porcelain, Gold-Banded, Plate	1871	1	x	5.06	=	5.06
	Porcelain, White, Plate, 7"	1871	4	x	4.00	=	16.00
	White Granite, Dish, 14"	1858	4	x	3.27	=	13.08
	White Granite, Plate, 10"	1846	9	x	1.93	=	17.37
	White Granite, Plate, 8"	1858	4	x	2.00	=	8.00
	White Granite, Plate, 6"	1858	2	x	1.98	=	3.96
	Printed, Dish, 14"	1855	1	x	2.22	=	2.22
		Flatware Subtotals		25		-	
	Flatware Mean		65.69 / 25 =		2.62		
Bowls	White Granite	1858	8	x	2.49	=	19.92
	Dipt	1854	2	x	1.14	=	2.28
		Bowls Subtotals		10		-	22.20
	Bowls Mean		22.20 / 10 =		2.22		
All Vessels	All Vessels Subtotals		83				231.06
	All Vessels Mean		231.06 / 83 =		2.81		

Table E.5 Miller CC Index Calculations for FYH2 Ceramic Vessels

Form	Type (Miller 1991)	Index Year	#		Value	=	Product
Teas	Painted, Handled	1859	1	x	1.63	=	1.63
	Painted, Unhandled	1853	1	x	1.23	=	1.23
	Printed, Unhandled	1848	1	x	2.89	=	2.89
	White Granite, Handled	1846	1	x	2.54	=	2.54
	White Granite, Unhandled	1846	11	x	2.08	=	22.88
	Teas Subtotals		15		-		31.17
	Teas Mean		31.17 / 15 =		2.07		
Flatware	Porcelain, Plate, 7"	1871	2	x	4.00	=	8.00
	White Granite, Plate, 10"	1846	4	x	1.93	=	7.72
	White Granite, Plate, 8"	1846	2	x	2.00	=	4.00
	Shell Edge Wares, Plate	1859	1	x	1.09	=	1.09
	Flatware Subtotals		9		-		20.81
	Flatware Mean		20.81 / 9 =		2.31		
Bowls	Dipt	1854	1	x	1.14	=	1.14
	White Granite	1858	3	x	2.49	=	7.47
	Bowls Subtotals		4		-		8.61
	Bowls Mean		8.61 / 4 =		2.15		
All Vessels	All Vessels Subtotals		28				60.59
	All Vessels Mean		60.59 / 28 =		2.16		

Table E.6 Miller CC Index Calculations for FYH3 Ceramic Vessels

Form	Type (Miller 1991)	Index Year	#		Value	=	Product
Teas	Porcelain, White, Handled	1871	1	x	3.01	=	3.01
	Printed, Unhandled	1848	1	x	2.89	=	2.89
	White Granite, Unhandled	1846	8	x	2.08	=	16.64
	Painted Teas, Unhandled	1859	2	x	1.63	=	3.26
	Painted, Unhandled	1853	3	x	1.23	=	3.69
	Teas Subtotals		15		-		29.49
	Teas Mean		29.49 / 15 =		1.96		
Flatware	White Granite, Dish, 14"	1858	1	x	3.27	=	3.27
	White Granite, Plate, 10"	1846	8	x	1.93	=	15.44
	White Granite, Plate, 8"	1858	4	x	2.00	=	8.00
	Shell Edge Wares, Dish, 10"	1859	1	x	1.09	=	1.09
		Flatware Subtotals		14		-	
	Flatware Mean		27.80 / 14 =		1.98		
Bowls	Dipt	1854	3	x	1.14	=	3.42
	White Granite	1858	8	x	2.49	=	19.92
		Bowls Subtotals		11		-	23.34
	Bowls Mean		23.34 / 11 =		2.12		
All Vessels	All Vessels Subtotals		40				80.63
	All Vessels Mean		80.93 / 40 =		2.01		

APPENDIX F: FAUNAL ANALYSIS, BUTCHERY CUT PREFERENCES AND INDEX TABLES

In this appendix you will find the values and tables used in the analysis of the faunal remains recovered from all three commissioned officers' quarters including the bone element identification and butchery cut preference tables for beef, venison, pork, chicken and shellfish. These tables also include the calculations for estimated meat yields for beef and pork and the preference index values for beef, pork, poultry, venison and shellfish by butchery cut.

Faunal analysis including species, element and portion identifications were conducted by the author utilizing the Comparative Faunal Collections at the Department of Anthropology at Oregon State University and in reference to Cohen and Serjeantson (1996) and Hillson (1996).

Butchery cuts identifications and meat yields were based on Horton (2014:383-384) after Abell (1852), Beecher (1871), Bliss (1850), Hall (1856), Philip (1859), Lyman and Lyman (1869), Storke (1859) and Webster and Parks (1845).

Preferential rankings and index values of all butchery cuts were also based on Horton (2014:383-384) after Huelsbeck (1991), LeeDecker et al. (1987), Lyman (1979, 1987); Manning (1905), Schultz and Gust (1983) and modified by the author using values in Adams (2009).

Estimated cost of beef and pork butchery cuts and the total cost beef and pork by meat yield was based on butchery cut identifications described above and by the cost of beef and pork as presented in the *Fort Hoskins Subsistence Account Book* (See APPENDIX C; FHSAB 1862).

