

University of Massachusetts Boston

ScholarWorks at UMass Boston

Anthropology, Historical Archaeology Masters
Theses Collection

Anthropology

8-2011

Urban Consumption in Late 19th-Century Dorchester

Jennifer Poulsen

University of Massachusetts Boston, jen.poulsen2@gmail.com

Follow this and additional works at: https://scholarworks.umb.edu/anthro_histarch_theses



Part of the [American Studies Commons](#), [Archaeological Anthropology Commons](#), and the [United States History Commons](#)

Recommended Citation

Poulsen, Jennifer, "Urban Consumption in Late 19th-Century Dorchester" (2011). *Anthropology, Historical Archaeology Masters Theses Collection*. 1.

https://scholarworks.umb.edu/anthro_histarch_theses/1

This Open Access Thesis is brought to you for free and open access by the Anthropology at ScholarWorks at UMass Boston. It has been accepted for inclusion in Anthropology, Historical Archaeology Masters Theses Collection by an authorized administrator of ScholarWorks at UMass Boston. For more information, please contact scholarworks@umb.edu.

URBAN CONSUMPTION IN LATE 19TH-CENTURY DORCHESTER

A Thesis Presented

by

JENNIFER POULSEN

Submitted to the Office of Graduate Studies,
University of Massachusetts Boston,
in partial fulfillment of the requirements for the degree of

MASTERS OF ARTS

August 2011

Historical Archaeology Program

© 2011 by Jennifer Poulsen
All rights reserved

URBAN CONSUMPTION IN LATE 19TH-CENTURY DORCHESTER

A Thesis Presented

by

JENNIFER POULSEN

Approved as to style and content by:

Christa M. Beranek, Research Archaeologist
Chairperson of Committee

Stephen Mrozowski, Professor
Member

Ellen Berkland, Senior Archaeologist, DCR
Member

Stephen Silliman, Program Director
Historical Archaeology Program

Judith Zeitlin, Chairperson
Department of Anthropology

ABSTRACT

URBAN CONSUMPTION IN LATE 19TH-CENTURY DORCHESTER

August 2011

Jennifer Poulsen, B.A., Boston University
M.A., University of Massachusetts Boston

Directed by Research Archaeologist Christa M. Beranek

This thesis examines the bottles recovered from an 1895 fill deposit at the Blake House site in Dorchester, MA, to determine what inconspicuous consumption reveals about the anonymous consumers of Dorchester in the late 19th century. The assemblage is composed of 1,892 pieces of bottle glass, representing food, alcohol, medicine, and household products, 73 with original paper labels. The analysis presented here demonstrates the consumers were from several households and included men, women and children from immigrant populations. Despite evidence for intensive recycling of bottles, indicating that these individuals were under economic stress, they had some amount of discretionary money to purchase non-essential goods, and their health was stable. The bottles indicate that these consumers were literate, influenced by advertisements and connections to downtown Boston. Understanding consumption patterns of these residents helps to gain insight into who they were, how they perceived themselves, and their experiences in their new urban environment.

ACKNOWLEDGEMENTS

I would like to thank my friends and family for their support throughout this process. Thanks also for the guidance of my committee: Christa Beranek, Steve Mrozowski, and Ellen Berkland. I could not have done this project without the kindness of Ellen Berkland, who generously opened up her house and archaeological collection to give me the chance to work on this project.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	v
LIST OF FIGURES	viii
LIST OF TABLES	x
CHAPTER	Page
1. INTRODUCTION	1
2. BACKGROUND	8
The James Blake House	8
A New Home for the Blake House	10
Changes in Dorchester	13
Richardson Park	15
The Filling of Great Pond	21
The Assemblage	27
3. HISTORIC TRENDS IN URBAN CONSUMER PREFERENCE	29
A Shift to Bottled Food	29
Alcohol Consumption	30
Proprietary Medicine and Its Advertising	32
The Impact of Proprietary Medicine on Bottle Diversification	36
4. METHODS	39
Documentary and Locational Evidence for Origin of Fill	39
Bottle Manufacturing Techniques	41
Blake House Bottle Cataloging, Identification, and Documentation	44

CHAPTER	Page
5. ANALYSIS.....	53
Descriptive Statistics.....	53
The Blake House Bottle Collection Dating	56
Bottle Locational Information.....	59
Manufacture-Deposition Lag Analysis	66
Bottle Function, Recycling, and Reuse.....	69
Patterns of Medicine Use from the Blake House Bottle Collection	73
6. DISCUSSION OF URBAN CONSUMPTION PATTERNS AT THE BLAKE HOUSE SITE	76
Consumer Behavior as the Study of Material Culture	76
Advertising Self Perception	81
Multiple Interpretations of Value.....	89
Consumers' Reasons for Choosing.....	90
7. THE INTEGRATION OF CONSUMER BEHAVIOR IN MODERN ARCHAEOLOGICAL STUDIES	94
The Blake House Site Consumer	95
APPENDIX	
1. BLAKE HOUSE BOTTLE CATALOG.....	103
2. PHOTODOCUMENTATION FOR PRESERVED PAPER LABELS.....	126
REFERENCES.....	160

LIST OF FIGURES

Figure	Page
1. Blake House as seen by Google Street View in 2007. Note Blake House in background and covered Trench 1 excavations in front yard	3
2. The Blake House as it appeared on its original site just prior to being moved in 1895	9
3. Reconstruction of 17th Century Dorchester Map based on Zurawski and Whitney 1979.....	17
4. Approximate boundary of proposed "Cradle of American Freedom" area	19
5. Oxen moving a home in Portland, ME circa 1892. Copyright Maine Historical Society.....	20
6. GPR survey results with pond outline and location of Trench 1 (Gontz, 2007)	21
7. Volunteers excavating Trench 1 at the Blake House site	22
8. South wall profile of Trench 1	24
9. Exceptional preservation examples including (clockwise from upper left) peanut shells, a womans wallet, dominoe, burnt match, and leather and cloth clothing fragments	28
10. Bottle diagram (Jones et Al. 1989)	42
11. Bovine Bottle (#0432) showing enhanced (left) and unenhanced paper label (right).....	49
12. Bovine Bottle (#0432) showing enhanced (left) and unenhanced paper label (right).....	50
13. BG#0057 with embossed "John F. Neill"	58
14. GIS map depicting known apothecaries in Boston, and locations that occur in the bottle collection.....	60

Figure	Page
15. Apothecaries in the vicinity of the Blake House.....	61
16. November 1895 Dorchester Beacon advertisement for A. A. Burnham pharmacist.....	83
17. Bottle BG#0423 with partially preserved label indicating it originated from the A. A. Burnham Pharmacist	83
18. November 1895 Dorchester Beacon advertisement for Scotts Emulsion	84
19. BG#0221 with Scotts Emulsion embossing.....	84
20. November 1895 Dorchester Beacon advertisement for Ayers Sarsaparilla.....	85
21. Ayer's Sarsaparilla embossed bottle (BG#0070)	85
22. Lazell's perfume card	86
23. BG#0081 Lazells Perfume bottle.....	86
24. Barta Press, Boston Advertisement for Metcalf's Water White Vanilla.....	87
25. BG#0361 Water White Vanilla bottle from Blake House collection	87
26. Advertisement for Bovinine.....	88
27. Bovinine bottle (BG#0432) from Blake House collection	88
28. Digital reconstruction of polish bottle from BG#0356 and 0395 showing German text.....	96
29. Digital enhancement of BG#0291 showing French and Spanish text on Pitcher's Castoria label.....	97
30. Religious medal from Blake House excavations	98

LIST OF TABLES

Table	Page
1. Manufacturing Techniques found at the Blake House site including dates and descriptions.....	44
2. Fike finishes, with count and percentage of Blake House bottles per category	55
3. Fike Base types, with count and percentage of Blake House bottles.....	56
4. Bottle type/function, counts, and overall percentage	56
5. Products from bottles found at the Blake House Site.....	56
6. Bottle Manufacture location and percentage.....	59
7. Counts of bottles based on functional categories defined by Hill (1982) and calculated lag time in years.....	67
8. Medicines and their advertised treatments found in the Blake House bottle collection.....	74

CHAPTER 1

INTRODUCTION

Archaeological analysis of consumer behavior has been traditionally limited to certain classes of conspicuously used artifacts; however the consumer behavior approach can be applied to a broader range of material goods. This thesis will examine the bottles recovered from an 1895 fill deposit at the Blake House site in Dorchester, MA, to determine what inconspicuous consumption reveals about the anonymous consumers of Dorchester in the late 19th century. The study of inconspicuous consumption in consumer behavior dissolves this anonymity allowing for an understanding of the detailed lives and daily concerns of this working class urban population.

Consumer behavior is the study of the decisions and behaviors related to people buying and using goods and services (Walters 1978:8). It is studied as part of the discipline of marketing in order to understand the complex decision and motivations of consumers in order to generate better goods (Walters 1978:5). The essential concern is not what a consumer buys, but why they made the decisions in that particular way (Walters 1978:13).

Though it is utilized for market research, the study of consumer behavior is interdisciplinary and draws from economics, sociology, psychology, and anthropology (Henry 1991:3). Originally considered a branch of economics, consumer behavior analysis draws on the sociological concern with group interaction, human motivation, and population studies (Walters 1978:29). Psychology is used to better understand ideas of perception and personal motivations for behavior (Walters 1978:28). Finally, anthropology offers an explanation for cultural standards and the role they play in consumer choice (Walters 1978:31-32).

Archaeologists have used a consumer behavior approach as a means to study socioeconomic status, favoring quantitative analysis over a qualitative analysis that would interpret symbolic values of consumer choice (Cook 1996:50). Archaeologists have emphasized large scale group social interaction in order to study socioeconomic status and class. This puts an emphasis on goods that were purchased primarily as objects of display, such as ceramics and glass tablewares. In terms of consumer behavior, this is referred to as items of “conspicuous consumption,” an idea introduced by Thorstein Veblen in 1899 to denote material goods that are used as a social display of wealth (Cook 1996:60).

A consumer behavior approach can be used, however, on archaeological goods that do not represent conspicuous consumption. Bottles recovered from archaeological sites from the late 19th century can give archaeologists great insight into urban consumption patterns because they are resilient in the archaeological record and are present in great

numbers during the late 19th century. The Great Pond fill from the Blake House site in Dorchester, MA, (figure 1) contains 1,892 pieces of bottle glass, representing food, alcohol, medicine, and household products, 73 with original paper labels, and thus will be instrumental in assessing the feasibility of a consumer behavior study focusing exclusively on bottles.

In order to determine who the consumers of these bottles were, it is necessary to first establish where the fill came from and when it was deposited. According to the analysis and research presented in this thesis, in the winter of 1895-1896, the Great Pond in Dorchester, MA, was filled in preparation for the moving of the James Blake House (constructed in 1661) to its current location in Richardson Park.



Figure 1- Blake House as seen by Google Street View in 2007. Note Blake House in background and covered Trench 1 excavations in front yard

In 2007 an archaeological excavation was conducted in front of the James Blake House in order to answer questions about the date of the filling episode. The excavation was conducted in coordination with volunteer workers from the community and led by Ellen Berkland, then City Archaeologist of Boston and the caretaker for the Blake House. In preparation for the work, a ground penetrating radar (GPR) survey was conducted on the front yard of the Blake House, to confirm the presence of Great Pond in that location. In total, a 4 x 1 meter trench was excavated on the edge of the pond as located by the GPR survey. The resulting archaeological collection represents fill deposits of the Great Pond overlaying a shell midden and natural soils.

Tens of thousands of artifacts were recovered from the four square meters of excavated fill. These included late 19th century ceramics, glass, metal, and well preserved organics including leather and fabric. Of particular note were the hundreds of broken and complete bottles. Preservation at the site was exceptional because the material culture had been kept constantly waterlogged from the presence of the pond. This thesis focuses on the bottle glass from L6 representing the filling of the Great Pond.

Late 19th-century Dorchester was experiencing an increase in urbanization due to growing numbers of immigrants. The rise of urbanization and industrialization meant that these populations had to rely on purchased goods. The trash deposits appear to be from these residents and thus allow for an understanding of their consumption patterns and give insight into who they were and how they managed their daily lives. Food, medicinal, and household bottles will all be considered because during the time period of interest these were all selected as consumer goods. These people were influenced by the

burgeoning marketing and consumer culture and their needs and desires for these products. In addition, the rise of industrialism presented the consumer numerous mass produced options demanding the consumer to make choices between products. How do choices they made in their purchases reflect who they were and their experiences in Dorchester?

This thesis begins with an overview of the movement to preserve and relocate the Blake House to Richardson Park in order to establish where the fill came from and when it was deposited. Chapter 3 is an overview of historic trends in bottle consumption in the 19th century, focusing on food, alcohol, and medicinal uses of bottles. Methods and cataloging are discussed in detail in Chapter 4, including cataloging bottle attributes, digital photographic manipulation of labels, and primary research. Chapter 5 continues with a discussion of the 1,019 bottle fragments from level L6 of the Blake House site. The discussion presented here will address manufacture-deposition lag of the bottle collection and recycling of bottles within the collection as a means to differentiate consumer choice and selective bottle deposition. Chapter 6 will provide a framework for how archaeologists can use consumer behavior in their studies of material culture. Finally, Chapter 7 will combine this information to interpret the collection in terms of the Blake House consumer.

Using bottles to look at personal consumption choices demonstrates the utility of taking a consumer behavior approach on archaeological goods that do not represent conspicuous consumption. By accounting for the disparate factors that come together to influence an individual's purchase decision, archaeologists work in reverse to reconstruct

the individual. Because culture impacts every aspect of consumer behavior, establishing norms for clothes, foods, and gifts (Walters 1978:451-462), archaeologists can reconstruct this culture through careful analysis of these goods.

Broadly defined, conspicuous consumption represents an expression of how people want to be perceived by others. Items of inconspicuous consumption do not reflect how people want to be perceived, but rather how they perceive themselves. Inconspicuous consumption has become a topic of discussion in historical archaeology; however some have distilled its value as a reflection of the consumer's identity without the influence of outside forces (Smith 2007:414). This paper will demonstrate that not only is inconspicuous consumption directly influenced by a myriad of outside forces including advertising, marketing, and social reference groups, but also that these influences give archaeologists greater insight into consumer self-perception and behavior.

The bottle collection from the Blake House site represents a time when Dorchester was going through a population change, and the urban immigrants who were newly living in the neighborhood are not well characterized by historic records. The analysis presented here demonstrates the consumers represented by the fill deposit were from several households residing in Dorchester in 1895. These include men, women and children from immigrant populations such as Irish Catholics, Germans, and Spaniards. Despite evidence for intensive recycling of bottles indicating that these individuals were under economic stress, they had some amount of discretionary money to purchase non-essential goods, and their health was stable. The bottles indicate that these consumers were literate, influenced by advertisements, and though they lived in an outlying

neighborhood they still had connections to downtown Boston. Understanding consumption patterns of these new residents helps to gain insight into who they were and how they managed their daily lives. The choices they made in their purchases reflect who they were, how they self identified, and their experiences in their new urban environment.

CHAPTER 2

BACKGROUND

The James Blake House

Though the Blake House itself is not the focus of this thesis, it is necessary to discuss briefly the history of the house to establish the events that led to the relocation of the structure and the deposition of fill in Richardson Park. The Blake House, built in 1661, is the oldest house in the city of Boston and is currently located in Richardson Park on Edward Everett Square in the neighborhood of Dorchester. Now a bustling urban space, this First Period wood-framed house sits alone in Richardson Park, surrounded by grass, a few trees, and a sloping hill. The property is bounded by roads on three sides, including the main thoroughfare of Columbia Road to the north, and the smaller Pond and Cottage Streets to the east and west, respectively (Historic Preservation and Design 2005).

The Blake House was originally built by James Blake, an immigrant who came to Massachusetts from England with his parents in the 1630s. The Blakes were successful in their new Massachusetts home and became a prominent family in early colonial Dorchester. James Blake was well respected in his church, and over the course of almost thirty years served as deacon and later as ruling elder. In 1651, James Blake married

Elizabeth Clapp, who was also from a prominent colonial Dorchester family, and in 1661 built the Blake House (Dorchester Historical Society 2008).

His success allowed him to build a larger-than-average, two-story house with spare rooms --- a luxury at that time (figure 2). It also allowed him to purchase the land the house was built upon, a 91-acre estate consisting of orchards, gardens, farms, and outbuildings (Historic Preservation and Design 2005). After James Blake's death, the house was passed down to Blake's son John (Historic Preservation and Design 2005).



Figure 2- The Blake House as it appeared on its original site just prior to being moved in 1895
The Blake House remained in the Blake family until the death of Rachel Blake in 1829, when the house was passed on to Caleb and Eunice Williams, descendants of the Clapp family (Historic Preservation and Design 2005). In 1892, George and Antonia Quinsler

bought the house from the Clapp family and owned it briefly before selling it to the City of Boston in 1895 (Historic Preservation and Design 2005).

A New Home for the Blake House

In the late 19th century, Boston was experiencing many transformations, and the neighborhood of Dorchester was no exception. New modern improvements affected all aspects of daily life. Many dramatic changes, including street widening projects, city electrification projects, and a new local public transportation system impacted the structure, layout, and dynamic of Dorchester. Road widening near the Blake House's original plot was the first indication that the house might be threatened with demolition. Additionally, it was suggested that Olmsted's Boston park system, the Emerald Necklace, ought to connect through this area of Dorchester, offering green space to offset the increasingly urban appearance of the landscape. This project ultimately resulted in the construction of Columbia Road, which was created to be a green boulevard connecting Franklin Park to the Boston waterfront (Historic Preservation and Design 2005).

In light of this plan, the City of Boston purchased the Blake House from the Quinslers in 1895 in order to develop the land. By this time, the house had suffered years of neglect. With the elaborate goals of reconfiguring the entire neighborhood, the outlook for the now decrepit house looked grim, and the property would certainly be slated for demolition. With the threat of demolition, a number of factors came into play that would ultimately lead to the preservation of the Blake House (Historic Preservation and Design 2005).

In June of 1895, while the house was still in the Quinslers' ownership, the meeting minutes of the Dorchester Historical Society first mention the prospect of moving the Blake House. By 13 September of that year, the City of Boston purchased the land with intent to expand nearby greenhouses onto the property. The original property ultimately was developed as greenhouses as planned (Historic Preservation and Design 2005).

The City of Boston offered the house at no cost to anyone who would be willing to have it removed from the plot. By his own account, Clarence J. Blake, a distant James Blake relative, took an interest in preserving the house, though his direct involvement may be self-embellished. As early as June 1895 he volunteered funds to have the house moved in order to save it from demolition. When no organization immediately accepted his challenge to move the house, Blake offered additional money to help fund the house moving project (Dorchester Beacon 1916).

Fortunately, the Dorchester Historical Society was looking for just such a cause to champion. Preservation interests in Dorchester were initially looked after by the Dorchester Antiquarian and Historical Society, founded in 1843. Membership steadily declined such that by 1870, the organization disbanded and their records were donated to the New England Historical and Genealogical Society. This left an opportunity for a new local preservation society to be formed, and two decades later in 1891 the Dorchester Historical Society was created (Zimmer 1977:55). The society's first meeting was held in 1893, and the prospective preservation of the historic Blake House became an ideal cause for the new group to undertake. In a 1916 interview in the Dorchester Beacon

newspaper, Clarence Blake told reporters that he was responsible for prompting the City of Boston to agree to move the house:

I found on inquiry that the old Blake house was to be torn down... by the city in order to make room for the green houses which now stand on Massachusetts Avenue... Under these circumstances I went to the then Mayor of Boston, Mr. Curtis and asked if I could buy the house and he told me that it was not in his power to sell it but that he would gladly give it to me if I would move it away and make good use of it. (Dorchester Beacon 1916)

Whether through the efforts of Clarence Blake, or the persuasive enthusiasm of the newly formed Dorchester Historical Society, on 28 October, 1895 the Historical Society received permission from the City of Boston to move the house (Zimmer 1977).

In the winter of 1895-1896 the house was moved from James Blake's original site (on what is now Massachusetts Avenue) to its current location off Columbia Road, just 400 yards away. In preparation for its relocation, fill was brought to the new site in order to fill Great Pond and improve the grade of the lot. This thesis examines the collections excavated from the late-19th-century fill deposits located only a few feet from the door of the Blake House's new location on Richardson Park.

Changes in Dorchester

Dorchester, as with many areas on the outskirts of Boston, was the location of many wealthy Bostonians' large estates and second homes up to the late 19th century when Dorchester rapidly transitioned to an urban landscape. The town of Dorchester was annexed by the City of Boston in 1870. The new association with the City of Boston, and the arrival of the streetcar to the Edward Everett Square, led to a massive increase of population into the northern end of Dorchester, which had remained relatively undeveloped despite the increase in immigrant populations in the mid-19th century.

This huge population explosion sparked a need for large-scale residential building in the 1880s-1890s, which brought wealthy land prospectors to Dorchester. These opportunistic businesspersons bought the few remaining large agricultural parcels and estates and subdivided them to accommodate a greater number of houses for the larger population. In addition, by the 1890s, the architectural innovation of the "triple-decker" appeared in Dorchester. Lining the roads that served the streetcars, these multifamily units housed the expanding population of working-class, often immigrant Dorchester residents (Zurawski and Whitney 1979: 29-31). By the beginning of the 20th century, populations had increased ten-fold.

The decision to fill parts of Richardson Park and use it as a permanent home for the Blake House was not embraced by all of the neighborhood's residents. Preserving a legacy of founding families most directly benefited those people who shared roots in the long history of the region, specifically those who had been residents of the area for

generations. Given the large swell in population at the turn of the century, this did not include most of the population of Dorchester.

In 1895, when the Blake House was spared from demolition, it is likely that many nearby areas were composed of residents who had lived there for only a few months, renting or purchasing one of the newly subdivided lots that had just been developed for residential use. These new residents had no allegiance to the founding families of Dorchester.