Table F.1 Domesticated Taxa Recovered From Fort Yamhill and Fort Hoskins

Element; Portion	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
Cow (<i>Bos taurus</i>)						
Femur; Medial/Distal Shaft	5	2	8	-	-	-
Femur; Proximal Shaft	2	1	1	-	-	-
Rib; Distal Shaft	2	3	-	-	-	-
Rib; Proximal End/Medial Shaft	6	2	3	-	-	-
Scapula; Neck	4	-	3	-	2	-
Tibia; Proximal End	-	1	2	-	-	1
Tibia; Medial Shaft	1	-	-	-	-	-
Tibia; Distal End	-	-	1	-	-	-
Humerus; Distal Shaft	-	-	2	-	-	-
Radius-Ulna; Distal End	-	-	-	-	-	2
Cervical Vert.; Complete	-	1	1	-	1	-
Lumbar Vert.; Complete	-	-	4	-	-	7
Ind. Vert.; Fragment	-	2	-	-	-	-
Inter. Phalange; Proximal End	-	1	-	-	-	-
Metacarpal; Proximal End	-	-	1	-	-	1
Metacarpal; Distal End	-	-	-	-	-	1
Metatarsal; Medial Shaft	-	1	-	-	-	-
Thoracic Vert; Complete	-	2	1	-	-	1
Innominate; Ilium Neck	-	-	2	-	-	-
Calcaneus; Complete	-	-	-	-	-	1
Talus; Complete	-	-	-	-	-	1
<i>Total Bos taurus</i>	<i>20</i>	<i>16</i>	<i>29</i>	<i>0</i>	<i>3</i>	<i>15</i>
Pig (<i>Sus scrofa</i>)						
Humerus; Distal End	1	-	-	-	-	-
Head; Various Elements	-	1	-	-	1	1
Rib; Distal End/Shaft	-	4	-	-	-	-
Rib; Medial Shaft	-	-	1	-	-	-
Rib; Proximal End/Shaft	-	2	-	-	-	-
Lumbar Vert.; Complete	-	-	-	-	1	-
Scapula; Neck	-	1	-	-	-	-
Ulna; Proximal End/Medial Shaft	2	-	-	-	-	-
<i>Total Sus scrofa</i>	<i>3</i>	<i>8</i>	<i>1</i>	<i>0</i>	<i>2</i>	<i>1</i>
Chicken (<i>Gallus gallus domesticus</i>)						
Whole (MNI); Various Elements	1	2	1	1	4	4
Egg Shell	2	-	-	-	-	-
<i>Total Gallus gallus domesticus</i>	<i>3</i>	<i>2</i>	<i>1</i>	<i>1</i>	<i>4</i>	<i>4</i>
Total Domestic Fauna	26	26	31	1	9	20

Table F.2 Deer and Elk Taxa Recovered From Fort Yamhill and Fort Hoskins

Element; Portion	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
Deer/Elk (<i>Odocoileus</i> sp./ <i>Cervus</i> Sp.)						
Humerus; Medial Shaft	2	1	-	-	-	-
Innominate; Ilium Neck	4	1	-	-	-	1
Innominate; Pubis-Acetabulum	-	5	-	-	-	1
Prox. Phalange; Complete	1	-	-	-	-	-
Radius-Ulna; Distal End	1	-	-	-	-	-
Radius-Ulna; Proximal End	-	2	1	-	-	1
Rib; Proximal Shaft/End	1	5	2	-	-	-
Rib; Medial Shaft/Distal End	1	4	-	-	-	-
Scapula; Neck	1	1	-	-	-	-
Talus; Complete	4	-	-	-	-	1
Tibia; Distal End	2	-	-	-	-	-
Tibia; Medial Shaft	-	3	-	-	-	1
Tibia; Proximal Shaft	-	-	4	-	-	-
Femur; Proximal Shaft	-	1	3	-	-	-
Ind. Vert.; Fragment	-	3	-	-	-	-
Innominate; Ilium-Acetabulum	-	-	2	-	-	-
Metacarpal; Medial Shaft	-	-	2	-	-	-
Metatarsal; Medial Shaft	-	-	-	-	1	-
Sacrum; 4th Vert. (S4)	-	-	-	-	-	1
<i>Total Odocoileus sp./Cervus Sp.</i>	<i>17</i>	<i>26</i>	<i>14</i>	<i>0</i>	<i>1</i>	<i>6</i>
Unidentified Galliform						
Whole (MNI); Various Elements	-	1	-	-	4	-
<i>Total Unidentified Galliform</i>	<i>0</i>	<i>1</i>	<i>0</i>	<i>0</i>	<i>4</i>	<i>0</i>
Unidentified Anseriform						
Whole (MNI); Various Elements	-	-	-	-	1	-
<i>Total Unidentified Anseriform</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>1</i>	<i>0</i>
Total Wild Fauna	17	27	14	0	6	6

Table F.3 Aquatic Taxa Recovered From Fort Yamhill and Fort Hoskins

Element; Portion	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
Fish (<i>Osteichthyes</i>)						
Scale	-	-	-	1	-	-
<i>Total Fish (Osteichthyes)</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>1</i>	<i>0</i>	<i>0</i>
Oyster (<i>Ostrea lurida</i>)						
Half-Shell or Hinge	-	-	-	52	11	19
Clam (<i>P. staminea</i> / <i>Tresus</i> sp.)						
Half-Shell, Hinge or Fragment	-	-	-	1	-	13
<i>Total Oyster/Clam</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>53</i>	<i>11</i>	<i>32</i>
Total Aquatic Fauna	0	0	0	54	11	32