Accounts of continual vandalism to the Blake House in Richardson Park give an indication of the tepid reception to its move. Shortly after moving the house the Society resolved that caretakers should reside in the house, maintaining and keeping it secure in exchange for living there free of charge. Nevertheless, vandalism was constant. New window repairs were required as early as 1905 and 1907 to replace damage done by vandals. A 1911 newspaper article states, “There is still a good chance further to safeguard the Blake House against the hazards of holocausts and hoodlums” (Zimmer 1977). From 1917 to 1920 the house was left without a caretaker, and all of the Dorchester Historical Society possessions from within the house were removed and relocated to spare them from theft. A contemporary account in a private letter said “...the society plan of moving the house [again] to some other lot with the idea that it was impossible to keep the boys from destroying it where it was...and...that this Spring...those in charge had moved out everything of value, the inference being that the case was hopeless” (Zimmer 1977).

Perhaps in a way the positioning of the house was interpreted as a claim of ownership by the wealthy “old guard” of Dorchester residents. Placed as a centerpiece in the middle of what used to be a public park, it was a less-than-subtle reminder to the new residents that “We were here first,” while the majority of residents lacked any personal connection to this history. A primary purpose of moving the House was to create park land; however the placement of the house within a public park diminished Richardson Park’s usefulness as a public space. Its prominent placement in the center of the park would have no doubt discouraged people from using the park as originally intended. The subsequent addition of a fence that established a private yard for the Blake House further diminished its public use. By 1928 the Society did reinstate caretakers for the Blake House and were able to find a secure location for their collections.

The controversy surrounding the placement of the Blake House demonstrates the social change occurring amongst the residents of Dorchester during the late 19th century, and should be seen as a backdrop upon which to view the lives of the residents who once owned the refuse used as fill for the Great Pond. Today, the Blake House has become a landmark of Dorchester and is seen with pride and a sense of ownership by residents in the immediate vicinity and the city as a whole.

Richardson Park

The current site of the Blake House and the artifacts discussed here has a diverse history. The park began as a portion of Dorchester Common. The first owners of the large plot of land that abutted the present day Richardson Park were Robert and Anne

Oliver, who came to Dorchester from Antigua in 1737. Their son Thomas built a house, which though now demolished, was later owned by the Everett family. Their property was leased by the Everetts to the Richardson family in 1819, until George Richardson purchased the property in 1833.

In 1841 Richardson purchased the adjacent island of land from Dorchester Common that was isolated by the paths of Cottage and Pond Streets. This land had remained undeveloped due to the presence of a natural pond and the establishment of paths around the shore. Richardson's estate was left to his brother, John, who then bequeathed this wedge of land to the City of Boston "to be used as a park or any other purpose except being sold for house lots." This land became Richardson Park. (Dorchester Historical Society 2008)

Given documentary resources and archaeological evidence, it is definite that this has always been open space, accessible to the community, and without any built structures upon it before the 1895 relocation of the Blake House. Before 1895 a pond was located within this plot, as evidenced by historic maps, and can be traced to prehistoric times due to the presence of a Native American shell midden beneath the fill deposits. The presence of the midden beneath fill that is associated with a pond indicates that the filling of the Great Pond with historic refuse extended beyond the shore of the pond to fill in what must have been a generally low lying area.

While reasons the Blake House needed to be moved have been discussed, it is necessary to examine why Richardson Park was chosen as the best space for relocation (figure 3). There are few documentary sources that discuss why Richardson Park was

chosen. In a 1916 *Dorchester Beacon* article, Clarence Blake recalls his involvement in the process of securing the site:

I went again and called on the Mayor...and he informed me that the City had just received the gift of a plot of land on Columbia Road in Edward Everett Square and that I could put the house in the plot provided it would be kept in repair and would be open on stated occasions for the use of the public. (*Dorchester Beacon* 1916).

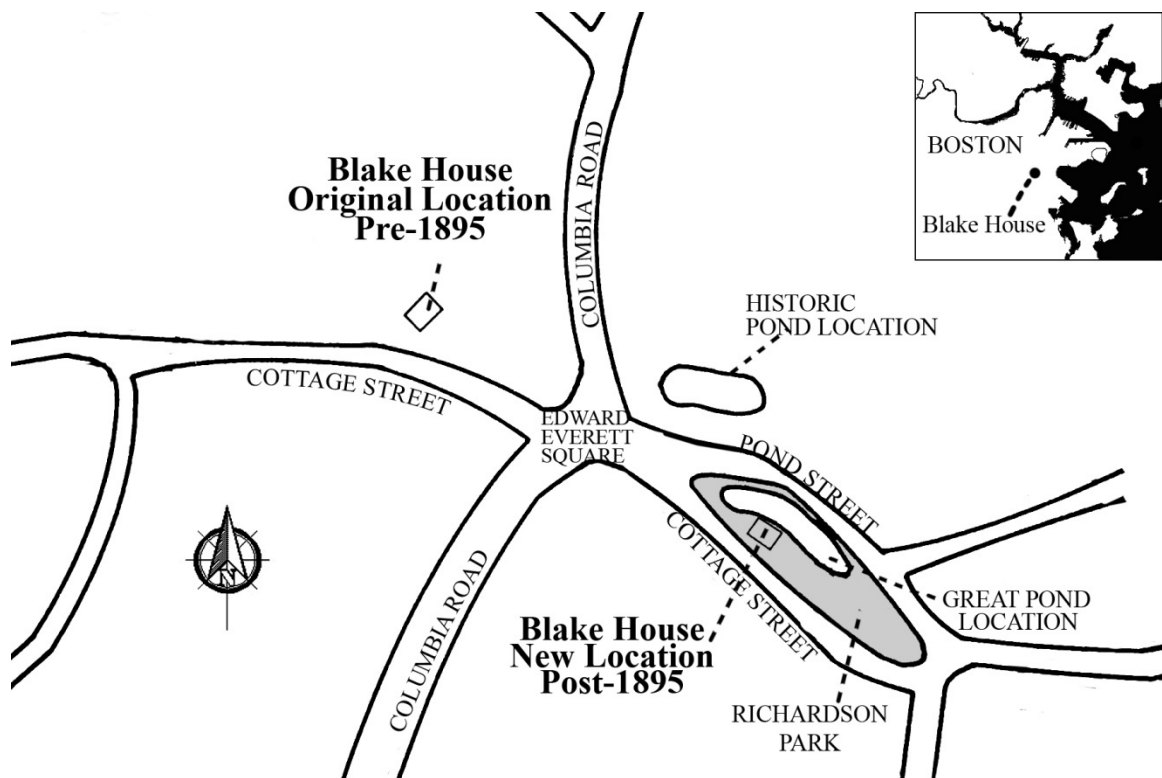


Figure 3- Reconstruction of 17th Century Dorchester Map based on Zurawski and Whitney, 1979

A newspaper article more contemporary with the event does not describe Clarence Blake's role as the instigator, but does detail his involvement, along with that of his father, Mr. John H. Blake, as giving "generous aid," particularly financial, toward the house's relocation. The article also credits Councilman Herbert M. Manks and Alderman Folson for passing an order through the city council that gave the Dorchester Historical Society use of Richardson Park as the new site for the Blake House, but is not specific as to their particular interests in the affair. (Dorchester Beacon 1895)

The most intriguing glimpse into the decision to use Richardson Park comes from this 7 December 1895 Dorchester Beacon article touting the benefits of the new location of the Blake House:

... in due time the society hopes to erect a handsome building there [Richardson Park] to commemorate the inception among those Puritan exiles who landed here in the Summer of 1630, of the idea of popular sovereignty, on the basis of universal education. "Town meeting square" on the east, "Edward Everett square" at the west, north the site of the "Richard Mather house" and South the highway now E. Cottage street along which the Roxbury settlers came to the meeting house are the bounds of the sacred area, aptly called the "Cradle of American Freedom" (figure 4) (Dorchester Beacon 1895).

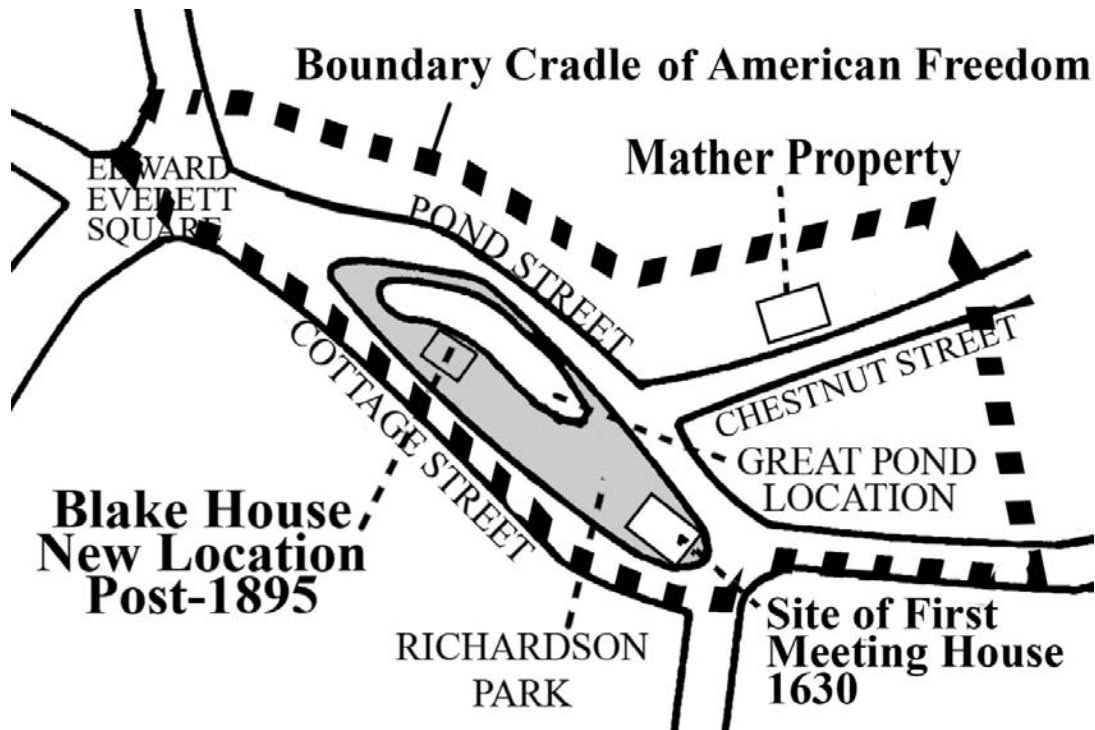


Figure 4-Approximate boundary of proposed "Cradle of American Freedom" area

Written by Willis B. Mendum, the secretary of the Dorchester Historical Society, this passage reaffirms the clear relationship between preserving the Blake House and establishing a legacy of the notable old families of Dorchester connecting them with the founding of the country. This passage is the only documentary record that addresses the reasoning behind the decision to use Richardson Park. It is likely that, given the rapid development in the area surrounding the original location of the Blake house, the proposed Olmsted changes, and the difficulty of moving houses long distances, Richardson Park was the only viable, and most obvious, option for the new location of the house.

Once selected, the geography of the park restricted the exact location that the house could be positioned within the lot. Primary access to the lot was via Pond and Cottage

Streets; however, there is a pronounced dip in the topography in the park on the western (Cottage Street) side. The flattest and most suitable part of the property would require the house to be brought in via Pond Street; however, the pond in Richardson Park, labeled Great Pond on earlier maps, lay between the road and the flat area. Thus, it was necessary for Great Pond to be filled in before the moving of the house. Later, the house could be moved on logs by a team of oxen (figure 5) during the winter when the ground became frozen and durable enough for the move (Historic Preservation and Design 2005).

www.maine-memory.net/item/20824
© Maine Historical Society



Figure 5- Oxen moving a home in Portland, ME circa 1892. Copyright Maine Historical Society

The Filling of Great Pond

In 2007 an archaeological permit was secured from the Massachusetts Historical Commission to conduct remote sensing and subsurface testing to identify and describe the bounds of the pond. At this time, the exact extent of the pond was unknown, and various documentary sources were inconclusive as to its size, the precise location of its shoreline, and the date it was filled.

Professor of Environmental, Earth, and Ocean Sciences at University of Massachusetts, Boston, Dr. Allen Gontz, conducted a Ground Penetrating Radar (GPR) survey assisted by students from that university. Dr. Gontz used a Mala Geosciences GPR fitted with a Trimble GeoXH global positioning system (GPS) capable of sub-meter accuracy. The survey identified the presence of a large feature stretching across the front yard of the Blake House approximately 1 m at its greatest thickness (figure 6). The entire

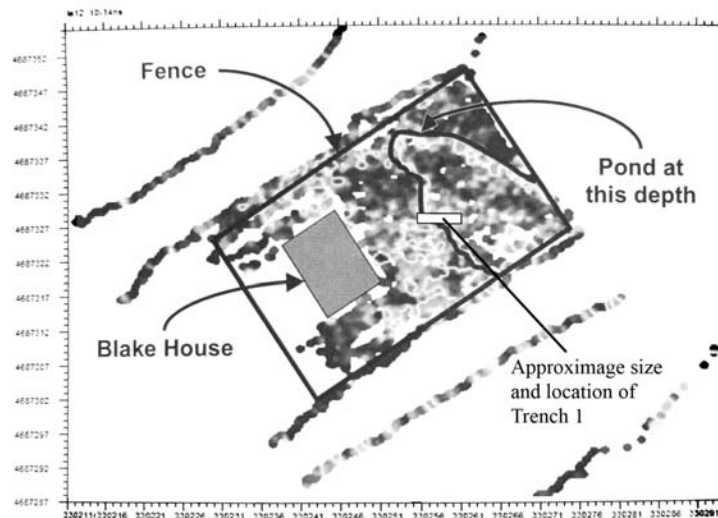


Figure 6-GPR survey results with pond outline and location of Trench 1 (Gontz, 2007)

feature was not captured in the survey, but extends beyond the lawn of the Blake House toward Pond Street. Dr. Gontz interprets this feature as chaotic infill, and “based on the character of the internal structures and upper and lower bounding surfaces, this unit ... is thus interpreted as the anthropogenically filled Great Pond” (Gontz 2007:6).

In concert with these results, an archaeological test trench was established at the presumed shore of Great Pond on the front lawn of the Blake House. The excavation was conducted by Ellen Berkland, who at the time was not only the City Archaeologist for the City of Boston, but also the caretaker for the Blake House. In the spirit of Massachusetts Archaeology Month, local volunteers were allowed to participate in the excavation (figure 7). Beginning on 6 October 2007, the project continued sporadically until 7 November 2008. Initially a 50 cm x 400 cm test trench was established, but was later expanded to be a 100 cm x 400 cm unit. The entirety of the large archaeological assemblage recovered from the survey came from these four square meters of excavation (Berkland 2007). Because Richardson Park was not owned or associated with the Blake family, the artifacts recovered during excavation are not directly related to the



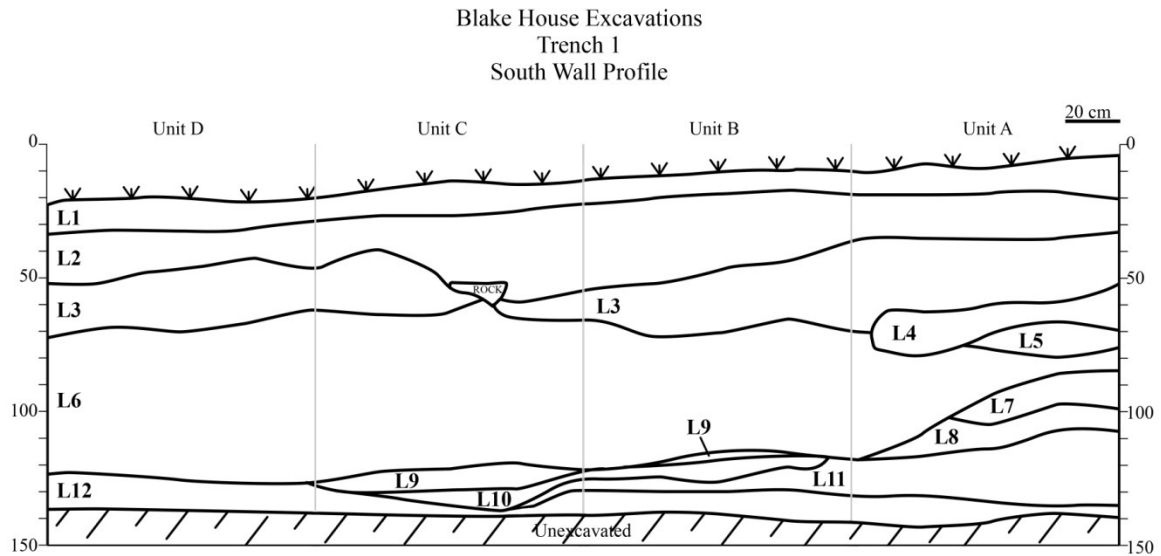
Figure 7- Volunteers excavating Trench 1 at the Blake House site

actual history of the Blake House owners.

The stratigraphy of this test trench corresponds with the results of the GPR survey (figure 8). At the deepest level, approximately 140 cm below surface, there is a sterile, natural deposit consisting of fine silty sand, most likely related to glacial outwash. Overlaying this, primarily on the western half of the unit, is a black (2.5Y 2.5/1) loam, rich with clam shell. This level (L11) is interpreted as a prehistoric shell midden on the shore of the pond. (Berkland 2007).

Directly overlaying the midden are three levels of fill identified only on the western end of the unit. These levels (L7, L8, and L9) begin at roughly 85 cm below surface and slope downward to a depth of 130 cm below surface, following the natural curve of the slope of the pond. Overlaying these levels, across the entire length of the 4 m trench is a thick deposit (almost 70 cm thick at points) which corresponds to the “chaotic infill” identified in the GPR survey. This level (L6) is an artifact-rich, grayish brown (10YR 5/2), fine to coarse sand and gravel consisting largely of furnace scale, ash, clinker, and artifacts. This is interpreted as the pond fill that was deposited in preparation of the Blake House move (Berkland 2007).

Levels L4 and L5 were additional sandy fill, used to completely level the plot after the deposition of L6 filled the pond. These levels were identified exclusively on the western edge of the unit where L6 was thinnest, and likely represents additional filling in a remnant low spot to complete leveling work (Berkland 2007).



- L1- 2.5 Y 4/2 Dark gray brown fine silty loam
- L2- Unit A and B: 2.5Y 6/4 Light yellow brown loose fine silty sand with pebbles and cobbles. Unit C and D: 2.5Y 5/3 Light olive brown loose silty sand with pebbles and cobbles.
- L3- Unit A and B: 10 YR 5/6 Brown fine sand with gravel. Unit C and D: Mottled 10 YR 4/4 Dark yellowish brown and 10 YR 5/6 yellowish brown silty sand
- L4- 10 YR 5/6 Yellow brown
- L5- 10 YR 2/2 Very dark brown
- L6- Mottled 10 YR 5/2 Grayish brown and 5Y 4/4 olive fine to coarse sand with gravel, ash, clinker, and furnace scale
- L7- 10 YR 4/4 Dark yellowish brown coarse sand
- L8- 10 YR 5/2 Grayish brown fine to coarse sand
- L9- 10 YR 5/2 Grayish brown "Mottled" with furnace scale and clinker
- L10- 5 YR 4/6 fine to coarse sand with shell
- L11- 2.5 Y 2.5/1 Black loam shell midden
- L12- 10 YR 4/6 Dark yellowish brown fine silty sand

Figure 8-South wall profile of Trench 1

Covering the entire unit, Level L3 consists of a combination of local Roxbury puddingstone foundation debris, sand, and gravel. It is interpreted that this level consists of clean soil removed during the excavation of the nearby cellar hole for the new location of the Blake House and deposited on top of the filled area. The pudding stone is consistent with the materials used to create the new foundation for the Blake House, and

its presence in this level further supports the interpretation that L3 is related to cellar hole excavations and foundation construction. (Berkland 2007)

Level L2, a loose light brown fine silty sand with evidence of planting holes, was present across the entire unit. This level was most likely related to landscape efforts by the Dorchester Historical Society. From the onset of the house-moving project, the society was concerned that the landscape be aesthetically pleasing and was preparing the land for an “ornamental park” (Dorchester Beacon 1895). This was all capped by a thin layer of modern topsoil and sod (L1) (Berkland 2007).

Of all of these levels, L6 was the thickest and most artifact-dense level and is the primary focus of this thesis. This level directly corresponds to the filling of the pond in preparation for the moving of the Blake House. The earlier belief that Great Pond had been filled in the 17th century may be the result of confusion with a pond located directly east of Great Pond on the opposite side of Pond Street. This pond appears on reconstructed 17th-century maps, and due to construction on this side of the road well before the 19th century, it is likely that this second pond was filled much earlier and is the probably source for earlier pond-filling records.

On 28 October 1895, the historical society received permission from the City of Boston to use Richardson Park for the new house location (Zimmer 1977). Up to this point in history, the pond was located on open land considered for public use, so there was no need for filling. In addition, the lowest levels of fill contain artifacts dating to the late 19th century, consistent with the major filling episode related to the moving of the Blake House. Therefore, filling of the pond did not occur before this date and only was

conducted in preparation for the move of the Blake House. Furthermore, a local newspaper article states that the park landscape changes were being finalized and the house was ready to be installed sometime between 7 December and 14 December 1895 (Dorchester Beacon 1895). A later article confirms on 18 January 1896 the house was present in its current location on Richardson Park (Dorchester Beacon 1896). Therefore, the fill present in L6 was deposited sometime after 28 October and was capped by December 14, a six-week period of time.

Visual verification from the profile confirms that L6 was a homogenous fill. Cross mending between artifacts within the fill indicates that the fill was deposited in a single filling event, likely in a single day. Since the L6 filling episode was just one component of the overall six-week-maximum landscape preparation for the Blake House move, the filling of Great Pond would have had to be swiftly executed. L6 represents a single temporally confined deposit, and a valuable rarity in archaeological study.

Initial questions established in the archaeological permit are thus resolved. Almost all of the boundaries of the pond are now known through GPR and confirmed with archaeological evidence. The pond was not filled prior to 1895, but was filled in preparation for the house moving. The entire contents of the fill including the bottles discussed in this thesis were deposited sometime between 28 October and 14 December 1895.