Table F.4 Nineteenth-Century Civilian and Military Butchery Cuts, Corresponding Skeletal Element, Preference Rankings and Preference Index Values and Preferred Cooking Method for Beef, Pork and Chicken (Based on Horton 2014:383-384)

Taxa	Mid-19 th Century Civilian Butchery Cut	Late-19 th Century Military Butchery Cut	Yield (lbs)	Corresponding Skeletal Element(s)	Rank	Index Value	Preferred Cooking Method
Beef	Leg	Leg	9.06	Distal Tibia; Tarsals; Proximal Metatarsal	L	2.00	Soup
	Mouse Buttock; Buttock; Veiny Piece; Thick Flank	Round	19.88	Femur Shaft and Distal Femur; Patella; Proximal Tibia and Shaft	H	7.00	A la mode, Corn, Soup
	Aitch; Edge Bone; H Bone	Rump	9.00	Ischium; Pubis; Acetabulum; Caudal Vertebrae; Proximal Femur	M	6.00	Corn, Soup
	Rump	Rump	14.44	Ilium; Sacral Vertebrae	H	8.00	A la mode, Corn, Soup
	Sirloin	Sirloin (Short Loin)	11.81	Lumbar Vertebrae	H	9.00	Roast
	Fore Rib; Middle Rib; Chuck Rib	Ribs (Best Ends); Rib (Middle); Rib (Chuck)	29.12	Thoracic Vertebrae; Proximal Ribs	H	8.00	Corn, Roast, Salt
	Neck; Sticking Piece	Chuck	7.56	Cervical Vertebrae	L	2.00	Mince, Soup
	Thin Flank; Brisket	Short Plate; Brisket	8.75	Distal Ribs; Sternum	L	3.00	A la mode, Corn, Salt
	Shoulder; Clod	Shoulder	8.38	Scapula; Proximal Humerus	M	5.00	Salt, Soup
	Shin; Fore-Knuckle	Foreshank	7.00	Distal Humerus; Ulna; Radius; Carpals; Proximal Metacarpals	L	2.00	Soup
	Foot	Foot	-	Distal Metapodials; Phalanges	L	1.00	Broth
	Cheek	Cheek	3.60	Maxillae; Mandible	L	1.00	Mince, Soup
	Head	Head	-	Cranium	L	2.00	Mince
	Pork	Leg	Ham	6.60	Sacrum; Innominate Bone; Femur; Proximal Tibia	H	7.00
Hind Loin; Fore Loin		Loins	20.60	Lumbar Vertebrae; Thoracic Vertebrae; Proximal Ribs	M	6.00	Roast
Spare Rib		Top of Neck (Butt)	3.00	Cervical Vertebrae; Scapula Blade	L	3.00	Roast
Belly/Spring		Side Meat/Bacon	20.90	Distal Ribs; Sternum	N/A	N/A	Smoke
Hand		Shoulder	3.00	Proximal Scapula; Proximal Humerus; Humerus Shaft	M	4.00	Boil, Corn, Smoke
Hand		Foreleg	3.70	Distal Humerus; Ulna; Radius	L	3.00	Corn, Boil
Foot		Feet	0.60	Carpals; Tarsals; Metapodials; Phalanges	L	1.00	Jelly, Souse
Head; Jowl		Head; Jowl	3.20	Cranium; Mandible	L	1.00	Broth, Mince
Chicken	Whole Bird	Whole Bird	3.00	All	H	8.00	Boil, Roast
	Egg	Egg	-	Shell	H	9.00	-

Table F.5 FYH1 Butchery Cut Preference Index Value Calculations by MNBC

Taxa	Butchery Cut	MNBC		Value		Product
Beef	Round	6	x	7.00	=	42.00
	Rump	2	x	6.00	=	12.00
	Ribs	6	x	6.00	=	36.00
	Shoulder	4	x	5.00	=	20.00
	Short Plate	2	x	3.00	=	3.00
	Subtotal	20		-		113.00
	Mean			$113.00 / 20 =$		5.65
Pork	Foreleg	3	x	3.00	=	9.00
	Subtotal	3	x	-		9.00
	Mean			$9.00 / 3 =$		3.00
Venison	Rump	4	x	6.00	=	24.00
	Ribs	1	x	6.00	=	6.00
	Shoulder	3	x	5.00	=	15.00
	Short Plate	1	x	3.00	=	3.00
	Leg	2	x	2.00	=	4.00
	Foreshank	1	x	2.00	=	2.00
	Foot	5	x	1.00	=	5.00
	Subtotal	17		-		59.00
	Mean			$59.00 / 17 =$		3.47
Poultry	Chicken Egg	2	x	9.00	=	18.00
	Chicken	1	x	8.00	=	8.00
	Subtotal	3		-		26.00
	Mean			$26.00 / 3 =$		8.66
All	Subtotal	43		-		207.00
	Mean			$207.00 / 43 =$		4.81