The Assemblage

The collection of artifacts produced from this excavation was large, including several thousand artifacts filling 20 standard-sized boxes. The collection is not only unique because of the narrowly defined deposition dates, but also because of the unusually good preservation. The presence of the pond created a consistently moist environment, into which the fill was directly deposited. The anaerobic environment of the water prevented oxygen from entering the system to initiate decomposition. This led to the preservation of materials that are uncommon in archaeological sites in New England, such as leather, fiber, food remains, and paper. Exceptional examples in the collection included various pieces of cloth, fragments of shoes, a woman's leather pocketbook with colorful embroidery, original labels on bottles, peanut shells, newspaper fragments, and a half-burnt match (figure 9).

The remarkable preservation of bottle labels lends itself to a greater understanding of consumer behavior due to the additional information they provide. The bottle labels are of particular interest due to their general rarity in archaeological sites, their abundance in this collection, and their ability to reveal the bottle contents. This level of information associated with bottle deposits is normally lost in archaeological sites. In essence, the bottle labels are fragments of the documentary record that have become part of the archaeological record, allowing them to give unique contributions to site interpretation in both textual and material ways. This thesis examines all of the bottle glass from the artifact assemblage, giving particular attention to those bottles directly relating to the

major fill episode, L6, and bottles with preserved labels.



Figure 9- Exceptional preservation examples including (clockwise from upper left) peanut shells, a woman's wallet, dominoes, burnt match, and leather and cloth clothing fragments

CHAPTER 3

HISTORIC TRENDS IN URBAN CONSUMER PREFERENCE

A Shift to Bottled Food

Nineteenth-century Massachusetts underwent a transition between an agrarian economy to a manufacturing-based, urbanized economy driven by industrialization (Rosenberg 2007). Changes in commercial industrialization created changes in commercial goods. There was a major shift away from the previously held practice of purchasing bulk food products from stores in favor of the convenience of individually packaged goods, with a new appreciation for brand-name recognition and the reliability with which it was associated (Cheney 1982:32-33). Metal cans at this time were not considered entirely safe due to the presence of heavy metals and poor construction, and plastics were not yet available, so glass containers -- glass bottles, specifically -- were the preferred packaging for most products (Rosenberg 2007).

The surge of immigrants into cities forced most of them into crowded tenement-style housing. Working long hours with no access to fresh food, they were dependent on

store-bought food (Rosenberg 2007:122). Infant formula was among the earliest high-demand prepared foods (Rosenberg 2007:123). Wet nurses were no longer used; instead, infants were fed with cow's milk (Rosenberg 2007:123). This milk was more prone to contamination, so a mixture of cow's milk, flour, and bicarbonate of potash was created to combat this, and it was heavily advertised by Boston's Theodore Metcalf Company (Rosenberg 2007:123).

The later part of the 19th century also represented a time of increased knowledge of sterilization and a wider availability of refrigeration to keep food products fresh. This allowed for an increased interest in packaged food. This shift to individual servings and preference for glass bottles created such a substantial need that keeping up with bottle demand was difficult, ultimately provoking the invention of the automatic bottle machine. (Rosenberg 2007)

Alcohol Consumption

Though consumers were now enjoying the availability of a host of individually packaged products, they were still limited in their choices by social forces, which made products like alcohol the subject of reform efforts. The Temperance Movement of the 19th century stressed abstinence from alcohol and tobacco as part of a middle-class American ideology (Reckner 1999:63).

Temperance organizations were particularly concerned with freeing working-class immigrant groups from their "addiction" (Reckner 1999: 63). Before this movement, alcohol and tobacco were used both medicinally and recreationally, and even during the

Temperance Movement many middle class people continued to use these substances. Nevertheless, the movement did have an impact, causing many business owners to ban alcohol and tobacco from their work environments (Reckner 1999: 66). It was believed that alcohol and tobacco use was related to such maladies as poor digestion, cholera, and tuberculosis, and the immigrant poor demonstrated their supposed immorality by being the population most often inflicted with these ailments (Reckner 1999: 70).

The temperate middle class sought to reform the working class, who were seen as “boisterous, immoral, non-productive, and ultimately detrimental to the Republic” (Reckner 1999:67). It is even suggested by Reckner that temperance was a way for native-born Americans to distinguish themselves from the threatening increase in immigrant populations (Reckner 1999: 68).

Paul Reckner (1999) suggests that the response to the temperance movement can be seen in the archaeological record. He uses the term “archaeology of class,” which analyzes and critiques the social relations between groups by examining inequalities and portrayed identities expressed in the archaeological record (Reckner 1999: 63). Specifically, he utilizes the archaeology conducted at the Boott Mill in Lowell, Massachusetts, as an example. Here, drinking liquor was forbidden by the company, and vendors who sold alcohol were pushed far from the mill. Work conducted by Beaudry and Mrozowski on the Boott Mill suggests that alcohol consumption still continued, but in a clandestine manner (2001:121). Liquor bottles, wine goblets, and beer mugs were recovered archaeologically, even though they were forbidden (Beaudry and Mrozowski 2001:121). In this new environment, Reckner suggests that consuming alcohol was

actually an “expression of solidarity among fellow laborers” as well as a means of resistance to the factory owners (Reckner 1999:71). Reckner even suggests that middle-class people resisted the temperance movement in their own clandestine manner by abusing medicine as a substitute for liquor (Reckner 1999:71).

As will be discussed in Chapter 5, the Blake House site data demonstrates that there is not a proportionately high frequency of medicine bottles, indicating that there was not an illicit use of medicines as a substitute for alcohol. Also the lack of alcohol bottles in this assemblage is attributed to heavy recycling, not an absence of alcohol consumption. There is no indication of the influence of the Temperance Movement on the consumers at the Blake House site.

Proprietary Medicine and Its Advertising

Commercial medicine production increased dramatically in the mid- to late 19th century, a time referred to as the Patent Medicine Era, or the Pharmaceutical Era. With few doctors available and a high mortality rate, the medicine business was an instant success. Given the real diseases facing urban populations (whooping cough, measles, influenza, diphtheria, cholera, and tuberculosis), most of the population was willing to try any remedy that might help (Rosenberg 2007). Druggists and apothecaries took the place of the healthcare a doctor might have provided. Initially, drugs were imported directly from England. Over time, only the medicine bottles were imported from England, to be filled with an American product, and finally both the bottle and product were manufactured in the United States (Hechtlinger 1970:125).

Commercial medicines are often categorized by the terms patent, proprietary, and ethical. In the strictest terms, patent medicines are those which are patented by the U.S. Patent Office. Proprietary medicines are any commercially available medicine marketed to the public (and do not hold an official U.S. patent), and ethical medicines are sold only through a doctor's prescription. Oftentimes "patent medicine" is considered a general term for all medicine from this time, especially including proprietary medicines, though this is technically incorrect (Fike 1987:3).

Most companies chose not to seek patents for their medicines because the U.S. Patent Office required, to some extent, a disclosure of the formula of the medicine, as well as a demonstration of some level of effectiveness of the product (Hechtlinger 1970:124). As a way to get around needing a patent while still protecting their company from direct competition, many companies sought trademarks and copyrights instead (Hechtlinger 1970:124). Unlike patents, trademarks did not require a demonstration that the product was new or useful. Instead a trademark was established on creative names of the product and bottle shapes, and copyrights were given to graphics and promotional literature. This system gave the company protection against competition using similar names or packaging, and did not require divulging ingredients, proof of effectiveness, or a demonstration of utility (Fike 1987:4, Hechtlinger 1970:124).

The period between 1850 and 1900 was also dominated by deception, fraud, and a complete lack of federal drug controls (Fike 1987:3). As the American frontier was pushing populations westward, there were even fewer doctors servicing these fringe populations. This not only started an interest in mail-order medicine, but also created a

demand for versatile medicines that could be applied to treat a range of illnesses (Hechtlinger 1970:125). Individual medicines claimed to cure dozens of ailments at once, even when these illnesses were contradictory. Until 1906 there was no legislation to control these bottled goods, and there was no accountability on the part of the manufacturer. Medicines were not required to demonstrate that they contained the active ingredients that they purported, but were instead concocted to have an unappealing taste (which would be interpreted as “medicine”), while containing mostly water, alcohol, sugar, and often narcotics like opium (Fike 1987:3).

The amount of alcohol varied with the product, but was usually as high as standard liquor or higher. For example, Paine’s Celery Compound had 20% alcohol, Hood’s Sarsaparilla 18%, while Jamaica Ginger could have 75% to 90% alcohol (Hechtlinger 1970:124). Medicines were even marketed to cure alcohol and morphine addictions, while these products themselves still contained alcohol and opiates (Hechtlinger 1970:125). Such high concentrations of alcohol might have had a soothing effect for the ill, but until the Pure Food and Drug Act of 1906, manufacturers were not obligated to label the medicines with their alcohol content (Fike 1987:4). This act made it illegal to mislead or mislabel, and as a result put many companies out of business. Even after this law was passed some companies opted to absorb the fine rather than discontinue the production or claims of a cure-all medicine (Fike 1987:4). Legislation rapidly became stricter, however, eventually putting an end to the era.

Just as there was no enforcement of federal restriction, there were also no regulations on truth of advertising. Advertisements of the Patent Medicine Era were

permitted to make unsubstantiated claims about the curative properties of their products (Hechtlinger 1970:125). Advertisement of the product often relied on using the name of doctors to sound legitimate and the copious use of testimonials from those claiming to have been cured (Hechtlinger 1970:125). Extensive advertisements in newspapers ensured that proprietary medicines were immediately considered whenever someone became ill (Hechtlinger 1970:125). Because the product itself was not patented, but rather the name trademarked, advertising became essential, and brand recognition imperative (Hechtlinger 1970:125).

The mid- to late 19th century saw a revolution in graphic techniques and graphic advertisement use. The introduction of lithography meant there were over 100 lithographic companies in Boston alone (Rosenberg 2007:21). These companies produced a variety of paper goods, including product advertisements, labels, and trade cards (Rosenberg 2007:21). Trade cards were small pieces of art given out by merchants as inexpensive advertisement for their products (Rosenberg 2007:21). Proprietary medicine manufactures included these with the sale of the medicine itself, serving not only to further advertise the purchased medicine, but also as an impetus for trade-card collectors to buy the product in order to get the new card (Hechtlinger 1970:234). The cards often featured young children, a common Victorian motif, as well as images of targeted users for many of the medicines (Hechtlinger 1970:234). They featured beautiful people, crude caricatures, social scenes, and historic events (Rosenberg 2007:21). These images addressed issues of health, social status, and appearance. Young

people collected the trade cards, using them in games or creating albums, and even adults became avid collectors.

In an elaborate advertising scheme, traveling salesmen were sent to communities to hawk proprietary drugs by putting on a show about the product, often including contests, music, comedy, and juggling (Hechtlinger 1970:122). Other sophisticated attempts at marketing centered on sending product advertisement in the form of something useful for the consumer. This might include almanacs, cookbooks, game books, song books, children's reading books, all full of advertisements for medicines (Hechtlinger 1970:125). Additionally, home remedy books were sold, which would help individuals self-diagnose their illness by reading about a range of possible symptoms. These books then matched the malady to specific remedies, which often included sending away for medicine from the book's author (Hechtlinger 1970:20).

The Impact of Proprietary Medicine on Bottle Diversification

This increased advertising effort was a direct result of proprietary medicines having to trademark their names and appearances; similarly, this trademark caused a diversification of bottle designs. The exact combination of glass color, shape, embossing, and label all could be described as unique and trademarked. Technological improvements in bottle manufacturing helped companies try to meet the new bottle demands, but these technologies, including improved finishes of bottles and the development of more reliable closures, also increased the demand for bottles as a primary commercial storage container (Miller 1984:83). In the year 1800 there were only 9 glass

houses in the United States, but by 1837 there were 108 (Lorrain 1968:35). This coincided with a period of increased specialization within these glass houses, so that one may specialize in window glass, another tableware, and another bottles (Lorrain 1968:35). The five years between 1899 and 1904 saw an increase of glass production of 50% (Miller 1984:83).

Additionally, advances in embossing technology also contributed to the diversification of bottles in the 19th century. Commercial embossing on bottles began as early as 1750, however was only sparingly used until the mid-19th century (Fike 1987:4). The advent of the plate mold, patented in 1867, was crucial to the widespread use of embossing (Baugher-Perlin 1982:265). Prior to the plate mold, individual bottle molds were created with embossed patterns. These bottle molds could only be used for one type of product -- the one specifically named -- and thus were only of commercial use to the glass manufacturer for as long as the client was interested in ordering more identical bottles. The plate embossing mold is a generic bottle mold that allows interchangeable embossed plates to be inserted prior to manufacture. If the client moved and needed to change the embossed location on their bottle, only the plate would need to be recreated, and the rest of the bottle mold could still be used. Furthermore, the same mold could be used for other clients with the insertion of a new plate. All together, the use of plate mold made embossed bottles more practical, made their manufacture more flexible, and made them cost effective (Baugher-Perlin 1982:265).

These patterns of bottle diversification and specialization were not restricted to medicinal bottles. All commercial bottling could benefit from the increase in

specialization, drawing more interest in their products through unique bottle shapes, personalized embossed detail, and colorful labels. These products were characterized by different scales of production and availability. While some products were widespread, available in Sears Roebuck and Montgomery Ward catalogs, other products were made at a restricted scale in smaller numbers for a local audience.

The widespread diversification and increased disposal of bottles created bottle deposits during the 19th century. Municipal trash collection in Massachusetts began as early as the 1840s, but at this time was limited to a few public spaces in urban centers (Cheney 1982:18). Municipal dumps were not common until the very end of the 19th century, and even still trash collection was almost exclusively the task of individuals or hired private companies (Cheney 1982:18). The prevalence of bottles coupled with the lack of trash removal resulted in bottle-rich trash deposits in diverse locations that opportunistically filled in low lying areas. This trash fill contained large numbers of bottles. These bottle deposits provide snapshots of the people living in this period, and the bottle diversity allows for greater analytical values of each individual type.

CHAPTER 4:

METHODS

Documentary and Locational Evidence for Origin of Fill

An early priority for this analysis was to determine where the Blake House fill originated in order to make further interpretations regarding the consumers who chose those artifacts. The first avenue for investigation was to review early documentary records to determine if they state a specific source for the Great Pond fill. Early records of the Dorchester Historical Society, specifically meeting minutes, would possibly have had details regarding this decision. Unfortunately, records of this specific nature dating from this time have gone missing from the Dorchester Historical Society. References to meeting minutes and preparatory work for the moving of the house are mentioned in local newspapers from this time however none provide the origin of the fill.

Additionally, newspaper fragments were found archaeologically at the Blake House Site. These fragments, though small, were legible, and showed promise of being matched to a historic newspaper. Ideally, these archaeological fragments could be matched precisely to a Dorchester newspaper. This would have given an exact date for

the newspapers as well as strongly suggesting that the fill originated from Dorchester residents. The Dorchester Beacon Newspaper was the only local paper available in late 19th century Dorchester, however no exact match was found. The subject matter of one fragment discussed a weekly Boston Horticultural show, so the newspaper is no doubt local to the Boston area. There is no way to conclude that the fragments were from the Dorchester Beacon. Indeed the formatting of the fragment appears more similar in nature to the Boston Daily Standard, though no exact match was found with this paper either.

Because private companies, not the city, were accountable for trash collection, trash removal in Dorchester was a continual problem. Dorchester residents wrote about this issue specifically in a Dorchester Beacon article in 1894, asserting that the private companies that they had hired to remove their trash were often late or absent, and trash routinely piled up. These trash removal issues provide evidence of a Dorchester origin for the deposit because of the demonstrated local surplus of trash and need for a dumping location. It would not have been necessary to look far for the trash to fill the pond.

Since the excavation in 2007, it has been assumed that the fill from Great Pond originated in Dorchester, likely from residents near the site. This assumption remains valid. A majority of bottles originating in Boston and the presence of a Boston newspaper proves that the fill originated in Boston. Furthermore the evidence indicates the deposit originated in Dorchester due to the documented trash removal issues, bottles from Dorchester pharmacists, a latch from an Eddy refrigerator (manufactured in Dorchester), a large population near Richardson Park, the obvious ease of using local trash as a fill versus carting it in from other neighborhoods, the overall consistency of the

artifact assemblage with a lower middle class population, and a complete lack of artifacts that would rule out a Dorchester origin.

Bottle Manufacturing Techniques

The way in which bottles were manufactured changed over time in predictable ways as technology improved. This allows archaeologists to infer dates of bottles based on their manufacture attributes as identifiable features of the bottle demonstrate its manufacture method. The following diagram (figure 10) introduces the basic parts of a bottle: base, body, shoulder, neck, finish, et cetera which may show differences in manufacturing technique (Jones, Sullivan, et al. 1989:77). Bottles from the Blake House were produced in the 19th century, based on their morphological characteristics.

During the 19th century, bottle manufacturing technology developed rapidly resulting in briefly used manufacturing techniques. The brief nature of these techniques allows for fairly precise dating of period bottles based on their physical characteristics.

Significant technological improvements began around 1810, when the use of dip molds for bottle production was abandoned in favor of the more consistent hinged molds (Lorrain 1968:37). This also coincided with the 1810 discovery that bottled foods could keep without spoiling by Frenchman Nicolas Appert, who perfected boiling sealed glass bottles to kill bacteria (Lorrain 1968:38). It was not until 1858 that the classic Mason jar, with its unique screw-seal closure, was invented for home food preservation (Lorrain 1968:40). In 1857 the snap case replaced a pontil rod as a means to hold a bottle while its finish was tooled, eliminating the

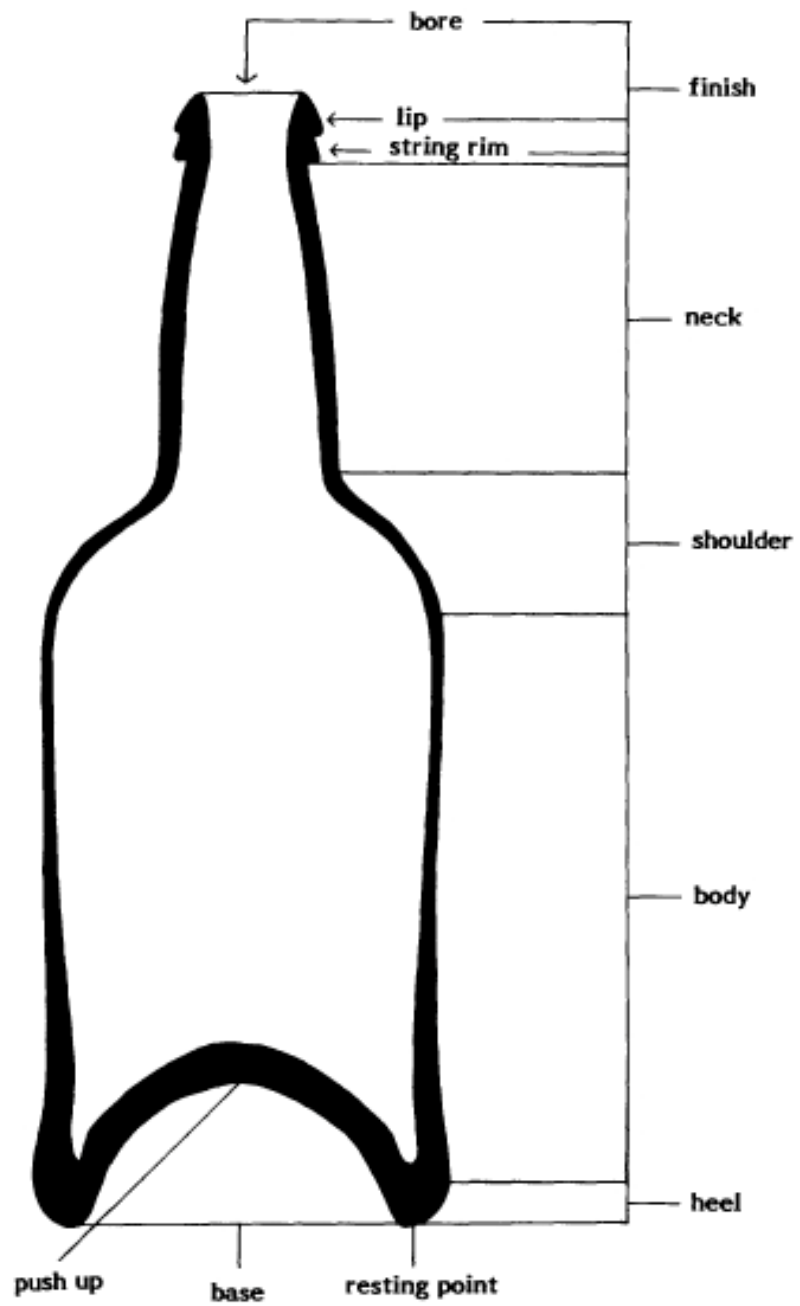


Figure 10-Bottle diagram (Jones et Al. 1989)

presence of a pontil scar on bottles (Lorrain 1968:40). Bottle closures prior to the mid-19th century were primarily cork stoppers, with very few other techniques utilized (Lorrain 1968:42). In the last half of the 19th century, a huge diversity of closure methods emerged, including the internal glass-ball stopper, the Hutchinson stopper with internal rubber gasket and wire loop, the popular lightning stopper for jars and bottles, and the still widely used crown cap (Lorrain 1968:42). The molds continued to improve throughout the 19th century, and in 1881 the semi-automatic bottle machine was developed (Lorrain 1968:42). This machine was not widely used, and in 1903 a fully automatic bottle machine was patented by Michael Owens (Lorrain 1968:43). Despite the promising technology of the fully automatic machine, the overhead cost was high, and it was not until the 1920s that automatic bottle production became standard, finally relegating hand-blown bottles to novelty objects (Lorrain 1968:43). This trend toward automation was due to the need of increased efficiency and the reduced need for highly skilled craftsmen (Miller 1984:86).

The Blake House site bottle collection represents a few of the basic manufacturing techniques characteristic of the 19th century. The terms used to classify these techniques throughout this thesis are listed in table 1.

Manufacturing Technique	Date Range	Description
Free Blown		No mold was used, detail exclusively shaped by hand
Molded		Mold seams evident but no indication of what type of mold used
Mold Blown		Not manufactured by machine process, molded, hand-finished. Specific mold blown technique not known
Cup Mold	1850-1910	Mold blown, horizontal base seam above heel, three piece mold.
Post Mold	1840-1900	Mold blown, no horizontal seam above heel, three piece mold, circular mold seam on base
Two Piece Mold		Single mold seam runs continuously along sides and base, often through the finish.
Turn Mold	1860-1920	Mold blown, no vertical seam due to bottle being rotated within the mold obliterating seam, mammalian detail on base similar to pontil scar.
Machine Made	1903-Today	Made with fully automatic machine. These will often have “ghost seams” where the vertical seam up the bottle is multiplied, and also a suction scar at the base
Indeterminate		Some manufacturing marks evident, but still unidentifiable
Unidentified		No manufacturing marks are present for identification.

Table Data: (Lindsey 2011)

Table 1-Manufacturing Techniques found at the Blake House site including dates and descriptions

Blake House Bottle Cataloging, Identification, and Documentation

Interpretation of the bottles in this study is restricted to deposits in Richardson Park related to the filling of Great Pond prior to the moving of the Blake House in 1895. Specifically, this context is defined by Level L6 (Figure 8) as described in the introduction. This level is interpreted as a uniform fill representing a single filling episode. This project began with the complete cataloging of the entire bottle-glass

assemblage from the collection (Appendix 1), however the analysis focuses exclusively on bottle glass from level L6.

First, the bottle glass was separated from other artifact classes, being careful to distinguish between window glass, tableware, and other non-bottle glass artifacts. Artifacts identified as bottle glass were divided into lots based on context, presence of decoration, and color, and then assigned sequential numbers beginning with BG#0001 (with BG referencing “bottle glass”). Cataloging was based on several parameters, including context, artifact count, color, manufacturing technique, embossing, and presence of a paper label. Manufacturing technique was determined using the Society of Historical Archaeology’s Bottle Analysis website (Lindsey 2011), and The Parks Canada Glass Glossary (Jones and Sullivan 1989). Height (in inches) was measured if the bottle was complete, and the portion of incomplete bottles (base, body, neck) was recorded. Furthermore, in cases where the base or finish of a bottle was intact, Fike’s The Bottle Book was used to classify the shape and type in a standard fashion using the numbered typology of bottle base shapes and finish forms (1987). Finally, any legible embossing or legible text on the original paper labels was transcribed and noted where it occurred on the bottle. This section presents techniques, not results, and as such the catalog should be referenced to view the full record of data compiled for all bottles in this analysis.

In total, 1,892 artifacts were classified as bottle glass representing 436 lots. Using the Massachusetts state catalogue protocol, a lot is defined as a group of artifacts from the same provenience (unit and level) that have identical characteristics. It became clear that restrictions were needed in order to better interpret the deposits, so the decision was made

to limit analysis to L6, which could most certainly be attributed to filling prior to the Blake House move. Though excavated stratigraphically, it was clear that the levels recorded on artifact bags did not correspond exactly to the levels recorded in the profile. In order to separate the bottles of L6 from the collection as a whole, field notes for units A-D and their corresponding expansion units E-H were reviewed. Based on recorded depths, stratigraphic location, soil descriptions, and the south wall profile drawing, the bags containing artifacts for L6 were isolated. The following contexts were identified to contain L6 deposits: A9, B7, B8, B9, C6, C7, C8, D6, D7, and G5. Only artifacts from these contexts were considered to be part of this study. In total, the collection analyzed in this thesis numbers 1,019 artifacts in 238 lots.

The L6 catalogue was improved upon by expanding it to include additional descriptive information, including the full name of the product that the bottle contained, the product description, date range, and production location. This information was thoroughly researched from a number of primary and secondary sources.

Analysis of the embossed inscriptions began with the use of Bill Hunt's bottle website (Hunt 1995). This website allows users to find company names and complete embossed inscriptions by searching using partial and fragmentary segments of embossed text from broken bottles. Secondly, a similar website is also formatted for fragmentary text searches, but focuses exclusively on basal embossing (Whitten 2011). These two websites, combined, identified many company and product names represented in L6 bottles from the Blake House. Bill Hunt's website also includes references for each of the embossing text entries, most of which cite Fike's *The Bottle Book* (1987). Each

embossed bottle (with the additional information from Whitten and Hunt) was searched in Fike's text to gather additional information. Unfortunately, Fike's text provided no additional information that was not uncovered through inscription reconstruction on the Hunt and Whitten websites. Finally, all of the aforementioned sources (both bottle websites and Fike's book) were only useful references for embossed bottles. For examples that did not contain embossing, information on the product name, function, date, and place of manufacture were yet unknown.

Next, bottles with any fragments of their original paper labels were photographed. These photographs served several purposes. First, and most importantly, they are a record of the bottles as they appeared in January 2011, and any subsequent degradation of the labels will be mitigated by this photographic record. Finally, these photographs allowed for the fragile labeled bottles to be immediately and carefully packaged and boxed without additional handling for the remainder of the analysis, thus preventing further damage to the labels. Because of the faded nature of the text on these labels, the digital photographs were taken on a variety of background in order to determine which was most effective in capturing the colors of the label. Black, white, and grey backgrounds were tried, but in the end the roughly 50% grey background brought out the best contrast on the bottle labels in the photographs. These digital photographs were then edited and enhanced in Adobe Photoshop to reveal any useful information that the label might provide.

Initial techniques involved overall manipulation of image contrast, which in Adobe Photoshop included "image adjustments" such as levels and curves, as well as

more complex techniques of using filters like the “unsharp mask” and “apply image” to increase the intensity and luminosity of the image to increase visibility. In general these techniques were successful at increasing the contrast on already legible text; however, none of these digital techniques were able to reveal completely faded text or figures from the labels. It is likely these techniques failed to reveal hidden information as they modify the entire image as a whole, instead of targeting specific areas or colors.

The only photographic manipulation technique that was successful at making illegible text more legible was using the “replace” function to select and darken (and thus increase contrast of) the visible sections of text on a label. This selection was then broadened so that colors similar to the known text were included in the selection and also darkened. This often included text that was previously too faded to be visible with the naked eye. Here, a label on the body and neck of a Blake House bottle is completely illegible (by the naked eye and in the digital photograph). After using the “replace” function in Adobe Photoshop to selectively darken various sections of the label that may contain text, one color selection resulted in the bottle label becoming readable. Though not perfectly clear, most of the text is legible and the product can be identified as Bovinine, and its place of manufacture and price are also visible (Figures 11 and 12).

Photographing and digitally manipulating the labeled bottles in this manner, while time consuming, made it easier to view the information that became integral in identifying the bottles’ contents, manufacturers, and places of origin. In addition, this photographic record was also the best option for the long-term conservation of the delicate labels. Even if they are kept in a temperature- and humidity-controlled, stable



Figure 11- Bovine Bottle (#0432) showing enhanced (left) and unenhanced paper label (right) environment, these delicate labels will still continue to degrade over the time. The paper will become more brittle, and the inks will fade. Each bottle could be assessed individually to see if the inks and adhesives could withstand common paper conservation techniques, but this would still run the risk of turning the paper labels translucent, effectively making them even less legible. In this way, documentation is the best defense against degradation of the labels (Dennis Piechota 2011, pers. comm.).



Figure 12-Bovine Bottle (#0432) showing enhanced (left) and unenhanced paper label (right)

After the available information was recorded directly from each bottle, research was conducted to further investigate this data. The Society for Historical Archaeology Bottle Identification Website (Lindsey 2011) was the most useful for providing general information about dating bottles based on physical characteristics. Each lot was assigned a date range, when possible, based on its finish, shape, and manufacturing technique. This provided general Terminus Post Quems (TPQ) for the majority of the artifacts. Further analysis refined many of these dates.

Primary sources were valuable for information specific to individual companies, products, dates, and locations identified through embossing and labels. The Boston Almanac and Business Directory identified apothecaries who were in business throughout

the 19th century. This resource, like many from this time period, has now been digitized and is available as a searchable document online. An edition from 1892 provided a detailed inventory of all the apothecaries and pharmacists in Boston that year, which aided in finding complete addresses and names for businesses which were partially or completely recorded via bottle labeling and embossing.

Using Geographic Information Systems, a complete map of all listed apothecaries and pharmacies in the 1892 Directory was compiled (see analysis section and figures 14 and 15). All companies represented on the bottles from the Blake House collection were highlighted to aid in interpretation of procurement methods and distance of the companies to the site.

For in-depth information on specific Boston apothecaries and druggists, as well as for any information regarding those outside of Boston, additional primary sources were consulted. Like the Boston Almanac and Business Directory, these were often available as online searchable documents so that individual manufacturer names, address, and products could be searched. As stated before, this data had been compiled through the combination of embossed decoration (often reconstructed with the use of Whitten and Hunts websites) coupled with information made more visible through digital enhancement of preserved labels, and supported, when fragmentary, with the Boston Business Directory listings.

Of particular use were pharmaceutical journals contemporary with the moving of the Blake House, including, *The Pharmaceutical Journal*, *The Spatula: An Illustrated*

Monthly Publication for Druggists, The Pharmaceutical Record and Weekly Market Review, and The Pharmaceutical Era.

These texts were written as regular newsletters with those in the medical profession as the targeted primary readership. They included detailed articles describing new products that were available, presenting marketing strategies and drug advertisements, and promoting regional meetings and conferences. Most significant to this thesis, they often contained updates from individual shops, including when new apothecaries opened, if shops moved locations, and if new business partners were added. These primary documents established firm start and end dates for specific events: often describing the advent of a new product, establishing when companies were renamed due to mergers, or when companies moved from one location to another or closed. These primary sources, contemporary with the bottles in this analysis, were instrumental in collecting accurate information regarding specific bottle dates, locations, and interpretations.

CHAPTER 5

ANALYSIS

The Blake House site provides an excellent example of a late-19th-century bottle dump, enhanced with the additional information provided by exceptional bottle label preservation. This section will begin with a discussion of the descriptive statistics, followed by bottle dating, locational analysis, manufacture-deposition lag, recycling and reuse, and patterns of medicine consumption. The analysis presented here will provide unique insight into 19th-century Dorchester, as well as a comparative study for future research using bottle data to understand consumer behavior.

Descriptive Statistics

Based on aforementioned cataloging efforts, statistics describing the collection are now available. Of the total 1,892 fragments of bottle glass excavated from the Blake House site, 1,019 fragments are from level L6. Of this bottle glass from L6, 56 bottles were whole or near complete. Seventy-two glass artifacts from L6 (bottles and bottle fragments) had pieces of their original label.

Using Fike (1984) to classify bottle finishes available in the collection (91 total) (Table 2), the Prescription finish (2.9) is the most common in L6, representing 29% of the entire collection. The next most popular, representing 17.6% was the patent finish (2.7). The bead finish (2.3) represented 14.3% of the identified finishes in L6. All other finishes represented 5% or less of the collection, for a total of 17 identified finish types.

Bases were also classified according to Fike (1984), with a small variety of shapes represented (Table 3). Of those examples where basal shape could be identified (58 total), 48.3% of the bottle bases were round (3.20), 17.2% were Blake (no relation to the site) Variant 1 (3.3), 12.1% were Buffalo Oval (3.18), and 10.3% were French Square (3.2). All other bases represented 5% or less of the collection, for a total of nine possible base types.

Of the collection of 238 bottle lots from L6, 151 (or 63.4%) were not demonstrative of a manufacturing technique, having no visible mold or manufacturing marks, or only a single, and therefore indeterminate, mold-blown seam. Of the remaining 87 bottle lots whose manufacturing method was able to be identified, 77.0% were cup molded, 13.8% were made with a post mold, and finally turn-mold, free-blown, and two-piece mold each represented 5% or less of the lots.

Of the 70 bottles where bottle function could be identified (table 4), the majority (57.14%) were medicine bottles, followed by food bottles (24.29%), household (non-food domestic bottles including cleaning and personal hygiene) bottles (15.71%), and finally nursing bottles (2.86%). The specific products that could be identified are listed in table 5.

Fike Finishes for Blake House Bottles



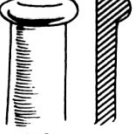

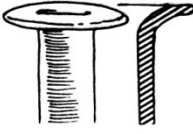
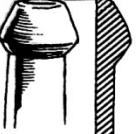


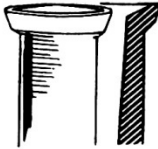

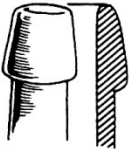
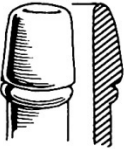



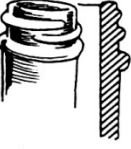
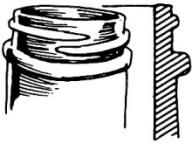


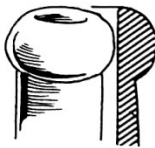


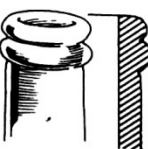
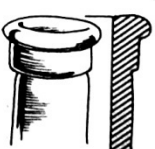

				Type	Count	%
2.1	2.2	2.3	2.4	2.1	1	1
				2.2	1	1
2.5	2.6	2.7	2.8	2.3	13	14
				2.4	0	0
2.9	2.10	2.11	2.12	2.5	0	0
				2.6	0	0
2.13	2.14	2.15	2.16	2.7	16	18
				2.8	3	3
2.17	2.18	2.19	2.20	2.9	27	30
				2.10	1	1
2.21	2.22	2.23	2.24	2.11	3	3
				2.12	1	1
2.25				2.13	0	0
				2.14	0	0
				2.15	4	4
				2.16	4	4
				2.17	2	2
				2.18	1	1
				2.19	4	4
				2.20	1	1
				2.21	4	4
				2.22	0	0
				2.23	0	0
				2.24	5	5
				2.25	0	0
				Total	91	100%

Table 2- Fike finishes, with count and percentage of Blake House bottles per category

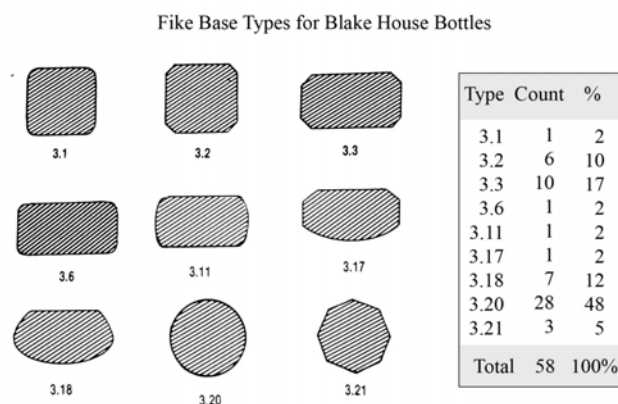


Table 3-Fike Base types, with count and percentage of Blake House bottles

Bottle type	Count	Percentage
Food	17	24.3%
Household	11	15.7%
Medicine	40	57.1%
Nurser	2	2.9%
Total	70	100.0%

Table 4- Bottle type/function, counts, and overall percentage

All products in Bottles
Blueing
Bovinine
Bromo seltzer
Castoria
Celery compound
Chilli sauce
Cod liver oil
Cold medicine
Fig syrup
Generic condiment
Generic medicine
Generic pills
Handy nurser
Hirsutis
Honey
Honey and almond cream
Ink
Jamaica ginger
Ketchup
Laxative of sprudel salts
Leather maintenance
Liniment
Liver pills
Mineral water
Perfume
Perfume
Prescription
Root beer
Sarsaparilla
Soda water
Vanilla extract
Worcestershire sauce

Table 5- Products from bottles found at the Blake House Site

The Blake House Bottle Collection Dating

Nineteenth-century bottles are often used in historical archaeology to estimate the date of a given site. This date is often based on analysis of bottle manufacturing attributes. For the Blake House bottle collection, the manufacturing attributes of the bottles were combined with dates found through documentary research regarding the creation of the contents or opening of apothecary shops. This research included finish and base types, subtle company name changes, dates a company was at a specific location, and court documents (demonstrating the introduction of a product in order to uphold an existing copyright).

Level L6 produced 94 bottle lots from which a reliable date range could be generated. The latest bottle (BG#0057) (figure 13) recovered from this level is embossed "JOHN F. NEILL // BOTANIC DRUGGIST // 19 UNION ST. BOSTON" with remnants of a now illegible paper label. Manufacture detail, such as its production in a cup mold, give a date range of 1850-1910 (Lindsey 2011); however, primary research is much more specific. According to an 1894 issue of *American Druggist and Pharmaceutical Record*, John F. Neill started his own business at the 19 Union Street location in 1894, which it proudly proclaims in one of its news bullets (Mayo and Keenan 1894:66). This is the terminus post quem (TPQ) for L6. The end date for the site is identified by a previously mentioned *Dorchester Beacon* article (Dorchester Beacon 1896), in which the *Dorchester Women's Club* notes that on 18 January 1896, the Blake House had already been relocated to Richardson Park. This makes the terminus ante quem (TAQ) 1896. These

dates are consistent with the hypothesis that the pond was filled in 1895 in preparation for the Blake House to be moved to the lot.



Figure 13-BG#0057 with embossed "John F. Neill"

Bottle Locational Information

Many of the bottles from the Blake House collection were embossed with locations or had addresses printed on their labels. Still others had enough information about the manufacturer that their locations could be discovered through documentary research. Each bottle was examined to determine if a location was discernible for its place of manufacture. In total, a list of 46 known Blake House bottle origins was

Bottle Mfg. Location	Percentage
Boston	52.0%
Philadelphia	10.9%
Baltimore	6.5%
Cincinnati	4.3%
England	4.3%
New York	4.3%
Portland, ME	4.3%
Chicago	2.2%
Czech	2.2%
Lowell	2.2%
Pittsburg	2.2%
San Francisco	2.2%
Windsor, VT	2.2%

Table 6-Bottle Manufacture location and percentage

compiled (Table 6).

Of these, 52.2% are from Boston, 10.9% are from Philadelphia, 6.5% are from Baltimore, and other locations are represented to a lesser degree. The preponderance of bottles originating in the Boston area confirms the hypothesis that the fill used in the Great Pond in Richardson Park was local.

In order to further examine this issue, all of the

Boston bottles recovered from the Blake House site that had known street addresses were mapped using

geographical information systems (GIS) to show their relative location in the city (figures 14 and 15). Most of these were medicinal bottles, including a few prescription bottles. These prescription bottles had labels that were intact enough to identify an address through aforementioned photo manipulations. Lindsey (2011) posits that prescription bottles will always be deposited within a few miles of their labeled address unless they

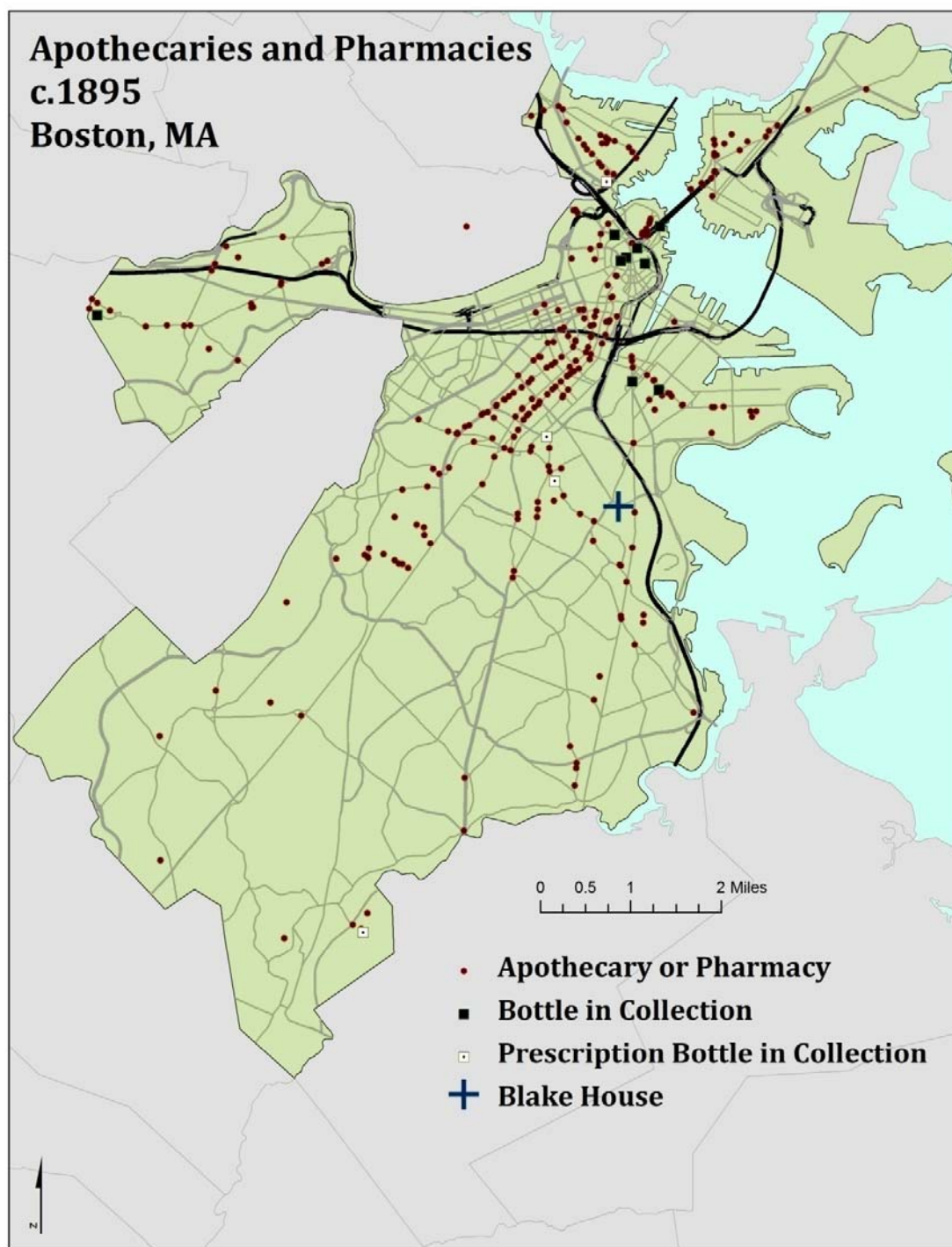


Figure 14- GIS map depicting known apothecaries in Boston, and locations that occur in the bottle collection. Map produced by Katharine Johnson.