Table F.6 FYH2 Butchery Cut Preference Index Value Calculations by MNBC

Taxa	Butchery Cut	MNBC		Value		Product
Beef	Chuck	1	x	8.00	=	8.00
	Round	3	x	7.00	=	21.00
	Rump	1	x	6.00	=	6.00
	Ribs	4	x	6.00	=	24.00
	Short Plate	3	x	3.00	=	9.00
	Leg	1	x	2.00	=	2.00
	Foot	1	x	2.00	=	2.00
		Subtotal	16		-	
	Mean			$72.00 / 16 =$		4.50
Pork	Loin	2	x	6.00	=	12.00
	Shoulder	1	x	4.00	=	4.00
	Head/Jowl	1	x	1.00	=	1.00
	Side Meat/Bacon	4	x	N/A	=	N/A
	Subtotal	8	x	-		17.00
	Mean			$17.00 / 8 =$		2.12
Venison	Rump	7	x	6.00	=	42.00
	Ribs	5	x	6.00	=	30.00
	Shoulder	1	x	5.00	=	5.00
	Short Plate	4	x	3.00	=	12.00
	Leg	3	x	2.00	=	6.00
	Foreshank	3	x	2.00	=	6.00
	Foot	-	x	1.00	=	0.00
	Subtotal	23		-		101.00
	Mean			$101.00 / 2 =$		4.39
Poultry	Chicken	1	x	8.00	=	8.00
	Galliform Fowl	1	x	2.00	=	2.00
	Subtotal	2		-		10.00
	Mean			$10.00 / 2 =$		5.00
All	Subtotal	49		-		200.00
	Mean			$200.00 / 49 =$		4.08

Table F.7 FYH3 Butchery Cut Preference Index Value Calculations by MNBC

Taxa	Butchery Cut	MNBC		Value		Product
Beef	Sirloin	4	x	9.00	=	36.00
	Chuck	1	x	8.00	=	8.00
	Round	8	x	7.00	=	56.00
	Rump	5	x	6.00	=	30.00
	Ribs	4	x	6.00	=	24.00
	Shoulder	3	x	5.00	=	15.00
	Leg	1	x	2.00	=	2.00
	Foreshank	3	x	2.00	=	6.00
	Subtotal	29		-		177.00
	Mean			$177.00 / 29 =$		6.10
Pork	Loin	1	x	6.00	=	6.00
	Subtotal	1	x	-		6.00
	Mean			$6.00 / 1 =$		6.00
Venison	Round	6	x	7.00	=	42.00
	Rump	3	x	6.00	=	18.00
	Ribs	2	x	6.00	=	12.00
	Foreshank	3	x	2.00	=	6.00
	Subtotal	14		-		78.00
	Mean			$78.00 / 14 =$		5.57
Poultry	Chicken	1	x	8.00	=	8.00
	Subtotal	1		-		8.00
	Mean			$8.00 / 1 =$		8.00
All	Subtotal	45		-		269.00
	Mean			$269.00 / 45 =$		5.97

Table F.8 FHH1 Butchery Cut Preference Index Value Calculations by MNBC

Taxa	Butchery Cut	MNBC		Value		Product
Poultry	Chicken	1	x	8.00	=	8.00
	Subtotal	1		-		8.00
	Mean			$8.00 / 1 =$		8.00
Shellfish	Oyster	55	x	8.00	=	440.00
	Clam	1	x	2.00	=	2.00
	Subtotal	1		-		442.00
	Mean			$442.00 / 56 =$		7.89
All	Subtotal	57		-		450.00
	Mean			$450.00 / 57 =$		7.89

Table F.9 FHH2 Butchery Cut Preference Index Value Calculations by MNBC

Taxa	Butchery Cut	MNBC		Value		Product
Beef	Chuck	1	x	8.00	=	8.00
	Shoulder	2	x	5.00	=	10.00
		Subtotal	3		-	18.00
		Mean		$18.00 / 3 =$	6.00	
Pork	Loin	1	x	6.00	=	6.00
	Head/Jowl	1	x	1.00	=	1.00
		Subtotal	2	x	-	7.00
		Mean		$7.00 / 2 =$	3.50	
Venison	Leg	1	x	2.00	=	2.00
		Subtotal	1		-	2.00
		Mean		$2.00 / 1 =$	2.00	
Poultry	Chicken	4	x	8.00	=	32.00
	Anseriform	1	x	2.00	=	2.00
	Galliform	3	x	2.00	=	6.00
		Subtotal	8		-	40.00
	Mean		$40.00 / 8 =$	5.00		
Shellfish	Oyster	11	x	8.00	=	88.00
		Subtotal	11		-	88.00
		Mean		$88.00 / 11 =$	8.00	
All		Subtotal	25		-	155.00
		Mean		$155.00 / 25 =$	6.20	

Table F.10 FHH3 Butchery Cut Preference Index Value Calculations by MNBC

Taxa	Butchery Cut	MNBC		Value		Product
Beef	Sirloin	7	x	9.00	=	63.00
	Round	1	x	7.00	=	7.00
	Ribs	1	x	6.00	=	6.00
	Leg	2	x	2.00	=	4.00
	Foreshank	2	x	2.00	=	4.00
	Foot	2	x	2.00	=	4.00
		Subtotal	15		-	88.00
		Mean		$88.00 / 15 =$	5.86	
Pork	Head/Jowl	1	x	1.00	=	1.00
		Subtotal	1	x	-	1.00
		Mean		$1.00 / 1 =$	1.00	
Venison	Round	1	x	7.00	=	7.00
	Rump	3	X	6.00	=	18.00
	Leg	1	x	2.00	=	2.00
	Foreshank	1	x	2.00	=	2.00
		Subtotal	6		-	29.00
	Mean		$29.00 / 6 =$	4.83		
Poultry	Chicken	3	x	8.00	=	24.00
		Subtotal	3		-	24.00
		Mean		$24.00 / 3 =$	8.00	
Shellfish	Oyster	19	x	8.00	=	152.00
	Clam	14	x	2.00	=	28.00
		Subtotal	33		-	180.00
		Mean		$180.00 / 33 =$	5.45	
All		Subtotal	26		-	150.00
		Mean		$150.00 / 26 =$	5.76	

Table F.11 FYH1 Estimated Meat Yields (Lbs) for Beef and Pork

Taxa	Butchery Cut	MNBC		Yield		Product
Beef	Round	6	x	19.88	=	119.28
	Rump	2	x	9.00	=	18.00
	Ribs	6	x	19.12	=	114.72
	Shoulder	4	x	8.38	=	33.52
	Short Plate	2	x	8.75	=	17.50
	Beef Total	20		-		303.02
Pork	Foreleg	3	x	3.70	=	11.10
	Pork Total	3		-		11.10
Combined	Totals	23		-		314.12

Table F.12 FYH2 Estimated Meat Yields (Lbs) for Beef and Pork

Taxa	Butchery Cut	MNBC		Yield		Product
Beef	Chuck	1	x	7.56	=	7.56
	Round	3	x	19.88	=	59.64
	Rump	1	x	14.44	=	14.44
	Ribs	4	x	19.12	=	76.48
	Short Plate	3	x	8.75	=	26.25
	Leg	1	x	9.06	=	9.06
	Foot	1	x	0.00	=	0.00
	Beef Total	16		-		193.43
Pork	Loin	2	x	20.60	=	41.20
	Shoulder	1	x	3.00	=	3.00
	Head/Jowl	1	x	3.20	=	3.20
	Side Meat/Bacon	4	x	20.90	=	83.60
	Pork Total	8	x	-		131.00
Combined	Totals	24		-		324.43

Table F.13 FYH3 Estimated Meat Yields (Lbs) for Beef and Pork

Taxa	Butchery Cut	MNBC		Yield		Product
Beef	Sirloin	4	x	11.81	=	47.24
	Chuck	1	x	7.56	=	7.56
	Round	8	x	19.88	=	159.04
	Rump	5	x	14.44	=	72.20
	Ribs	4	x	19.12	=	76.48
	Shoulder	3	x	8.38	=	25.14
	Leg	1	x	9.06	=	9.06
	Foreshank	3	x	7.00	=	21.00
	Beef Total	29		-		417.72
Pork	Loin	1	x	20.60	=	20.60
	Pork Total	1	x	-		20.60
Combined	Totals	30		-		438.32

Table F.14 FHH2 Estimated Meat Yields (Lbs) for Beef and Pork

Taxa	Butchery Cut	MNBC		Yield		Product
Beef	Chuck	1	x	7.56	=	7.56
	Shoulder	2	x	8.38	=	16.76
	Beef Total	3		-		24.32
Pork	Loin	1	x	20.60	=	20.06
	Head/Jowl	1	x	3.20	=	3.20
	Pork Total	2	x	-		23.26
Combined	Totals	10		-		47.58

Table F.15 FHH3 Estimated Meat Yields (Lbs) for Beef and Pork

Taxa	Butchery Cut	MNBC		Yield	=	Product
Beef	Sirloin	7	x	11.81	=	82.67
	Round	1	x	19.88	=	19.88
	Ribs	1	x	19.12	=	19.12
	Leg	2	x	9.06	=	18.12
	Foreshank	2	x	7.00	=	14.00
	Foot	2	x	0.00	=	0.00
	Beef Total	15		-		153.79
Pork	Head/Jowl	1	x	3.20	=	3.20
	Pork Total	1	x	-	=	3.20
Combined	Totals	16		-		156.99

Table F.16 FYH1 Estimated Cost of Beef and Pork Based on Estimated Meat Yields

Taxa	Total Yields (Lbs)		Cost Per Pound	=	Total Cost
Beef	303.00	x	0.08	=	24.24
Pork	11.10	x	0.10	=	1.11
Combined	314.10		-		25.35

Table F.17 FYH2 Estimated Cost of Beef and Pork Based on Estimated Meat Yields

Taxa	Total Yields (Lbs)		Cost Per Pound	=	Total Cost
Beef	193.43	x	0.08	=	15.47
Pork	131.00	x	0.10	=	13.10
Combined	324.43		-		28.57

Table F.18 FYH3 Estimated Cost of Beef and Pork Based on Estimated Meat Yields

Taxa	Total Yields (Lbs)		Cost Per Pound	=	Total Cost
Beef	417.72	x	0.08	=	33.41
Pork	20.60	x	0.10	=	2.06
Combined	438.32		-		35.47

Table F.19 FHH2 Estimated Cost of Beef and Pork Based on Estimated Meat Yields

Taxa	Total Yields (Lbs)		Cost Per Pound	=	Total Cost
Beef	24.32	x	0.08	=	1.94
Pork	23.26	x	0.10	=	2.33
Combined	47.58		-		4.27

Table F.20 FHH3 Estimated Cost of Beef and Pork Based on Estimated Meat Yields

Taxa	Total Yields (Lbs)		Cost Per Pound	=	Total Cost
Beef	153.80	x	0.08	=	12.30
Pork	3.20	x	0.10	=	0.32
Combined	157.00		-		12.62