Local Apothecaries and Pharmacies (Dorchester)

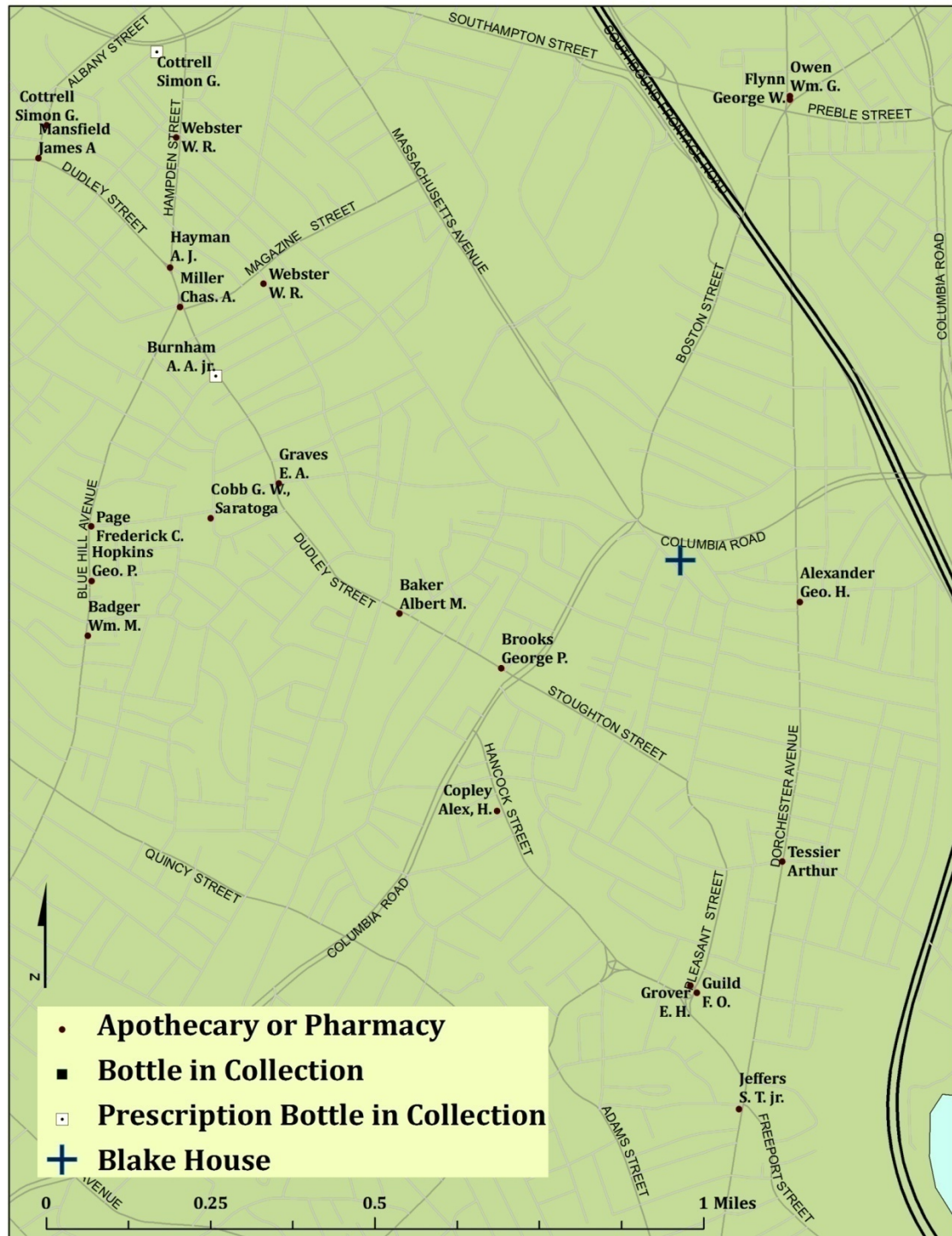


Figure 15- Apothecaries in the vicinity of the Blake House. Map produced by Katharine Johnson.

were individually transported by a traveler to a new location. The assumption made by Lindsey is that prescriptions are purchased close to the home. By mapping the prescription bottles separately, it is clear that they are not limited to the Dorchester neighborhood: two are located in Dorchester, one from Roxbury, one from Hyde Park, and the final one from Charlestown.

Still, it was possible that residents of Uphams Corner in Dorchester did not have ready access to the resources that were available in other parts of the city, and were effectively forced to look elsewhere for their prescriptions. To verify this, all of the apothecaries listed in the 1892 Boston Almanac and Business Directory (the most comprehensive listing of apothecaries and druggists in Boston near the time of the Blake House filling episode) were also plotted on the map. The locations of the prescription bottles excavated from the Blake House were compared with the available apothecary locations. Apothecaries (and thus physical access to medicine) appear to have been available both near the house site as well as throughout all of Boston, especially following main thoroughfares through the city, and concentrated in the downtown business area.

Therefore, access to healthcare was not geographically limited in Dorchester or any of the surrounding neighborhoods. Perhaps people were procuring medicine near their place of work, or along their daily commute through the city. There is a probably correlation between the locations of the apothecaries and the workplaces of the consumers, however because the individuals who contributed to the fill are unknown, their workplaces are also unknown. Regardless, it is likely that the people who

contributed to the fill worked throughout Boston, accounting for the broad distribution of apothecaries.

It is also possible that the apothecaries chosen carried a range of products and services not available at nearer locations. Alternately, store advertisement may have played a role, giving consumers more name recognition and familiarity with certain apothecaries over others. For example, A.A. Burnham was consistently advertised in almost every issue of the *Dorchester Beacon* of 1895-1896, virtually the exclusive druggist advertised in this paper and perhaps influencing the Beacon readers to develop a trust relationship with this apothecary over similar local choices. Four bottles from the deposit originated from A.A. Burnham's apothecary despite the fact that it was not the closest apothecary to the Blake House.

Differential access to healthcare then was not a product of location, but other factors, perhaps due to limited financial resources. Indeed, all of Boston is only a few miles wide and was connected by easily accessible streets and streetcars; thus all areas of Boston were easy to travel to and through. All of the prescription bottles found in level L6 of the Blake House site were still purchased within a five-mile radius of the house. This is consistent with Lindsey's supposition that prescriptions would have been purchased locally, though it is not useful in identifying more specifically where the L6 fill came from.

Authors such as Baugher-Perlin (1982) use bottle locations to indicate trade networks and economic links between communities. In her studies Baugher-Perlin only had access to the information that was embossed on the bottles, while at the Blake House

site there is the advantage of paper labels that describe in more detail where the bottles originated. Baugher-Perlin suggested that in rural areas it would be more common to find bottles that originated far outside of a region and were ordered through the mail. In contrast, urban communities would have more access to local products because of an increase in local industry and thus would be less likely to rely on mail-ordered products from outside of the region. Still, the availability of mail-order catalogues brought national marking and product branding to an individual household level (Purser 1992).

The bottle collection from the Blake House is consistent with Baugher-Perlin's suggestion that urban communities would have more accessibility to local products. Most of the bottles at this urban site are local in origin. Bottles from the Northeast (including Boston; Lowell, Massachusetts; Portland, Maine; Windsor, Vermont; and New York) represent 65.2% of the bottles from which locations can be discerned. Bottles from the Blake House site that are from outside of this local region tend to be from large scale manufacturers that advertised to broad local markets. A fair number of bottles recovered (19.6%) originated in the Mid Atlantic (in this case from Baltimore, Maryland; Philadelphia, Pennsylvania; and Pittsburgh, Pennsylvania). This is not unexpected due to the railroad networks between these two regions. Other areas like the Midwest (represented by Chicago and Cincinnati at 6.5%), West Coast (San Francisco at 2.2%) and Europe (England and Czechoslovakia at 6.5%) represent much lower levels of trade.

This is suggestive of a few possibilities. Boston may have had a weaker economic connection to these regions, the needs of consumers more easily met by more local manufacturers, there was a preference for more regionally local goods because of

heightened advertisement to local markets, or Boston was not in need of their services as they were those from the Mid Atlantic.

It is suggested that sometimes when American cities grow rapidly that consumers no longer identify with the downtown area, and business moves to the outskirts of the city (Walters 1978:374). The GIS map created from Blake House site bottle data does not support that this has taken place in Boston at the end of the 19th century. The majority of the apothecaries are still centered on the central business district of Boston, and bottles were often procured by the Blake House site consumers, despite the seeming inconvenience of the distance between downtown and Dorchester. Again, this may be due to the Blake House consumers working in the areas of these more distant apothecaries.

Immigrant populations also undoubtedly brought with them consumer preferences from their home country (Walters 1978). It is also possible that the immigrant populations that were moving into Boston neighborhoods at this time including Dorchester were producing products that suited their market segment specifically: they were producing the goods for themselves that would most suit themselves. In this way there would be a tendency to buy locally, because local products were most similar to their tastes from home.

There are countless variables which impact these complex market relations, but despite the uncertainty for which of these scenarios is most valid, using a consumer behavior approach allows all of these to be considered as possible factors. Each may

have played a role, and viewing them together allows for a more complex understanding of the relationship Bostonians had with the rest of the country.

Manufacture-Deposition Lag Analysis

Calculating the manufacture-deposition lag for classes of bottles is a useful way of determining if the bottles were deposited after an anticipated amount of time, or in contrast if there were other factors that increased or decreased the intensity of use for a functional class of bottles (Hill 1982). In this way, manufacture-deposition lag analysis is linked to consumer behavior studies by allowing researchers to better understand the intensity of consumer's use of specific products.

Using Hill's manufacture-deposition lag formula on the datable bottles from the Blake House site, an average of the possible initial production date with the known end date of the site (1896) or manufacturer was taken for each bottle. These dates are only possible for bottles in which the date range is available and the function of the bottle is known, which in this case was 54 bottle lots. These dates were then averaged for each functional category of bottle, including fresh beverages (milk and fruit juice), carbonated beverages (beer and soda), food, medicine, personal-utility, and wine. Hill predicts idealized lag rates for bottles from each category based on the perceived importance of freshness.

Results for the manufacture-deposition lag of the Blake House bottles are overall consistent with Hill's predictions and are based on functional categories. Table 7 indicates the relative frequencies of bottles per functional category from the Blake House,

Bottle Type	# Of Bottles	Lag Time In Years
Nursers	2	2.5
Carbonated Beverages	2	5.3
Food Bottles	11	10.2
Household Bottles	6	14.1
Medicine Bottles	33	15.1
Total	54	

Table 7- Counts of bottles based on functional categories defined by Hill (1982) and calculated lag time in years

where the function could be identified. According to Hill, milk and fruit juice bottles should have the shortest lag time because of the importance on their immediate consumption as

products that easily spoil (1982). These classes of bottles are not present in the Blake House assemblage, representing a possible lack of access to fresh milk and fruit juice in an urban environment. Urban populations during the late 19th century often had limited to no access to fresh provisions and were thus dependent on other store-bought products instead (Rosenberg 2007). In this way, the lack of milk and juice consumption does not represent a lack of interest, but rather issues of accessibility.

Carbonated beverages should have the next shortest lag time because of the concern that these beverages would go flat without immediate use. The carbonated beverage bottles from this collection do indeed have a comparatively short lag time, in this case 5.25 years. This is slightly less than the predicted number from Hill, though the conspicuously small sample size (only two bottles for this category) might better explain the difference. This small sample size is addressed further in a later section on bottle recycling and reuse.

According to Hill's model, food bottles should be represented with the next highest lag time (Hill 1982). Freshness was only somewhat important for this category of bottles, and often food bottles represented condiments and other food categories that were not quickly used. The Blake House food bottles had a lag time of roughly 10 years, which is consistent proportionally with Hill's predictions. This anticipated intensity of food bottle use demonstrates that the Blake House site consumers had seamlessly made the shift to utilizing bottle food products that was rising in popularity in urban industrial environments during the late 19th century.

According to Hill, medicine bottles should have a longer lag time than food, but still shorter than personal-utility and wine, with an idealized lag time of 10 years. The Blake House bottles do not fit this idealized model. Instead, medicine bottles at this site represent the longest lag time at 15 years. This is a noticeable discrepancy that shows a slow use of the medicines purchased. An explanation for this might either be relatively stable health conditions, or a preference for home remedies over proprietary and prescription medicines. A preference against an intense use of these medicines might be due to a variety of consumer choices. Perhaps the medicines were deemed too expensive to be purchased and used frequently. Perhaps the medicines were used sparingly, and deemed effective treatments that did not necessitate more than one dose and thus had an extended shelf life because of their perceived effectiveness. Conversely, these bottled remedies might have been purchased, used, and deemed ineffective, thus not used again or not frequently, extending their shelf life in the home due to infrequency of use.

Personal and utilitarian bottles like ink, hygiene products, and polishes should have a longer lag time than medicine, because after purchase, the products are not used frequently and there is no underlying concern for freshness at all. In the case of the Blake House, the lag time for personal and utilitarian bottles is actually shorter than that of medicine. Hill anticipates that the personal-utility category of bottles should have a lag time of around 12 years, and the Blake House value of 14 years is not too far from the predicted model. In this case, compared with Hill's predictive model, it appears that this does not demonstrate a discrepancy in the lag in the person-utility category, but rather further emphasizes the unusually long lag time of the medicine bottles.

Lastly, wine bottles are supposed to have the longest lag time. Because they are often more valuable with age, there is no concern with freshness or need to consume them quickly after purchase. There were no wine bottles recovered from L6. The lack of wine bottles and other alcoholic containers could thus be explained by two polar opposite theories. Either the lack of liquor is indicative that the bottle collection came from a temperate middle or upper class that chose to refrain from alcohol, or the lack of bottles is due to intensive recycling and reuse of these bottles. Temperance is difficult to determine archaeologically, so an analysis of the recycling and reuse of bottles (below) will determine to what extent recycling played a role in the lack of alcohol bottles.

Bottle Function, Recycling, and Reuse

Using Cheney (1982) and Cushman's (1984) reports as a guide, bottle recycling and reuse must be taken into account in order to understand the relative frequencies of

bottle functional categories first introduced in the manufacture-deposition lag analysis. The frequencies represented in the archaeological collection may not represent product preferences if the number of artifacts sampled archaeologically has been selectively altered through bottle recycling and reuse.

Though outside the scope of this thesis, one of the most apparent visual observations of the Blake House collection as a whole is that the majority of all of the artifacts are bottles. Due to the high level of bottles relative to ceramics, it is easy to assume that bottle recycling was minimal, suggesting that the residents were not under financial stress. This, however, is incorrect. As discussed below, a lack of beer and soda bottles shows that these valuable bottles were heavily recycled. It is the extraordinary numbers of medicine bottles and whole bottles in the collection that inflate the overall numbers of bottles and make it appear at first glance that bottle recycling and reuse was minimal.

A lack of alcohol bottles, including whiskey, wine, and beer, at the site draws a number of possible interpretations discussed above. The most obvious is an aversion to alcohol related to the Temperance Movement. The lack of whiskey and wine could be explained by a preference for beer. Beer bottles had a high value and they would have been actively recycled, especially in times of economic stress. It is most plausible that both a decrease in the consumption of alcohol due to financial stress of the local population, and a preference for beer (leading to heavy recycling), are the explanations for the absence of alcohol bottles in the Blake House site. It has been posited that Irish immigrants from this time had a preference for soda and beer over wine and liquor

(DeCunzo 1987). Given recycling patterns, this might explain the lack of whiskey and wine bottles observed at the Blake House site, suggesting that the consumers contributing to the Blake House fill were Irish, immigrants, or shared in this group's preference. While the preference might be related to cultural traditions of the Irish, it may also be a preference related only to the differential cost between the two products (DeCunzo 1987).

There are very few bottles from carbonated beverages (represented by only two soda bottles). Carbonated beverages, such as beer and soda, were very popular choices and would have been widely consumed in great number. The lack of their representation in this fill could indicate that they were not being consumed; however, given the popularity of the beverages, this is unlikely. Any decrease in beer consumption would have been replaced with an increase in soda use, and therefore soda would have continued to be a common artifact and its conspicuous absence would still be unexplained. The more plausible explanation is that these bottles, like beer bottles, have the highest relative recycle value due to their high demand and monetary value if returned to the manufacturer, and therefore were heavily recycled. Of the bottles two soda bottles which were deposited in the fill, one is labeled "THIS BOTTLE // NOT TO BE SOLD." This bottle was property of the bottle manufacturer and had no monetary return value (Busch 1987). In this system, nobody would profit from the recycling of the bottle, and it was simply discarded.

Food bottles were represented in relatively high frequencies in the Blake House collection. This correlates with the recent popularity of individually packaged brand-name food. At the time of the deposit, this prepared food would have been increasingly

accessible and affordable, so it is not surprising to see food bottles in increasing numbers at this time (Rosenberg 2007). Pepper sauce (BG#0263), honey (BG#0217 and 0218), ketchup (BG#0188), Worcestershire sauce (BG#0323), and chili sauce (BG#0306) were among the foods represented. Popularity of these packaged foods were especially indicative of urban populations who did not have the ability to venture outside of the city to procure fresh food in bulk, but instead were forced to rely on what they could find available within the city (Rosenberg 2007).

Two nursing bottles are also present in this collection. This is a good example of an artifact that represents both women and children. Because nursing bottles, like fruit jars, were meant to be continually reused, their presence in the fill requires examination. In this case, they were both patented in 1891, suggesting that they might have been a few years old at the time of deposition. In this way, they most likely exhausted their functional life early, as Cheney predicts heavy reuse of nursing bottles for a prolonged period (Cheney 1982). Because they were both found broken, it is reasonable to assume that they were only discarded after they were no longer useful and could not be reused or recycled further.

Finally, medicine bottles are the most prevalent functional category of bottle glass in the collection. Their presence in such large numbers is to be expected, however. As mentioned in a previous section, proprietary medicines were increasingly popular in the mid- to late 19th century, and their popularity necessitated the use of a variety of bottles. Still, in terms of recycling values, embossed medicine bottle were only of use to the bottler that produced them, and it was not always profitable to return them. Additionally,

proprietary medicine bottles were especially hard to refill because the small size of the bottle opening made them difficult to clean. In this way, the seemingly large numbers of medicinal bottles from the Blake House does not represent an unbridled wave of illness, but rather represents the selective recycling taking place in the late 19th century. The overall number of bottle artifacts indicates the likelihood that more than one household contributed to the fill deposit. The heavy reuse and recycling of bottles is indicative that the consumers were under economic stress, and further supports the idea that the deposits come from working class immigrants of Dorchester. One likely interpretation is the weekly non-recyclable trash of all of the nearby newly constructed triple-decker properties was deposited into Great Pond as a readily available fill.

Patterns of Medicine Use from the Blake House Bottle Collection

Given the range of medicine bottles recovered at the Blake House site, more specific information about illness might be available through further analysis. At the Five Points site in New York, New York, Bonasera and Raymer (2001) were able to investigate what ailments the residents may have suffered from based on the medicine bottles that they discarded. A similar process was used with collections from the Blake House to determine if patterns would emerge in what the recovered medicines were purporting to treat. Of the bottles in the Blake House collection, only fifteen of the medicine bottles could be specifically identified to determine the exact type of product

Medicine	What it might treat
Bovinine	Malnourishment
Bromo Seltzer	Upset stomach, heartburn, indigestion
Castoria	Laxative
Celery Compound	Blood purifier and nerve tonic
Cod Liver Oil	Given to children to prevent rickets and other Vitamin D deficiencies
Cold Medicine	Cough/cold
Fig Syrup	Laxative
Hirsutis	Hair restorative treatment
Jamaica Ginger	Stimulant and corrector of stomach troubles
Laxative Of Sprudel Salts	Laxative
Liniment	Eases stiffness and muscle pain, cures Diphtheria, Rheumatism, Sore Throat, Frost Bites, Swelling, Bruises, Sprains, Burns, Headache, and Neuralgia
Liver Pills	Laxative, treats torpid liver, dyspepsia and distress from too hearty eating, dizziness, nausea, drowsiness, bad taste in the mouth, coated tongue, pains in the side and back
Mineral Water	Promotes general health
Root Beer	Purify blood and give rosy cheeks
Sarsaparilla	Purifies the blood, stimulates vital functions, restores health and infuses new life throughout the whole system

Table 8- Medicines and their advertised treatments found in the Blake House bottle collection

they contained. The bottles, as well as historic advertisements, were used to determine their reported treatments in order to identify why a consumer might have purchased them.

The medicines represented at the Blake House site, however, are not connected by a common ailment. In fact, the advertised uses for each of the remedies were so broad that it is nearly impossible to discern why the consumer might have purchased it. Additionally, almost all medicines at this time treated a wide range of ailments, so the specific ailments singled out by Bonasera and Raymer may not be entirely indicative of the actual ailments suffered by Five Points consumers. For instance, several of the medicines from the Blake House are known laxatives, including Carter's Little Liver Pills; however,

advertisements suggest that they will fix "torpid liver, dyspepsia and distress from too hearty eating, dizziness, nausea, drowsiness, bad taste in the mouth, coated tongue, [and] pains in the side and back."

Because of the diversity of symptoms each of the medicines treated and the comparatively small sample size, it was not possible to find a common ailment the products were treating. Still, by viewing each bottle individually, the overall health concerns of the consumers of these bottles can be proposed: stomach troubles, malnourishment, overall feelings of health and blood purity, coughs and colds, hair restoration, and muscle pain. As discussed in an earlier section of this thesis on manufacture-deposition lag analysis, there was a preference at the Blake House site against an intense use of medicines: the medicine bottles were apparently in the household for a long time before they were discarded. This, taken in combination with the sweeping applications for these medicines, might support the interpretation that medicines were used sparingly and applied to treat a wide variety of ailments. By choosing medicines that had more general applications, the consumers would have been able to incur a lower upfront cost for the medication thereby having to purchase fewer bottles overall. In addition the general uses of the medicines might have made home treatment an easier process, as they were assured that they were using the correct medicine for virtually any ailment.

CHAPTER 6:

DISCUSSION OF URBAN CONSUMPTION PATTERNS AT THE BLAKE HOUSE SITE

Consumer Behavior as the Study of Material Culture

The bottles from the Blake House site are consumer goods, but were never purchased as conspicuous goods, for others to see and judge. Therefore they represent the buyer's self-perception and personal preference as influenced by many outside factors. Consumption is not limited to purchasing luxury goods as a means of social competition (Purser 1992:107). These commonplace objects have the potential to provide insight in the daily lives and personal struggles of the consumers (Mullins 2004:195). Looking at other dimensions of consumption, including the consumption of necessities or non-luxury goods, produces a more holistic view (Purser 1992:107). While it is clear that there is a relationship between consumer behavior and economic and cultural forces, there is still much discussion on the degree to which outside forces (economic, cultural, marketing) impact the daily decisions of the individual (Mrozowski 2006:8). Miller looks at manufacturing, marketing, retailing, and shopping as a way of understanding the everyday experience of a consumer and their relationship to producers

(Mullins 2004:198; Miller 1997:7). Due to the exceptional preservation of the bottle labels and identifiable embossed bottles at the Blake House, this thesis is able to interrogate the relationship between the marketing, advertising, and consumer choice.

Consumption at its core is a straightforward three-step process: first a consumer determines their personal or group wants, then goods are sought, purchased, or procured, and finally the products are used to derive their desired benefits (Walters 1978:6-7). These behaviors and decisions are imbued with meaning. The consumer behavior then is not purely economic, but also social and communicative (Cook 1996:54). The meaning of goods changes with time and has both a shared, public understanding (founded in advertising) and a personal, individual meaning. Thus the choices for consumer goods are representative of community and personal knowledge and identity (Cook 1996:53).

Pierre Bourdieu defined consumption as part of the process of communication that involves consumers deciphering messages (Bourdieu 1984). Arjun Appadurai (1986) built on this concept, suggesting that acquiring and using objects was not only important in sending messages, but also for receiving them. Margaret Purser views consumption as “a continuous process through which people simultaneously impose meaning on and read meaning from material culture, and by extension the rest of their surrounding material and social world” (Purser 1992:105). This distinction between sending and receiving messages that Appadurai identifies and Purser builds upon illustrates the difference between the archaeological consumer behavior studies focused on ceramics and tableware (public goods, sending signals) and this study of bottles (private goods, receiving message).

While theorists have interpreted consumption in terms of communication, archaeologists have, in the past, chosen to limit the scope of this communication, interpreting it as social displays based on socio-economic motives. Many articles have been written under the false assumption that socio-economic status is the only observable factor for a purchasing decision (Baugher and Venables 1987; Spencer-Wood and Heberling 1987; Orser 1987; McBride and McBride 1987; Shepard 1987; Garrow 1987; Lee Decker, Klein, et al. 1987; Branster and Martin 1987; Henry 1987). The assumption in these articles is that class (and implicitly financial resources) is the determining factor for purchasing goods, that people buy precisely what they can afford and maximum expense is their only concern when assessing their wants and making a purchasing decision (Henry 1987). This has led to interpretations centered on the identification and categorization of class, despite the amount of variability in consumer behavior within those classes identified (Garrow 1987:247). This discussion of socioeconomic status is sometimes related to a discussion of differential access to goods and services, related largely to affordability (Branster 1987:301).

The overwhelming technique that archaeologists have employed for analyzing artifacts in terms of socioeconomic status for consumer behavior utilizes George Miller's Cream Colored Ceramic Index or similar formulas adapted from Miller's to different artifact classes (Miller 1980). This technique calculates a range of prices that various ceramics would have been worth at the time of purchase to create an index of relative values. From this, archaeologists interpret the expense that consumers had to bear in order to purchase various goods, so that they might have a more objective view of the

consumers' overall wealth and spending capacity. This technique is widely applied to ceramics, glass table ware, and faunal remains (Branster and Martin 1987; Baugher 1987; Cook, Yamin et al. 1996; DeCunzo 1987; Garrow 1987; Heberling 1987; Henry 1987; Klein 1991; McBride and McBride 1987; Shephard 1987; Spencer-Wood and Heberling 1987). However, looking at only this dimension of consumer choice essentializes the decision to such a degree that these studies lose sight of the utility of incorporating a consumer behavior approach in archaeology. This approach fails to recognize the aspirations of working class people who purchased goods that would have been outside of their predicted means (DeCunzo 1987:288).

A true consumer behavior approach does acknowledge the role of income and class as important in shaping decisions, but these are not exclusive factors (Walters 1978:384). In this approach, financial wealth is broken into three categories: personal income (the total funds), disposable income (personal income left after taxes), and discretionary income (disposable income left after taxes, and necessities required to maintain an individual's standard of living such as basic food, clothing, and shelter) (Walters 1978:384). Studies that focus on ceramics and glass tablewares as an indication of wealth are looking at discretionary income, whereas studying the bottles from a collection mostly examines the disposable income of the consumers. A consumer behavior approach details that income is impacted by education level (often correlating higher income with higher education), the occupation of household members, the presence of children (who negatively impact a household's income), and the family stage

(median income increases with the age of a family until retirement when income then declines) (Walters 1978:386-400; LeeDecker, Terry, et al. 1987:233-258).

More recently the focus of consumer behavior studies have shifted to a discussion of race and ethnicity and their influence on consumer culture. Paul Mullins' examination of African American sites in Annapolis, MD, investigates the relationship between race and materialism during the same period as the Blake House site (Mullins 1999:V). He states that consumer culture was dominated by racist views and ingrained, constructed, inequality and animosity--- especially toward African Americans (Mullins 1999:4). He reiterates that the overwhelming social and class distinctions are based on race (Mullins 1999:4). This approach emphasizes the roles ethnicity and immigrant status play in the decisions of the Blake House consumers. The advertisements associated with the products found at the Blake House site demonstrate that, similar to the African American study by Mullins, the Blake House consumers were making unconscious sociopolitical statements of their desires and aspirations despite ethnic stereotypes (Mullins 1999:27).

Stephen Brighton's analysis of Five Points in New York and the Dublin district of Paterson, New Jersey, focuses predominately on Irish Americans contemporaneous with the Blake House site. Brighton states that religion, particularly Catholicism, played as great a role as class and ethnicity in distinguishing populations in the mid to late 19th century (Brighton 2008:194). The Irish immigrant status and associated social and economic status meant that access to healthcare (specifically prescription medicine) was poor throughout much of the 19th century (Brighton 2008:137-138). Toward the end of the 19th century, during the time that the Blake House bottles were deposited, Irish

immigrants were gaining a greater level of “incorporation and citizenship” that resulted in a more equal access to medical care (Brighton 2008:147). This correlates with the stable health conditions interpreted from the Blake House bottle analysis.

Advertising Self Perception

Many factors contribute to the perception of social class, both actual and aspired. Advertising serves to create a visual reference for a particular group that a consumer can then relate to or wish to emulate, regardless of actual similarities between the consumer and the portrayed individual. Some archaeologists have attempted to extend modern consumer behavior to interpret all past consumer behavior including prehistory (Smith 2007:425-430), however this paper finds greater value and relevance in examining the contemporary advertisements and marketing of the products found in the Blake House collection. Advertisements of the late 19th century predominately depict people, sometimes without the presence of the product. By examining advertisements of this period for the products represented within the Blake House collection, we can better understand how the consumers identified themselves. Because the bottles in this collection were not displayed socially, they did not provide a visible identity of social status in the way that clothing and other conspicuous goods would, instead they represent the consumer’s needs and self-perception.

Understanding a consumer’s behavior with accuracy is important in the disciplines of marketing and economics because it represent potential market share that advertisers can try to identify and sell their goods (Walters 1978:261). While marketers

are interested in learning about consumers in order to alter their marketing campaigns, archaeologists are interested in looking at the role of marketing in influencing consumer behavior. The intent of marketing is to “relate to the consumers’ own goals, values, and self-image with the product” (DeCunzo 1987:288).

Marketing encourages consumers to identify with the people, environment, or feeling represented in the advertisement. It is an expression of them: expressing status, ethnicity, community, age, family life and countless other previously described qualities. These are carefully constructed by the manufacturer. Decisions on how consumers feel about the product and their association with the product are constructed by marketing. Each product is a “complex of tangible and intangible attributes, including packaging, color, price, manufacturer’s prestige, retailer’s prestige, and manufacturer’s and retailer’s services, which the buyer may accept as offering satisfaction of wants and needs” (Walters 1978:516). The design of the product and its branding influences the consumer’s psychological perceptions of the product, impacting their understanding of the communication between manufacturer and consumer (Walters 1978:525-526).

This is true to such an extent that changing the packaging actually creates a new product. Some products’ functions were not as clearly defined as others, such that manufacturers and retailers appealed to different consumer markets by changing packaging and attributing new prescribed uses to their products. Because the Blake House site’s fill was deposited over such a short period of time, it is not possible to see this level of change over time in the artifacts in this collection. However, an example of this concept is the variety of sodas which started as medical remedies and then were

rebranded and marketed as beverages. Altering the packaging and branding alone can create new products (Walters 1978:527). Businesses promote their products and their own self image in way targeted to persuade consumers to behave in controlled specific ways (Walters 1978:552). Often the opinion the consumer has of the store is as important as the image they have of the product itself (Walters 1978:534).

The 1895 advertisement in the Dorchester Beacon for A.A. Burnham (BG#0042, 0077, 0084, 0423), the closest apothecary to the Blake House site represented in the collection, can be found in nearly every issue. With such saturation of advertising, it is no wonder a bottle originating from this location was found on the site. In addition, as an apothecary, other medicines advertised in the paper were likely available at the location, and it was perhaps the purchase location for other brand-name medicines and products found. Consumers, having been presented with the advertisement repetitively, would have been more likely to use this apothecary as it was both local to the area and they had become familiar with the name.

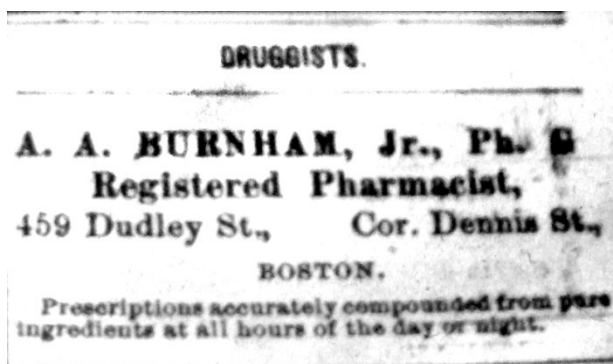


Figure 16- November 1895 Dorchester Beacon advertisement for A. A. Burnham pharmacist



Figure 17- Bottle BG#0423 with partially preserved label indicating it originated from the A. A. Burnham Pharmacist

Scotts Emulsion of Cod Liver Oil (BG#0221) is advertised in this ad from an 1895 Dorchester Beacon newspaper. It proclaims the horrors of weakness and the benefits of the elixir for strength and warding off disease. As with the apothecary advertisement above, the saturation of advertisements in the paper increased brand recognition and trust in the product.

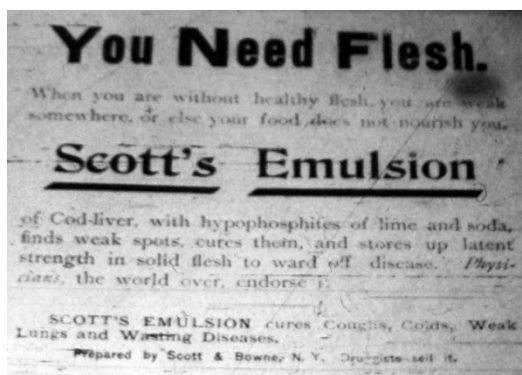


Figure 18- November 1895 Dorchester Beacon advertisement for Scotts Emulsion



Figure 19- BG#0221 with Scotts Emulsion embossing

Ayers Sarsaparilla, (BG#0070) also advertised in the 1895 Dorchester Beacon newspaper, depicts the product surrounded by the strength and durability of stone. Each stone proclaims a symptom defeated by the sarsaparilla. The addition of a testimonial from a “Business Man” is from a successful person whose opinion the consumer should trust, and whose occupation the consumer should aspire to if they can cure themselves of their ailments with Ayers Sarsaparilla.



Figure 20- November 1895 Dorchester Beacon advertisement for Ayers Sarsaparilla

Figure 21- Ayer's Sarsaparilla embossed bottle (BG#0070)

Lazell's Unrivalled Perfume (BG#0081) is advertised in this period trade card. The back of the card depicts a romantic view of a couple outdoors. This advertisement evokes longing feelings of love, the countryside, travel, nature, landownership, leisure,

youth, and European culture despite the fact that this product was manufactured in New York and for sale in the urban Boston market. The consumer was choosing an image that was in stark contrast to their living environment. Recent archaeological studies have focused on the ideas of gentility and its role in camouflaging inequalities in socioeconomic status (Mrozowski 2006:8; Wurst and McQuire 1999:198). The Lazell's perfume at this site is an excellent example of this behavior.



Figure 22- Lazell's perfume card



Figure 23- BG#0081 Lazells Perfume bottle

Metcalf Water White Vanilla (BG#0361) is advertised in this 1895 ad from the Barter Press in Boston. The ad emphasizes the superiority of the product over competitor's products. It too depicts a well dressed, content, healthy woman.



Figure 24- Barta Press, Boston Advertisement for Metcalf's Water White Vanilla

Figure 25- BG#0361 Water White Vanilla bottle from Blake House collection

Bovine (BG#0432), a nutritional supplement used to cure appetite and boost strength, is shown on this trade card in expensive glassware as a young woman lies listless in a chair by a window (perhaps on a train). The implication of this ad is the ability of this medicine to revive from malnourishment.



Figure 26- Advertisement for Bovinine



Figure 27- Bovinine bottle (BG#0432) from Blake House collection

The common motif of many of these goods is depicting people of a social and economic status that would not be suffering most of the ailments that would necessitate the use of these medicines such as wasting disease. The people who consumed these products wished to emulate these young, healthy, wealthy, and happy people. The consumer was also reassured that these same people were also once suffering as they were but have now achieved a more positive lifestyle.

Multiple Interpretations of Value

Consumer behavior shows a diverse range of motivations for purchase. LouAnn Wurst and Randall McQuire argue that consumer choice is limited by affordability, privilege, and cultural norms (1999:192-193). Income is a major factor, however not the only variable because in reality people buy goods that they apparently cannot afford. The justification of higher prices can be interpreted as an indicator of quality and status. There is psychological appeal to paying high prices because of the distinction of owning high-priced goods (Walters 1978:528-530). There is also a feeling of empowerment brought on by possessing these goods, however possession rarely results in real social change (Mullins 2004:202). People buy goods that are inconsistent with their social standing. If income was the only factors of consumer choice, archaeologists would have a model so predictable there would be almost no need to excavate (Purser 1992:106). Archaeologists are often interested in the ways that consumer behavior masks or displays power struggles (Mullins 2004:203). Miller stresses the ability of the consumer to

“recontextualize” the symbolism of a mass produced good, attributing their own personally defined meaning (Mullins 2004:207; Miller 1987:174-176).

Knowing the income or status of an individual is not enough to understand their aspirations, values, and life choices (Henry 1987:374). Consumption is impacted by finances, aspirations, values, product availability, advertising and marketing, tradition, and taste (DeCunzo 1987:269). During the late 19th century, the wealth of the Victorian leisure class prompted the consumption of superficial conspicuous goods to increase the sense of importance of the consumer (Veblen 1899, Mullins:195). Consumers as individuals are also motivated by individualistic psychological factors that are unpredictable at best, such as “love, esteem, affection, status achievement, and recognition” (Walters 1978:181). We can see this in the Blake House collection in the presence of Lazell’s perfume and its associated advertising.

Consumers’ Reasons for Choosing

At the most basic level, consumers are guided through their need for a product, a motivation to fulfill their need, a personality that guides their response to the motivation, and an awareness of the product that allows them to select it (Walters 1978:14). The consumer’s resultant behavior is guided by external influences that provide information, advice and pressure to consume in a specific manner (Walters 1978:7). These influences can be family, friends, corporate, cultural, social, economic, and marketing efforts and can act consciously or unconsciously on the consumer (Beaudry 1989:19; Henry 1991:4; Walters 1978:17-19).

In the discipline of consumer behavior, there is a distinction between needs (necessary), wants (unnecessary), and desires (long term goals) (Walters 1978:197), though for simplicity sake all are treated similarly in this thesis. A conflict arises for the consumer as their needs are impacted by their buying power, their management of money, and their value of leisure over work, and they are forced to resolve these conflicts (either rationally or not) (Walters 1978:208). Motives, like hunger, security, and comfort, are based on needs and give way to action. There is no doubt that legitimate sickness led to an actual need for many of the medicine bottles found in the Blake House. At the same time, goods such as the honey, bluing, condiments, shoe polish, and hair tonic were all goods purchased for pleasure, to enhance personal appearance, and improve quality of life therefore representing a consumer's "wants," not needs. As discussed in previously, long term goals or "desires" such as wealth, health, and a leisurely lifestyle are often visually represented through the people depicted in advertisements.

Demography including sex, age, occupation, ethnicity, marital status, and social class impacts these needs (Walters 1978:254). For example needs for nursing bottles exist only in the presence of young children. Certain goods are restricted to use by genders (consumption of perfume often limited to women for example). These needs, though guided by demographic classifications, are impacted by individuals' motives and perceptions. Consumers are motivated differently, often based on external influences or their own aspirations (Walters 1978:225-230).

Consumers act based on their perceptions, including their perception of their place in society, their culture, their perceptions of the product, the store, and the business (Walters 1978:239-254). Personality traits (impulsiveness, stability, masculinity/femininity, anxiety, et cetera) differ on an individual level, impacting a consumer's perception (Walters 1978:301-302). For example, some individuals might be motivated by a desire for upward social mobility and act on this motivation by purchasing products they believe represent this ideal such as the Metcalf Water White Vanilla, while other individual consumers might have disdain or contempt for these displays. Moreover consumers are not merely individuals acting of their own accord, but often households, negotiating their shared, group needs. Because households have to mitigate everyone's interests, family organization and relationships are extremely important in consumer behavior (Walters 1978: 342-344). Many of the products at the Blake House site were actively marketed for family use such as Syrup of Figs, a laxative (BG#0059).

Individuals belong to many groups outside of the household, which they use as reference groups to inform their consumer choices. Any given person might belong to groups related to their family, church, hobby, neighborhood, ethnicity, et cetera which they use as reference (consciously or unconsciously) in their purchase decision (Henry 1987:360-361). Often groups are used as reference to an individual who is not, themselves, part of the group (Henry 1987:361). In most cases, the advertisements related to the products found in the Blake House site reference young wealthy people, who were not likely the same reference group as the consumer. By purchasing goods

actively promoted in the Dorchester Beacon, they are participating in the reference group of literate English-speaking Dorchester residents.

Once a consumer is motivated to purchase, their decision is impacted by the accessibility of products, and the consumer's awareness of these products. For example, increased production of glass bottles in the late 19th century made these goods more accessible for purchase (DeCunzo 1987:288). Though it is tempting to think of availability in absolute terms, there is actually a gradient of availability with "degrees of access" (Klein 1991:85). Some products are more convenient; while others require pursuit to own; therefore access is not an insurmountable factor if desire for the good is great. The GIS study revealed that the products in the fill came from a wide variety of locations across the city. This shows that consumers overcame the ease of shopping at the nearest location for goods perhaps going out of the way for a less accessible product that they preferred.

Overall the effects of need, marketing, perceptions, and accessibility played significant roles in the choices made by the Blake House site consumers. It is clear from these advertisements that the advertisers believed consumers would be influenced by wealthy people as a reference group and took advantage of this. The Blake House consumer appears to have had a genuine need for many of the medicinal products purchased, whereas other bottled goods, representing discretionary income, were purchased out of wants.

CHAPTER 7

THE INTEGRATION OF CONSUMER BEHAVIOR IN MODERN ARCHAEOLOGICAL STUDIES

Artifacts recovered through historical archaeology are remnants of consumer goods, representing choices that individual and group consumers made to address their needs, wants, and desires. Consumer goods show evidence of the influence of the demography of the consumers and the impact of external reference groups on their purchase choices. The psychological, individualistic impact of personality cannot be reconstructed archaeologically, however. A consumer behavior approach is not limited to goods of social display such as ceramics and glass tableware, but is applicable to all artifact classes in the late 19th century, as they were all selected as consumer goods. Focusing on a humble class of artifacts like bottles can allow archaeologists to examine large-scale issues like the intensification of industrialization and the ways individuals were interacting with the world around them, as well as providing information on a smaller-scale household and individual level.

One of the aspirations of taking a consumer behavior approach to historical archaeology is to be able to reconstruct who the historical consumers are at

archaeological sites. Even without knowing their identities, archaeologists can discern many aspects of their personal and public lives and the potential choices they were faced with in adapting to an increasingly industrialized and urbanized environment.

The Blake House Site Consumer

In the case of the Blake House site, the anonymous nature of the fill deposit means there is less documentation available that would describe the lives of those people who used the artifacts. Even if the conclusions are not specific, the determination of who these consumers were contributes meaningfully to the micro-history of the area and local understandings of heritage and identity. Observations of other artifact classes within the collection coupled with the bottle assemblage provide a clearer view of who these consumers were.