Table F.21 FYH1 Butchery Cut Preference Index Value Calculations by Meat Yield

Taxa	Butchery Cut	Pounds		Value		Product
Beef	Round	119.28	x	7.00	=	834.96
	Rump	18.00	x	6.00	=	108.00
	Ribs	114.72	x	6.00	=	688.32
	Shoulder	33.52	x	5.00	=	167.60
	Short Plate	17.50	x	3.00	=	52.50
	Subtotal	303.02		-		1851.38
	Mean	1851.38 / 303.02 =		6.11		
Pork	Foreleg	11.10	x	3.00	=	33.30
	Subtotal	11.10	x	-		33.30
	Mean	33.30 / 11.10 =		3.00		
All	Subtotal	314.12		-		207.00
	Mean	1884.68 / 314.12 =		5.99		

Table F.22 FYH2 Butchery Cut Preference Index Value Calculations by Meat Yield

Taxa	Butchery Cut	Pounds		Value		Product
Beef	Chuck	7.56	x	8.00	=	60.48
	Round	59.64	x	7.00	=	417.48
	Rump	14.44	x	6.00	=	86.64
	Ribs	76.48	x	6.00	=	458.88
	Short Plate	26.25	x	3.00	=	78.75
	Leg	9.06	x	2.00	=	18.12
	Subtotal	193.43		-		1120.35
	Mean	1120.35 / 193.43 =		5.79		
Pork	Loin	41.20	x	6.00	=	247.20
	Shoulder	3.00	x	4.00	=	12.00
	Head/Jowl	3.20	x	1.00	=	3.20
	Side Meat/Bacon	83.60	x	N/A	=	N/A
	Subtotal	47.40	x	-		262.40
	Mean	262.40 / 47.40 =		5.54		
All	Subtotal	240.83		-		1382.75
	Mean	1382.75 / 240.83 =		5.74		

Table F.23 FYH3 Butchery Cut Preference Index Value Calculations by Meat Yield

Taxa	Butchery Cut	Pounds		Value		Product
Beef	Sirloin	47.24	x	9.00	=	425.16
	Chuck	7.56	x	8.00	=	60.48
	Round	159.04	x	7.00	=	1113.28
	Rump	72.20	x	6.00	=	433.20
	Ribs	76.48	x	6.00	=	458.88
	Shoulder	25.14	x	5.00	=	125.70
	Leg	9.06	x	2.00	=	18.12
	Foreshank	21.00	x	2.00	=	42.00
	Subtotal	417.72		-		2676.82
	Mean	2676.82 / 417.72 =		6.41		
Pork	Loin	20.60	x	6.00	=	123.60
	Subtotal	20.60	x	-		123.60
	Mean	123.60 / 20.60 =		6.00		
All	Subtotal	438.32		-		2800.42
	Mean	2800.42 / 438.32 =		6.39		

Table F.24 FHH2 Butchery Cut Preference Index Value Calculations by Meat Yield

Taxa	Butchery Cut	Pounds		Value		Product
Beef	Chuck	7.56	x	8.00	=	60.48
	Shoulder	16.76	x	5.00	=	83.80
		Subtotal		24.32		-
		Mean		144.28 / 24.32 =		5.93
Pork	Loin	20.60	x	6.00	=	123.60
	Head/Jowl	3.20	x	1.00	=	3.20
		Subtotal		23.80		-
		Mean		126.80 / 23.80 =		5.19
All		Subtotal		48.12		-
		Mean		271.08 / 48.12 =		5.63

Table F.25 FHH3 Butchery Cut Preference Index Value Calculations by Meat Yield

Taxa	Butchery Cut	MNBC		Value		Product
Beef	Sirloin	82.67	x	9.00	=	744.03
	Round	19.88	x	7.00	=	139.16
	Ribs	19.12	x	6.00	=	114.72
	Leg	18.12	x	2.00	=	36.24
	Foreshank	14.00	x	2.00	=	28.00
		Subtotal		153.79		-
		Mean		1062.15 / 153.79 =		6.91
Pork	Head/Jowl	3.20	x	1.00	=	3.20
		Subtotal		3.20		-
		Mean		3.20 / 3.20 =		1.00
All		Subtotal		156.99		-
		Mean		1065.35 / 156.99 =		6.78

APPENDIX G: HIGH STATUS ARTIFACT CLASSIFICATIONS

In this appendix you will find the classification scheme used to identify the 238 high status artifacts used in this study. In general “higher status” artifacts were identified as such relative to “lower status” artifacts within the same artifact Group, Class, Type and Category. The status of an individual artifact was determined on several factors including the relative cost of the artifact, the relative value of the artifact or relative preference of the artifact over another artifact within the same category. High status artifacts were not identified within all artifact Classes, Types or Categories, therefore only those Classes, Types or Categories where “high status” artifacts were identified are listed below (Table G.1).