A variety of conclusions can be made about who the Blake House site consumers were, based on the artifacts sampled from the 2007 excavation of fill. These consumers were present in the winter of 1895, as suggested by the documentary research and confirmed by the bottles recovered, especially the “JOHN F. NEILL” bottle which had a TPQ of 1894 (figure 14). These were domestic consumers, not industrial. Their purchases met the needs of individual households, not purchases intended for resale as industrial consumers. This is evidenced through the range of domestic goods: personal products in bottles, as well as utilitarian ceramics, tableware, and artifacts of personal adornment. The location of the fill in Richardson Park, public land not associated with one domestic owner, is suggestive of the fill representing multiple households. This idea

is supported also by the density of artifacts. It is most likely that a deposit of such volume that was created in such a short time period was created by multiple households.

Demographically, the artifacts suggest that at least some of the households represented in the Blake House fill were immigrants. Several of the bottles recovered had labels written in more than one language, suggesting a bilingual audience. Specifically, bottles from this collection include leather polish bottles with German text (BG#0356 and 0395) (Figure 28), and Pitcher's Castoria (a laxative) produced in Boston with French and Spanish text written on the bottle. (Figure 29) (BG# 0291).



Figure 28-Digital reconstruction of polish bottle from BG#0356 and 0395 showing German text

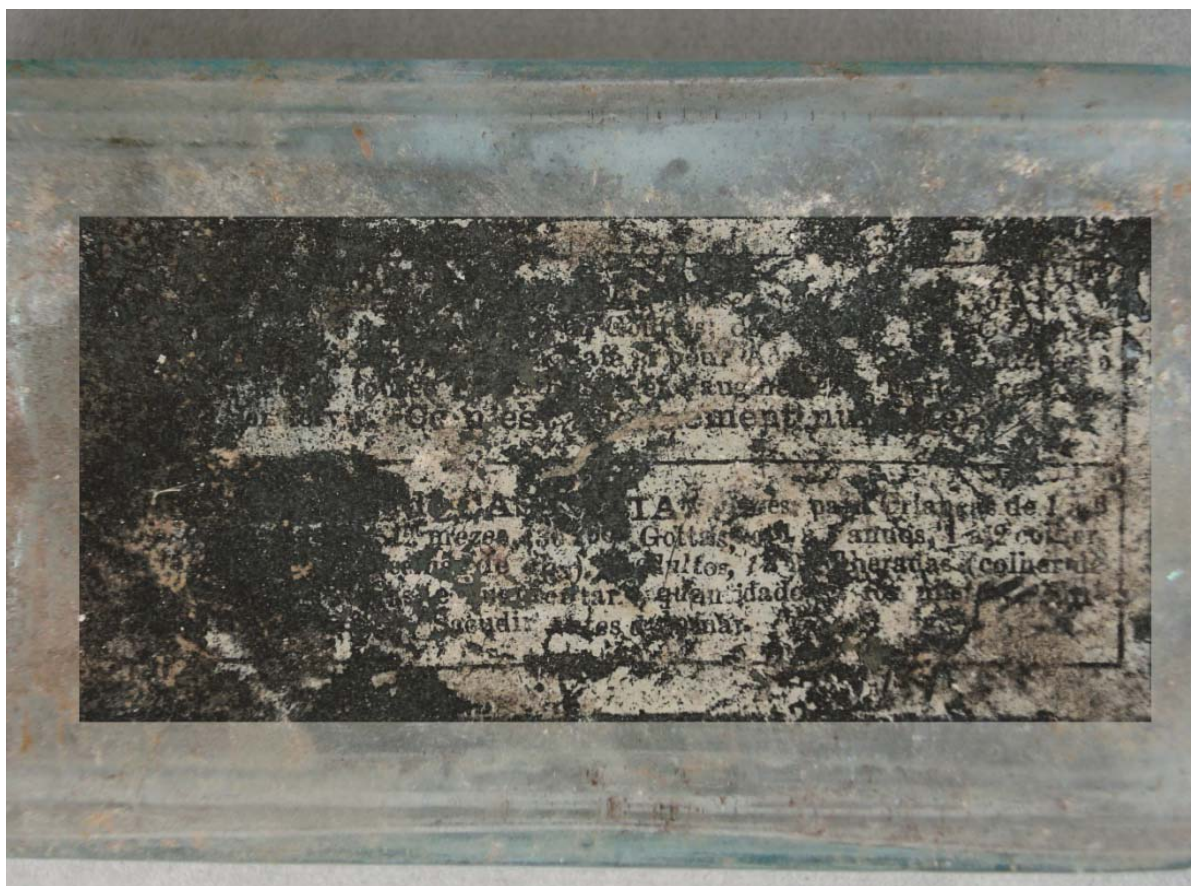


Figure 29-Digital enhancement of BG#0291 showing French and Spanish text on Pitcher's Castoria label

One interpretation of this is the association with European imported goods with quality or prestige. However, products such as Pitcher's Castoria are manufactured in Boston, suggesting that a more plausible explanation for the bilingual label is communicating with a larger, immigrant market share. Additionally, religious medallion of a Catholic nature (figure 30) is indicative that at least some of those consumers contributing to the Blake House site fill were Catholic, a common immigrant demographic.



Figure 30-Religious medal from Blake House excavations

Due to the nature of the fill deposit at the Blake House site, it is not possible to associate the assemblage with one specific household. However the artifact analysis coupled with research conducted for this paper allows for an association of these artifacts with European immigrants living in Dorchester. This paper also emphasizes that the careful analysis of fill deposits that cannot be associated with specific people or households can still provide valuable insight about individuals in a population. The need to quickly fill Great Pond and the documented supply of uncollected Dorchester trash demonstrates that the fill was local. In addition, Dorchester was undergoing a massive influx of immigrants and was transforming from pastoral country estates to a subdivided

urban region of low income, working class families. The presence of numerous bottles marketed to immigrant populations including French, German, and Spanish speaking people, the association of Dorchester with Irish immigrants, Catholic artifacts present at the site, and an artifact assemblage consistent with low to moderate income families, are clear indications that the fill deposit can be associated with European immigrants residing in Dorchester.

Women and children were also distinctly represented as consumers in the Blake House site. Several fragments of infant nursing bottles were recovered, representing this demographic. In addition, a women's perfume bottle was recovered, as well as a woman's pocketbook. This pocketbook has detailed, colorful, floral embroidery and potentially speaks to social aspirations of the consumer who purchased it. In context with an assemblage of largely utilitarian, essential, belongings in a working class Dorchester neighborhood, artifacts such as this pocketbook, two silvered milk glass buttons, and one piece of French porcelain are suggestive of the consumers' knowledge of and aspirations for fine goods.

Through analysis on bottle reuse and recycling it appears that soda and beer bottles were intensively recycled. These recycling patterns are demonstrative of a consumer group under economic stress. They are particularly indicative of a working-class urban population and suggestive of an immigrant population. This also exemplifies the significance of the conspicuous goods mentioned above among the more inconspicuous artifacts such as the bottles.

Nevertheless, the Blake House site consumers prioritized leisure time as evidenced by dominoes that were recovered from the fill and newspaper fragments that were also recovered archaeologically. Despite seemingly limited funds and economic stress, these leisure activities were arranged as dominoes particularly emphasizes a group leisure activity. The newspaper fragments also confirmed that at least a portion of the consumers were literate in English (though potentially also literate in other languages) and interested in local current events. The newspapers pertain to discussions of Boston topics, most likely fragment of the Boston Daily Standard. The most clearly identified subject of these archaeologically sampled newspapers was that of the regular meetings of the Boston Horticultural Society, though it is impossible to know if these pages particularly were of interest to the Blake House site consumers, or if the preservation of these specific pages are coincidental.

These consumers had some amount of discretionary money available to spend on more than simply the bare necessities. For instance, the bottle collection represented optional goods such as hair growth tonic, condiments, and perfume. Though these goods could have improved the quality of life for the Blake House site consumers, they were not essentials, but rather preferred goods (for example, food is necessary as sustenance, but condiments are flavor additives to make the experience more enjoyable).

Based on manufacture-deposition lag analysis, these consumers had either stable health conditions or a preference for home remedies over proprietary and prescription medicines. This pattern is also confirmed by the recycling patterns, demonstrating that the seemingly large assemblage of medicine bottles is actually a result of selective

recycling, rather than a great deal of illness. GIS analysis of apothecaries demonstrates that these consumers had ample selection of stores from which to purchase their medicine, giving them easy geographic access to healthcare. Despite nearer options, goods including medicine were still purchased in the downtown area of Boston, suggesting that the Dorchester consumers still felt connected to the heart of the city. Their product and store selection appears to be demonstrably impacted by advertisements. The Dorchester Beacon newspaper from 1895 heavily advertises Scott's Cod Liver Oil and the A.A. Burnham pharmacy in virtually each weekly issue, (one of the only medicinal products advertised in the newspaper). These two products show up more frequently than most other products, suggesting a correlation between the advertising campaign in the Dorchester Beacon and product selection from the Blake House consumers.

Consumer behavior analysis can be applied to archaeological data sets, even in cases of inconspicuous consumption such as the selection of bottled goods. If a consumer behavior approach is used only to interpret artifacts based purely on determinations of wealth and social status, many of the diverse aspects of consumer behavior are overlooked, to the disadvantage and clear oversimplification of the interpretation. This thesis should eliminate some of those assumptions, and encourage researchers to use consumer behavior to analyze a more diverse range of artifacts. There are many influences on consumer behavior, including marketing, reference groups, income, and taste, but this diversity in influences should not be viewed as preventing a clear interpretation of consumer behavior, rather an opportunity to further analyze the

impact of these influences on people's lives. By critically examining recycling potential, and manufacture-deposition lag, this challenge to interpretation can also be faced, allowing for the embrace of a consumer behavior interpretation. Examining artifact classes, such as glass bottles, that are outside of the realm of conspicuous consumption allows researchers to re-evaluate and extend the ways in which consumer analysis can be useful.

APPENDIX 1

BLAKE HOUSE BOTTLE CATALOG

Artiller # (BG)	Quantity	Unit	Lev	Strati- graphic Level	Color	Manufacturing Technique	Emboss- sed Label (Y/N)	Part of Bottle	File Finishes	File Bases	Bottle Height inches	Notes from bottle	Full Name/ Identification	Product Description	Product Location	Base Text and Interpretation	Notes
0001	11	A	1	L1	Amber	molded	N	N	Body								
0002	1	A	1	L1	Line	indeterminate	N	N	Body								
0003	9	A	1	L1	Green	indeterminate	N	N	Body								
0004	1	A	1	L1	Colorless	indeterminate	N	N	Neck	incomplete							
0005	2	A	1	L1	Colorless	molded	Y	N	Body			illegible single embossed letter					
0006	1	A	1	L1	Colorless	molded	Y	N	Base		incomplete	illegible single embossed letter					
0007	1	A	2	L1	Dark Green	indeterminate	N	N	Body								
0008	1	A	2	L1	Solarized	indeterminate	Y	N	Body			"OL."					solarized glass from 1820-1930
0009	5	A	2	L1	Aqua	indeterminate	N	N	Body								
0010	1	A	2	L1	Aqua	Machine Made	Y	N	Base	incomplete							bottles labeled with ounces were after 1913
0011	26	A	2	L1	Amber	indeterminate	N	N	Body								
0012	1	A	2	L1	Amber	Machine Made	N	N	Base		incomplete						
0013	44	A	2	L1	Colorless	indeterminate	N	N	Body								stippling on machine made bottles from 1940s or later
0014	3	A	2	L1	Colorless	molded	N	N	Base		incomplete						
0016	1	A	2	L1	Colorless	molded	N	N	Base		incomplete						
0017	4	A	2	L1	Colorless	indeterminate	Y	N	Body			illegible single embossed letter					
0018	1	A	3	L2	Colorless	free blown	N	N	Lip	2.15		free formed finish					
0019	1	A	3	L2	Aqua	free blown	N	N	Body								
0020	1	A	3	L2	Dark Green	indeterminate	N	N	Body								
0021	1	A	3	L2	Aqua	indeterminate	Y	N	Body			"HA..."					
0022	2	A	3	L2	Colorless	indeterminate	N	N	Body								
0023	1	A	3	L2	Aqua	indeterminate	N	N	Body								
0024	3	A	4	L3	Colorless	indeterminate	N	N	Body								
0025	1	A	4	L3	Colorless	molded	N	N	Body								
0026	1	A	4	L3	Colorless	indeterminate	Y	N	Body			"QU..."					
0027	1	A	4	L3	Cobalt Blue	indeterminate	N	N	Body								
0028	2	A	4	L3	Light Olive	indeterminate	N	N	Body								
0029	1	A	4	L3	Colorless	molded	N	N	Base	incomplete							
0030	1	A	4	L3	Olive	free blown	N	N	Body								
0031	1	A	5	L3	Colorless	molded	N	N	Body								
0032	1	A	5	L3	Colorless	indeterminate	N	N	Body								
0033	1	A	6	L4/5	Colorless	cup mold	Y	N	Whole	2.12	3.20	improved tooled finish, base embossed "T"				"T"	cup mold dates 1850-1910
0034	4	A	6	L4/5	Aqua	indeterminate	N	N	Body								
0035	1	A	6	L4/5	Aqua	indeterminate	N	N	Base	incomplete							
0036	3	A	6	L4/5	Colorless	indeterminate	N	N	Body								
0037	1	A	6	L4/5	Colorless	molded	N	N	Body								
0038	4	A	6	L4/5	Colorless	molded	N	N	Neck and finish	2.1		tooled finish, all pieces cross hatched					

Artifact # (BG)	Quantity	Unit	Level	Strati- graphic Level	Manufacturing Technique	Embossed (Y/N)	Paper Label (Y/N)	Part of Bottle Finishes	Fike Bases	Bottle Height (in inches)	Notes from bottle	Full Name/Identification	Product Description	Product Location	Base Text and Interpretation	Notes
0039	1 A		6	L4/5 Aqua	cup mold	Y	N	Base and Body	3.3		from panel: "...R // ...AICA // CS & // ...ERED 1876"; side panel: "...A"; base: "13"	POTTER DRUG & CHEM. CORP // BOSTON, MASS. U.S.A. // SANFORD'S JAMAICA GINGER / THE QUINTESSENCE OF JAMAICA / GINGER, CHOICE AROMATICS, & / FRENCH BRANDY, REGISTERED 1876 Fike 1987/48, 113, 115, 129 Does not look like the bottle in Fike, but text lines up.	jamaica ginger	Boston	"13"	cup mold dates 1850-1910
0040	1 A		6	L4/5 Colorless	cup mold	Y	N	Whole	2.9	3.3	5.5	prescription lip, tooled finish "K // A L. KIMBALL // PHARMACIST // CHARLESTOWN	prescription	Charlestown, MA		cup mold dates 1850-1910; by June 1891 purchased the store at 119 Main St address according, still listed at same 119 Main Street address in 1914 Druggist Directory
0041	1 A		8	L4/5 Aqua	cup mold	N	N	Whole	2.7	3.20	2.5	patent lip, fiber inside bottle, possibly remnant of brush style applicator				cup mold dates 1850-1910
0042	4 A		8	L4/5 Colorless	mold blown	Y	N	Near Compl ete	2.9			tooled finish, prescription lip, pieces all cross read: "A. A. BURNHAM ... // PHARMACIS. ... // 459 DUDLEY ST COR D. ... // B. ... ON"		459 Dudley St, Boston (intersection of Dudley and Dennis St)		listed as a member in rolls of members for the National Pharmaceutical Association, membership beginning in 1891, and latest reference found 1918
0043	3 A		8	L4/5 light green	cup mold	Y	N	Near Compl ete		3.3		pieces all cross read, front panel: "S. ", side panel "SARSAPARILLA"; side panel 2 "MPOUND EXT"; base: "p 8" Cross reads with BG#0070	sarsaparilla		"p 8"	James Cook Ayer established his drug and medicine business in 1841. The first embossed containers date ca 1847. In 1938 the business was acquired by Sterling Products Inc." (Fike 1987:94); SHIA Bottle website says cup mold dates 1850-1910
0044	1 A		8	L4/5 Colorless	cup mold	Y	N	Whole	2.7	3.3	4.0	tooled finish, patent lip. Front panel: "GEO C FRYE // PORTLAND // ME"	prescription	Portland, ME		cup mold dates 1850-1910. Given other Geo C Frye bottle, no indication that this is actually from a druggist in Portland, but rather could have been used by a druggist in Boston. Started pharmacy in 1868
0045	1 A		8	L4/5 Amber	post mold	Y	N	Whole	2.3	3.11	7.25	bead lip, tooled finish, front panel: "THE // MALTINE // MFG CO. /CHEMISTS // NEW YORK"		New York		post mold from 1840-1900
0046	5 A		8	L4/5 Colorless	mold blown	N	N	Near Compl ete	2.7			tooled finish, patent lip, extensive burning of glass adhered to bone and charcoal				
0047	1 A		8	L4/5 Aqua	mold blown	Y	N	body				side panel: "COD ..."	Cod Liver Oil?			
0048	2 A		8	L4/5 Amber	indeterminate	N	N	body								
0049	4 A		8	L4/5 Olive	indeterminate	N	N	body								
0050	19 A		8	L4/5 Colorless	indeterminate	N	N	body								

Artifact # (BG)	Quantity	Unit	Level	Stratigraphic Level	Manufacturing Technique	Embossed (Y/N)	Paper Label (Y/N)	Part of Bottle	Fike Finishes	Fike Bases	Bottle Height (in inches)	Notes from bottle	Full Name/Identification	Product Description	Product Location	Base Text and Interpretation	Notes
0051	12 A		8	L4/5	Colorless molded	N	N	Body									
0052	1 A		8	L4/5	Colorless molded	Y	N	Body				illegible letter and possible design					
0053	1 A		8	L4/5	Colorless mold blown	Y	N	Neck and finish	2.3			tooled finish, bead lip, body embossed with "8"					
0054	22 A		8	L4/5	Aqua cup mold	Y	N	base and body		3.4		base reads: "14", most pieces cross mend				"14"	cup mold dates 1850-1910
0055	1 A		8	L4/5	Aqua mold blown	N	N	Body									
0056	1 A		8	L4/5	Aqua indeterminate	N	N	Body									
0057	1 A		9	L6	Colorless cup mold	N	Y	Whole	2.9	3.18	4.25	prescription lip, tooled finish, paper label wraps around front and side of ovoid bottle. Text includes "Chadwick", "Physician's Prescription", "Directions" "Dr.", "Chadwick St.", "Boston Hig...", label includes lines for writing	...TIRE ...CHADWICK// Simon G. Cottrell at 34 Dearborn and 19 Chadwick who is an apothecary	prescription	Chadwick St, Boston		Chadwick Street today is a culdesac, but 1907 map of Dorchester puts the street in the exact same area, just a street, not a culdesac. According to the 1892 Boston Business Directory there is a Simon G. Cottrell at 34 Dearborn and 19 Chadwick who is an apothecary. Cup mold dates 1850-1910. In 1873 was working in Cambridge, by 1884 had own place at 34 Dearborn, Boston, then 1891 listed as 34 Dearborn & 19 Chadwick
0058	1 A		9	L6	Colorless cup mold	Y	Y	Whole	2.9	3.20	4.75	prescription lip, tooled finish, embossed bottom reads "WT & CO // 2"; paper label with text including "...cription" and possibly includes lines for writing	possibly "...MU..." written below?	prescription		"WT & CO // 2", lip for base embossing: 1857-1901	Cup mold dates 1850-1910
0059	3 A		9	L6	Colorless cup mold	Y	N	Base and Body		3.3		Pieces cross mend. Embossed front panel: "...NIA FIG SYRUP Co // FRANCISCO CAL"; side panels: "SYRUP OF FIGS" and "SYRUP OF FIGS", base: "XII"	SYRUP OF FIGS // CALIFORNIA FIG SYRUP CO // SAN FRANCISCO CAL// SYRUP OF FIGS Fike 1987-54; B&B Wilson 1971-89	Fig Syrup	San Francisco	"XII"	Cup mold dates 1850-1910
0060	5 A		9	L6	Aqua mold blown	N	N	Body									
0061	2 A		9	L6	Aqua indeterminate	N	N	Body									
0062	1 A		9	L6	Aqua indeterminate	Y	N	Body				embossed "...ON..." or "...NO..."				"...ON..." or "...NO..."	
0063	1 A		9	L6	Aqua cup mold	Y	N	Base		incomplete		base embossed "1"				"1"	Cup mold dates 1850-1910
0064	1 A		9	L6	Aqua mold blown	Y	N	Base		incomplete		"1"					
0065	1 A		9	L6	Aqua mold blown	N	N	base		incomplete							
0066	1 A		9	L6	Aqua mold blown	N	N	Neck and finish	2.7			patent lip, tooled finish					