Table G.1 High Status Artifacts Recovered From Fort Yamhill and Fort Hoskins

Class	Type	Artifact	FYH1	FYH2	FYH3	FHH1	FHH2	FHH3
Domestic Artifact Group								
Housewares	Lighting	Porcelain Chamberstick	-	-	-	1	-	-
Gustatory	Glassware	Cut Glass Vessel	2	1	-	2	2	-
		Ceramics	Porcelain Vessel	14	2	1	35	5
			Gilded Vessel	4	-	-	3	-
Foodstuffs	Faunal Remains	Transfer-Printed Vessel	4	1	1	5	1	1
		Pig (Pork)	3	8	1	-	2	1
		Chicken (Poultry)	3	1	1	1	4	3
		Oysters	-	-	-	55	11	19
Maintenance	Sewing	Silver Thimble	-	-	-	1	-	-
Military Artifact Group								
Arms and Ammunition	Projectile	.28 Cal. Conical Bullet	-	-	-	1	-	-
		.36 Cal. Conical Bullet	1	-	-	-	-	-
Personal Artifact Group								
Indulgences	Alcohol	Champagne Bottle	4	2	2	4	2	1
	Non-Alcohol	Gasogene/Siphon	-	-	-	1	-	-
	Tobacco	Porcelain Pipe	1	-	-	-	-	-
Adornment	Button	Gilded Button	7	-	1	1	-	1
	Jewelry	Silver Ring	1	-	-	-	-	-
Administration	Office Supplies	Gilded Ink Pen	-	-	-	1	-	-
		Porcelain Ink Pot	1	-	-	-	-	-
Recreation	Toys	Glass Marble	2	-	-	3	-	-
Total			47	15	7	114	27	28

Domestic Group Artifacts

A total of 201 high status domestic artifacts were identified in the artifacts assemblages recovered from FYH1 (n=30), FYH2 (n=13), FYH3 (n=4), FHH1 (n=103), FHH2 (n=25) and FHH3 (n=26). These 201 high status artifacts are represented in four domestic artifact classes: Housewares, Gustatory, Foodstuffs and Home Maintenance.

Housewares Class Artifacts

One high status houseware artifact was identified in the domestic artifact assemblages recovered from FHH1 and are represented in one houseware artifact type: Lighting Appliances.

Lighting Appliances. One high status lighting appliance was identified in the artifact assemblage recovered from FHH1. The single high status lighting appliance is represented by a chamber stick made of porcelain which would have been considered more expensive and therefore higher status than chamber sticks made of brass, pewter or iron.

Gustatory Artifact Class Artifacts

Eighty-six high status gustatory artifacts were identified in the domestic artifact assemblages recovered from FYH1 (n=24), FYH2 (n=4), FYH3 (n=2), FHH1 (n=45), FHH2 (n=8) and FHH3 (n=3) and are represented in two houseware artifact types: Glassware Vessels and Ceramicware Vessels.

Glassware Vessels. Seven high status glassware vessels were identified in the artifacts assemblages recovered from FYH1 (n=2), FYH2 (n=1), FHH1 (n=2) and FHH2 (n=2). All of the high status glassware vessels are represented by glass drinkware vessels decorated with cut glass patterns which were considered to be more expensive and therefore of higher status than glassware vessels decorated with pressed glass patterns or plain patterns (Jones 2000; Revi 1973).

Ceramicware Vessels. Seventy-nine high status ceramicware vessels were identified in the artifact assemblages recovered from FYH1 (n=22), FYH2 (n=3), FYH3 (n=2), FHH1 (n=43), FHH2 (n=6) and FHH3 (n=3). Fifty-nine (FYH1=14, FYH2=2, FYH3=1, FHH1=35, FHH2=5 and FHH3=2) of the high status ceramicware vessels were represented by gustatory vessel made of porcelain which would have been considered a higher status ceramicware vessel than those made of ironstone, whiteware or yellowware (Miller 1980, 1991). Seven (FYH1=4 and FHH1=3) of the high status ceramicware vessels were gilded and thirteen (FYH1=4, FYH2=1, FYH3=1, FHH1=5, FHH2=1 and FHH3=1) of the high status ceramicware vessels were decorated with transfer-printed patterns. Both gilded and transfer-printed decorated vessels were considered to be more expensive and therefore of higher status than hand-painted, edged, annular/banded, sponge decorated, molded and plain ceramicware vessels (Miller 1980, 1991).

Foodstuffs Class Artifacts

One hundred and thirteen high status foodstuff items were identified in the artifacts assemblages recovered from FYH1 (n=6), FYH2 (n=9), FYH3 (n=2), FHH1 (n=56), FHH2 (n=17) and FHH3 (n=23) and are represented in a single foodstuff artifact type: Faunal Remains.

Faunal Remains. One hundred and thirteen high status faunal remains were identified in the artifact assemblages recovered from FYH1 (n=6), FYH2 (n=9), FYH3 (n=2), FHH1 (n=56), FHH2 (n=15) and FHH3 (n=23). Fifteen (FYH1=3, FYH2=8, FYH3=1, FHH2=2 and FHH3=1) of the high status faunal remains were represented by butchery cuts of pork (pig) and since pork was more expensive than beef or deer it would have been considered a high status food item (FHSAB 1862). Thirteen (FYH1=3, FYH2=1, FYH3=1, FHH1=1, FHH2=4 and FHH3=3) of the high status faunal remains were represented by butcher cuts of poultry (chicken) which was considered a higher preference meat cut than beef, pork or mutton and therefore was considered a higher status food item (Horton 2014:383-384). Eighty-five (FHH1=55, FHH2=11 and FHH3=19) of the high status faunal remains were represented by oysters which were “held in high esteem” and was a fancy food of choice for commissioned officers (Adams 2009: 112, 114).

Home Maintenance Class Artifacts

One high status home maintenance items were identified in the artifacts assemblages recovered from FHH1 and is represented in a single home maintenance artifact type: Sewing Implements.

Sewing Implements. One high status sewing implement was identified in the artifact assemblages recovered from FHH1. One of the high status sewing implements recovered from FHH1 is represented by a silver thimble which would have been considered higher status than brass and iron thimbles recovered from the other commissioned officers’ quarters (Beaudry 2006:106).

Military Group Artifacts

Two high status military group items were identified in the artifact assemblage recovered from FYH1 (n=1) FHH1 (n=1) and are represented in a single military group artifact class: Arms and Ammunition.

Arms and Ammunition Class Artifacts

Two high status arms and ammunition item was identified in the artifact assemblage recovered from FYH1 (n=1) and FHH1 (n=1) and are represented in a single arms and ammunition artifact type: Projectiles.

Projectiles. Two high status projectiles were identified in the artifact assemblage recovered from FYH1 (n=1) and FHH1 (n=1). One higher status projectile recovered from FYH1 is represented by a .36 caliber conical bullet. One

high status projectile recovered from FHH1 is represented by a .28 caliber conical bullet. Conical bullets during the middle of the 19th century, were still a relatively new projectile form compared to the much more common round “ball” projectile. The conical bullet would have represented the most up to date military projectile technology of the time and therefore would have been considered more desirable and of a higher status than the older round ball projectile technology used at the time (Adams 2009:221n36; Thomas and Thomas 1996:6).

Personal Group Artifacts

Thirty-five high status personal group items were identified in the artifact assemblages recovered from FYH1 (n=16), FYH2 (n=2), FYH3 (n=3), FHH1 (n=10), FHH2 (n=2) and FHH3 (n=1) and are represented in four personal group artifact classes: Indulgences, Adornment, Administration and Recreation.

Indulgence Class Artifacts

Seventeen high status indulgence class items were identified in the artifact assemblages recovered from FYH1 (n=5), FYH2 (n=2), FYH3 (n=2), FHH1 (n=5), FHH2 (n=2) and FHH3 (n=1) and are represented in two indulgence class artifact types: Alcohol Bottles, Non-Alcoholic Beverage Bottles and Tobacco Pipes.

Alcohol Bottles. Sixteen high status alcohol bottles were identified in the artifact assemblages recovered from FYH1 (n=4), FYH2 (n=2), FYH3 (n=2), FHH1 (n=5), FHH2 (n=2) and FHH3 (n=1). All of the high status alcohol bottles recovered are represented by champagne bottles which was considered to contain higher status and favored over other alcohols such as wine, brandy, whiskey, ale, stout and porter by commissioned officers (Adams 2009:119).

Non-Alcoholic Beverage Bottle. One high status non-alcoholic beverage bottle was identified in the assemblage recovered from FHH1. The single high status non-alcoholic beverage bottle recovered from FHH1 is a gasogene/siphon bottle which would have been considered higher status than the more common glass carbonated beverage bottles recovered from the other commissioned officers’ quarters (Lindsey 2014; Odell 2004).

Tobacco Pipes. One high status tobacco pipe was identified in the artifact assemblage recovered from FYH1. The single high status tobacco pipe recovered from FYH1 is a porcelain pipe which would have been considered of higher status than the more common earthenware tobacco pipes recovered from all of the commissioned officers’ quarters (Bradley 2000:121).

Adornment Class Artifacts

Eleven high status adornment class items were identified in the artifact assemblages recovered from FYH1 (n=8), FYH3 (n=1), FHH1 (n=1) and FHH3 (n=1) and are represented by two adornment class artifact types: Buttons and Jewelry.

Buttons. Ten high status buttons were identified in the artifact assemblages recovered from FYH1 (n=7), FYH3 (n=1), FHH1 (n=1) and FHH3 (n=1). All of the high status buttons are represented by gilded brass buttons stamped and/or chased with various designs. All of the gilded buttons would have been considered of higher status than non-gilded brass, glass, ceramic, fabric, iron, leather, mineral, bone, hard rubber, shell, pewter and prosser buttons recovered from all of the commissioned officers' quarters (Luscomb 1962:17, 89, 106, 163, 220; White 2005:65).

Jewelry. One high status jewelry item was identified in the artifact assemblage recovered from FYH1. The single high status jewelry item recovered from FYH1 is a silver finger ring which would have been considered to have been of higher status than the brass and hard rubber finger rings recovered from the other commissioned officers' quarters (White 2005:93).

Administration Class Artifacts

Two high status administration class items were identified in the artifact assemblages recovered from FYH1 (n=1) and FHH1 (n=1) and are represented by a single administration class artifact type: Office Supplies.

Office Supplies. Two high status office supply items were identified in the artifact assemblages recovered from FYH1 (n=1) and FHH1 (n=1). The single high status office supply item recovered from FYH1 is a French made porcelain ink pot which would have been considered to be a higher status item than the cheaper stoneware and glass ink bottles recovered from the other officers' quarters at Fort Yamhill (Badders 1998a:8, 1998b:35; Jaegers and Jaegers 2000:18; Jones and Sullivan 1989:90; Rivera and Rivera 1973:153). The single high status item recovered from FHH1 is an iridium-tipped and gold plated ink pen nib which would have been considered to be a higher status item than the cheaper iron pen nibs recovered from the other officers' quarters (David 2012, 2016).

Recreation Class Artifacts

Five high status recreational class items were identified in the artifact assemblage recovered from FYH1 (n=2) and FHH1 (n=3) and are represented by a single recreational class artifact type: Toys.

Toys. Five high status toys were identified in the artifact assemblages recovered from FYH1 (n=2) and FHH1 (n=3). All of the high status toys are represented by glass marbles which would have been considered to be a higher status item than the cheaper and less desirable porcelain and crockery marbles recovered from the other officers' quarters (Baumann 1970:30, 66).