Artifact # (BG)	Quantity	Unit	Level	Stratigraphic Level	Manufacturing Technique	Embossed (Y/N)	Paper Label (Y/N)	Part of Bottle	Fake Finishes	Fake Bases	Bottle Height (in inches)	Notes from bottle	Full Name/Identification	Product Description	Product Location	Base Text and Interpretation	Notes
0067	1 A		9	L6 Colorless	post mold	Y	Y	Whole	2.3	3.1	2.75	bead lip, tooled finish, ground inside neck, embossed front panel reads: "LAZELLS // PERFUMES // NEW YORK"; base embossing somewhat illegible, includes "BOTTLE // AUG ..." (looks like a year follows). Very small fragment of paper label remains on side of bottle, no text.		perfume	New York	"BOTTLE // AUG ..."	Post mold dates from 1840-1900; Changed name to just "Lazell" in 1890
0068	2 A		9	L6 Olive	mold blown	N	N	Neck and shoulder	2.15			cracked off finish that was ground; rippled vessel surface					
0069	2 A		9	L6 Colorless	mold blown	N	N	Neck and shoulder	2.9			prescription lip, tooled finish, pieces cross mend					
0070	5 A		9	L6 light green	mold blown	Y	N	Near Complete	2.24			tooled finish, collared ring lip, pieces all cross mend. Front panel reads "AYER", back panel "LOWELL // MASS, U.S.A.", side panel "CO. ...". Cross mends with BG#0043	AYERS / COMPOUND EXT. / LOWELL / MASS, U.S.A. / SARSAPARILLA Wilson 1981:44, also File P.214 like BG#0043	Sarsaparilla	Lowell, MA		no base in tact to determine manufacturing technique, so date is based on availability of Ayer's Sarsaparilla
0071	5 A		9	L6 Dark Green	free blown	N	N	neck, finish, and body	2.18			champagne lip, pieces cross mend					
0072	5 A		9	L6 Aqua	molded	N	N	body									
0073	15 A		9	L6 Colorless	molded	N	N	body									
0074	1 A		9	L6 Colorless	molded	N	N	shoulder	incomplete								
0075	1 A		9	L6 Colorless	molded	N	N	base		incomplete							
0076	46 A		9	L6 Colorless	indeterminate	N	N	Body									
0077	1 A		9	L6 Colorless	cup mold	Y	N	Base and Body		3.2		bottom reads "Z // W T & CO // U.S.A." side panel: "... M JR. // ... T // ... ENNIS"	A.A. Barnham Jr., Pharmacist, 459 Dudley St. Cor. Dennis, Boston		also on corner of Dudley and Dennis St in Boston?	"Z // W T & CO // U.S.A." tpq for base embossing 1857-1901	Cup mold dates 1850-1910; listed as a member in rolls of members for the National Pharmaceutical Association, membership beginning in 1891, and latest reference found 1918
0078	1 A		9	L6 Colorless	cup mold	Y	N	Base		incomplete		embossed on base: "H"				"H"	Cup mold dates 1850-1910
0079	1 A		9	L6 Colorless	mold blown	Y	N	Body				embossed "S"					
0080	1 A		9	L6 Colorless	molded	Y	N	Body				embossed "... STERED"					
0081	1 A		10	L7 Aqua	cup mold	N	Y	Whole	2.7	3.20	2.5	paper label completely illegible. Patent lip, tooled finish. Metal closure still attached, with long applicator.					Cup mold dates 1850-1910
0082	1 A		11	L8 Aqua	cup mold	Y	N	Whole	2.7	3.12	5.25	tooled finish, patent lip, embossed front panel: "SAWYERS // CRYSTAL // BLUEING"; base "S"		Bluening	Boston		Cup mold dates 1850-1910 Sawyer's Blue Co in Boston MA since 1864. (from the Federal Reporter 1887)
0083	3 A		11	L8 Amber	molded	Y	N	Body				embossed "... TS // ... RK"					
0084	3 A		11	L8 Colorless	cup mold	Y	N	Base and Body		3.2		side panel: "... ST // ... EY ST. COR. DENNIS // ... OSTON"; base poorly embossed, includes: "T" "U.S.A." "S" "W" "O". Text similar to BG0042, but different bottle sizes	A.A. Barnham Jr., Pharmacist, 459 Dudley St. Cor. Dennis, Boston	prescription	459 Dudley St, Boston (intersection of Dudley and Dennis St)	likely "W T & CO U.S.A." tpq for base embossing 1857-1901	Cup mold dates 1850-1910; listed as a member in rolls of members for the National Pharmaceutical Association, membership beginning in 1891, and latest reference found 1918

Artifact # (BG)	Quantity	Unit	Level	Stratigraphic Level	Color	Manufacturing Technique	Embossed (Y/N)	Paper Label (Y/N)	Part of Bottle	Finishes	File Bases	Bottle Height (inches)	Notes from bottle	Product Description	Product Location	Base Text and Interpretation	Notes
0085	2 A		11	L8	Colorless	mold blown	N	N	Neck, should er, and body	2.9			prescription lip, tooled finish, may be part of BG0084				
0086	1 A		11	L8	Colorless	mold blown	N	N	Finish	2.177			ground rim, possibly jar with external screw				Wide mouth external screw ground lip from 1858-1910
0087	6 A		11	L8	Colorless	indeterminate	N	N	body								
0088	2 A		11	L8	Colorless	molded	N	N	body								
0089	1 A		11	L8	Colorless	molded	N	N	neck	incomplete							
0090	2 A		11	L8	Dark Green	indeterminate	N	N	Body								
0091	2 A		11	L8	Aqua	indeterminate	N	N	Body								
0092	3 A		11	L8	Dark Green	turn molded	N	N	Base and Body		3.20		pushup with mandelon, pieces cross mend				
0093	5 A		11	L8	Dark Green	indeterminate	N	N	Body								
0094	1 A		11	L8	Colorless	cup mold	Y	N	Whole	2.7	3.3	6.5	Patent lip, tooled finish. Front panel: "CALIFORNIA FIG SYRUP CO // SAN FRANCISCO CAL."; Side panels "SYRUP OF FIGS" and "SYRUP OF FIGS", base "XI" or "XI"	Fig syrup	San Francisco	"XI" or "XI"	Cup mold dates 1850-1910
0095	1 A		12	L9	Colorless	indeterminate	N	N	Body				raised textured surface				
0096	1 A		12	L9	Colorless	indeterminate	N	N	Body								
0097	2 H		1	L1	Amber	indeterminate	N	N	Body								
0098	2 H		1	L1	Amber	molded	N	N	Body								
0099	1 H		1	L1	light green	indeterminate	N	N	Body								
0100	8 H		1	L1	Colorless	indeterminate	N	N	Body								
0101	2 H		1	L1	Colorless	indeterminate	N	N	Body								
0102	1 H		1	L1	Colorless	indeterminate	Y	N	Base		incomplete		textured surface base embossing possibly reads "...ED"			"...ED"	
0103	14 B		1	L1	Amber	indeterminate	N	N	body								
0104	1 B		1	L1	Amber	molded	N	N	body								
0105	1 B		1	L1	Amber	Machine Made	N	N	base		incomplete						Base stippling on machine made bottles from 1940s or later
0106	1 B		1	L1	Aqua	indeterminate	N	N	body								
0107	1 B		1	L1	Line Green	indeterminate	N	N	Body				impressed diamond pattern				
0108	1 B		1	L1	Line Green	indeterminate	N	N	Body								
0109	1 B		1	L1	Black	indeterminate	N	N	Body								
0110	1 B		1	L1	Colorless	molded	N	N	Body								
0111	3 B		1	L1	Colorless	Molded	N	N	Body								
0112	40 B		1	L1	Colorless	indeterminate	N	N	Body								
0113	4 B		1	L1	Colorless	indeterminate	N	N	Body				textured surface				
0114	1 B		1	L1	Colorless	molded	N	N	Neck	incomplete							
0115	1 B		1	L1	Colorless	molded	Y	N	Body				"NEWBUL..."				
0116	1 B		1	L1	Colorless	molded	Y	N	Body				"...E //...E"				
0117	1 B		1	L1	Colorless	molded	Y	N	Body				"...NE..."				
0118	1 B		1	L1	Colorless	molded	Y	N	Body				"...O..."				
0119	1 B		1	L1	Colorless	molded	Y	N	Body				"...S..."				
0120	10 E		1	L1	Amber	indeterminate	N	N	Body								
0121	1 E		1	L1	Amber	indeterminate	N	N	Neck	incomplete							
0122	1 E		1	L1	Amber	indeterminate	N	N	Neck	2.16			external screw top				

Artifact # (BG)	Quantity	Unit	Level	Stratigraphic Level	Manufacturing Technique	Embossed (Y/N)	Paper Label (Y/N)	Part of Bottle	Fake Finishes	Fake Bases	Bottle Height (inches)	Notes from bottle	Full Name/Identification	Product Description	Product Location	Base Text and Interpretation	Notes
0123	1 E		1	L1 Amber	indeterminate	N	N	Base		incomplete							
0124	1 E		1	L1 Lime Green	modded	N	N	body									
0125	7 E		1	L1 Aqua	indeterminate	N	N	body									
0126	70 E		1	L1 Colorless	indeterminate	N	N	body									
0127	9 E		1	L1 Solarized	indeterminate	N	N	body									
0128	7 B		2	L1 Amber	indeterminate	N	N	body									
0129	1 B		2	L1 Amber	modded	N	N	Neck	incomplete								solarized glass from 1820-1930
0130	1 B		2	L1 Amber	modded	Y	N	Base		incomplete		embossing on base, but illegible					
0131	1 B		2	L1 Amber	modded	Y	N	body				rippled texture, and illegible embossing					
0132	1 B		2	L1 Lime Green	indeterminate	N	N	body									
0133	1 B		2	L1 Olive	indeterminate	N	N	body									
0134	4 B		2	L1 Aqua	indeterminate	N	N	body									
0135	1 B		2	L1 Aqua	modded	N	N	body									
0136	1 B		2	L1 Colorless	indeterminate	N	N	body				solarized animal label in red, white, and blue (Pepsi logo?)					that kind of label existed in US in 1934 into the 1960s
0137	2 B		2	L1 Solarized	indeterminate	N	N	body				ribbed glass					solarized glass from 1820-1930
0138	2 B		2	L1 Solarized	indeterminate	N	N	body									
0139	42 B		2	L1 Colorless	indeterminate	N	N	body									
0140	3 B		2	L1 Colorless	modded	N	N	Body									
0141	1 B		2	L1 Colorless	indeterminate	Y	N	Body				"...NE..."					
0142	1 B		2	L1 Colorless	indeterminate	Y	N	Body				"...D..."					
0143	1 B		3	L2 Aqua	indeterminate	N	N	Body									
0144	2 B		4	L2 Aqua	indeterminate	N	N	Body									
0145	1 B		4	L2 Amber	indeterminate	Y	N	Body				"H..."					
0146	1 B		4	L2 Amber	indeterminate	Y	N	Body				"...DE..."					
0147	1 B		4	L2 Colorless	indeterminate	N	N	Body									
0148	2 B		5	L3 Aqua	indeterminate	N	N	Body									
0149	15 B		5	L3 Colorless	indeterminate	N	N	Body									
0151	2 B		6	L3 Aqua	indeterminate	N	N	Body									
0152	3 B		6	L3 Colorless	indeterminate	N	N	Body									
0154	1 B		7	L6 Colorless	cup mold	N	N	Body									
0155	1 B		7	L6 Colorless	cup mold	Y	N	Whole	2.9	3.3	4.0	prescription lip, tooled finish	BURNETT / BOSTON; Fike 1987:156; Reynolds 1983:182; Switzer 1974:69-70; B&B Wilson 1971:25		Boston		cup mold dates 1850-1910; Joseph Burnett opened an apothecary in 1845 according to the city directory in Boston; previously Burnett was in partnership with Theodore Metcalf & Co. ... By 1937 the family-owned business was exclusively manufacturing flavoring extracts; cup mold dates 1850-1910
0156	1 B		7	L6 light green	cup mold	Y	N	Whole	2.8	3.20	8.0	applied rim, ring finish, bottom embossed with "TB // 07 // 02"				"TB // 07 // 02" possibly for "Tibby Brothers, Pittsburgh, PA and Sharpsburg, PA, 1866- c. 1902"	cup mold dates 1850-1910; but 1800-1890 for applied finish
0157	1 B		7	L6 Colorless	mold blown (3 pieces)	N	N	Whole	2.9	3.18	5.0	prescription lip, tooled finish					

Artifact # (BG)	Quantity	Unit	Level	Stratigraphic Level	Manufacturing Technique	Embossed (Y/N)	Paper Label (Y/N)	Part of Bottle	Fake Finishes	Fake Bases	Bottle Height (inches)	Notes from bottle	Full Name/Identification	Product Description	Product Location	Base Text and Interpretation	Notes
0158	1 B		7	L6 Colorless	cap mold	Y	Y	Whole	2.8	3.3	7.0	patent lip, tooled finish, small piece of cork inside bottle. Back panel embossed "WM JAY BARKER // HIRSHUTUS // NEW YORK". Paper label covers front panel and both sides. Text on side panel label: "...ALD HEADS // ...or where the hair is shaved off // should be well // rubbed with the // HIRSHUTUS // on the affected // parts until ... // red, which in ... // short time ... // cause an entirely // new growth // In cases of se- // vere Headache // apply the // HIRSHUTUS // with the palm ... // the hand" Front panel label includes: "ISHED" "BARKER'S", "HAIR" "Keep" "...REUT // ...R USE... // our a quantity ... // the Hirsutus // ...a cup and // with a brush ... // well among the // ...ors of the Hair // ...taking care ... // ... in such... // ...that... // ...and brush // thoroughly // ...particular to... // the points on // hair wants...	REGISTERED / WM JAY BARKER / HIRSHUTUS / NEW YORK; File 1987.154	Hirsutus (Hair tonic)	New York		cup mold dates 1850-1910; the product was sold under Barker's Hirsutus name from 1869-1930
0161	6 B		7	L6 Dark Green	free blown	N	N	body				turn molded mandrel base					
0162	1 B		7	L6 Green	turn molded	N	N	base		3.20							
0163	2 B		7	L6 Amber	indeterminate	N	N	body									
0164	5 B		7	L6 Cobalt Blue	molded	N	N	Body									
0165	1 B		7	L6 Colorless	post mold	Y	N	Base		incomplete		Embossed: "PAT FE. // W. T. // U. " Cross mends with BG 0199; body embossed "1" "2" and tick marks		handy nurse	Philadelphia new york, boston		
0166	31 B		7	L6 Colorless	indeterminate	N	N	body									
0167	11 B		7	L6 Colorless	molded	N	N	body									
0168	21 B		7	L6 Aqua	indeterminate	N	N	Body									
0169	6 B		7	L6 Aqua	molded	N	N	Body									
0170	2 B		7	L6 Aqua	mold blown	N	N	Base		incomplete		pieces cross mend					
0171	2 B		7	L6 Colorless	indeterminate	N	N	Base and Body		incomplete							
0172	1 B		7	L6 Colorless	molded	Y	N	Body				"P... // E..."					
0173	1 B		7	L6 Colorless	molded	Y	N	body				side panel labeled "FIG. "		Fig syrup			
0174	1 B		7	L6 Colorless	molded	Y	N	body and	incomplete			side panel labeled "FL..."					
								should er									
0175	1 B		7	L6 Colorless	molded	Y	N	body				tick marks indicating graduated volume of bottle		nurse?	Philadelphia, New York, Boston		
0176	1 B		7	L6 Colorless	molded	Y	N	body				tick mark, and "UN..."		nurse?	Philadelphia, New York, Boston		
0177	1 B		7	L6 Colorless	indeterminate	N	N	should er	incomplete								

Artifact # (BG)	Quantity	Unit	Level	Stratigraphic Level	Manufacturing Technique	Embossed (Y/N)	Paper Label (Y/N)	Part of Bottle	Fike Finishes	Fike Bases	Bottle Height (in inches)	Notes from bottle	Full Name/Identification	Product Description	Product Location	Base Text and Interpretation	Notes
0178	1 B		7	L6 Colorless	molded	N	N	Neck and shoulder	incomplete								
0179	2 B		7	L6 Colorless	mold blown	N	N	Neck and finish	2.7			pieces cross mend. tooled finish - patent finish with ball neck					ball neck from 1860-1910
0180	1 B		7	L6 Colorless	indeterminate	N	N	neck and finish	2.10			tooled finish, no mold seems on any part of neck					
0181	1 B		7	L6 Colorless	mold blown	N	N	Neck and finish	2.24			collared ring style finish					
0182	1 B		7	L6 Aqua	molded	Y	N	body				"...IT..."					
0183	1 B		7	L6 Aqua	molded	Y	N	body				one illegible letter embossed					
0184	1 B		7	L6 Aqua	mold blown	N	N	base		3.3							
0185	1 B		7	L6 Aqua	indeterminate	N	N	base		incomplete							
0186	1 B		7	L6 Aqua	mold blown	N	N	Neck and finish	2.7			tooled finish, patent lip					
0187	1 B		7	L6 Aqua	mold blown	N	N	Neck and finish	2.11			tooled finish					
0188	5 B		8	L6 Colorless	cup mold	N	Y	Near Complete	2.16	3.20	9.0+	bottle complete except the top of the finish. Small mouth external thread. Label in bright green, yellow, and white with black text. Green leaves. Red or orange fruit/vegetable.	possibly ketchup? Looks like tomatoes-possibly Snider's Tomato Catsup? The T.A. Snider Preserve Co, Cincinnati USA	ketchup			cup mold dates 1850-1910; external thread finishes on ketchup bottles date to 1890's or later
0189	1 B		8	L6 Colorless	unidentified	N	N	Near Complete	2.21	3.20		small glass vial filled with ash(?)		pills			
0190	1 B		8	L6 Colorless	mold blown	N	N	Base and Body		3.20		mold seam on bottom half of vessel only. Appears heavily modified by hand. Is this really a bottle?/?					
0191	1 B		8	L6 Aqua	cup mold	Y	N	Base and Body		3.20							cup mold dates 1850-1910
0192	1 B		8	L6 Aqua	cup mold	Y	N	Whole	2.7	3.2	4.5	tooled finish, patent lip. Base embossed "2". Four square sides. Side 1: "MANUFACTURED BY // THE CHARLES HIRSH CO"; Side 2: "PHILADELPHI PA // U. S. A."; Side 3: "HIRSH IMPROVED // ROOT BEER"; Side 4: "MAKES FIVE // GALLONS OF A // DELICIOUS DRINK"	Root Beer	Philadelphia, PA	"2"	cup mold dates 1850-1910; 1877 Hirt introduces root beer	
0193	1 B		8	L6 Colorless	cup mold	N	N	Whole	2.9	3.2	3.75	tooled finish, prescription lip					cup mold dates 1850-1910
0194	1 B		8	L6 Amber	turn molded	N	N	body and neck	incomplete			applied finish, but not enough of it to identify					
0195	1 B		8	L6 Cobalt Blue	cup mold	N	N	Base and Body		3.20							cup mold dates 1850-1910
0196	1 B		8	L6 Aqua	post mold	Y	N	Whole	2.20	3.20	9.75	tooled finish, with lighting closure still completely in tact. Base embossed "37"; body reads "THIS BOTTLE // NOT TO BE SOLD". Front has an embossed oval where a label might have been placed.	soda			"37"	post mold dates from 1840-1900 and lightning closures from 1870-1920. returnable bottle system (and "Not to be sold" text) dates after 1879)

Artifact # (BG)	Quantity	Unit	Level	Stratigraphic Level	Manufacturing Technique	Embossed (Y/N)	Paper Label (Y/N)	Part of Bottle	Fike Finishes	Fike Bases	Bottle Height (in inches)	Notes from bottle	Full Name/Identification	Product Description	Product Location	Base Text and Interpretation	Notes
0197	1 B		8	L6 Colorless	mold blown	N	N	Neck and finish	2.12			Brandy style lip					
0198	1 B		8	L6 Colorless	mold blown	N	N	Neck, Finish and Shoulder	2.3			applied bead finish					
0199	1 B		8	L6 Colorless	post mold	Y	N	Base		3.12		base reads: "... B 24 1891 // ...T & CO // ... B // ... S. A." "Cross mends with BG 0165	nurser		Philadelphia, New York, Boston	"... B 24 1891 // ...T & CO // ... S. A." "tpq for base embossing: 1857-1901	post mold dates from 1840-1900
0200	1 B		8	L6 Aqua	mold blown	N	N	lip	2.7			looked finish, patent lip					
0201	1 B		8	L6 Amber	indeterminate	N	N	body									
0202	3 B		8	L6 Dark Green	indeterminate	N	N	body									
0203	4 B		8	L6 Cobalt Blue	indeterminate	N	N	body									
0204	1 B		8	L6 Colorless	molded	N	N	shoulder	incomplete								
0205	1 B		8	L6 Colorless	indeterminate	N	N	shoulder	incomplete								
0206	1 B		8	L6 Colorless	molded	Y	N	body				"...YES. ..."					
0207	1 B		8	L6 Colorless	cup mold	Y	N	Base and Body		3.6		"Df & CO" embossed in starburst pattern on base; side: "... G // ...STON"	possibly, but not necessarily GENUINE/RUSSEL SPAULDING / BOSTON MASS. Fike 1987:181; R&B Wilson 1971:86		Boston	"Df & CO" in starburst pattern for Dean, Foster & Company, Boston, MA. This company evidently made primarily prescription and druggist ware. tpq for base embossing: c.1870s-c.1900	cup mold dates 1850-1910,
0208	2 B		8	L6 Colorless	post mold	Y	N	Base and Body		3.20		mostly illegible embossing, possibly "W" with other letters. Two pieces cross mend					post mold dates to 1840-1900
0209	10 B		8	L6 Colorless	molded	N	N	body				tick marks indicating graduated volume of bottle, and various numbers "1", "2", "4", "5", "6", "7", "8". Many pieces cross mend	nurser		Philadelphia, New York, Boston		
0210	7 B		8	L6 Aqua	molded	N	N	Base and Body		3.15		pieces all cross mend					
0211	13 B		8	L6 Aqua	molded	N	N	body									
0212	12 B		8	L6 Aqua	indeterminate	N	N	body									
0213	4 B		8	L6 Colorless	molded	N	N	body									
0214	29 B		8	L6 Colorless	indeterminate	N	N	body									
0215	3 B		9	L6 Olive	turn molded	N	N	base and body		3.20		pieces cross mend					
0216	1 B		9	L6 Olive	molded (turn molded?)	N	N	finish and neck	2.2			applied mineral finish style					

Artifact # (BG)	Quantity	Unit	Level	Stratigraphic Level	Manufacturing Technique	Embossed (Y/N)	Paper Label (Y/N)	Part of Bottle	Fake Finishes	Fake Bases	Bottle Height (inches)	Notes from bottle	Full Name/Identification	Product Description	Product Location	Base Text and Interpretation	Notes
0217	1 B		9	L6 Colorless	cup mold	N	Y	Whole	2.3	3.20	5.5	paper label covers almost the entire bottle (body, neck, lip). Identical to BG 0218. Label reads "...LURE... // VERM... HONE... // D...GEER & SON // A... BOSTON."	text reads "PURE VERMONT HONEY" "UT UP BY" "D.H. GEER & SON" "ANAR... Boston" (Put up by = manufactured by)	Honey	Boston		cup mold dates 1850-1910; manufactured by David H. Geer & Son in Boston at least around 1893-1896. Geer was born in 1808, and still operating his company under the name D. H. Geer & Son at least until 1897. Could not have been alive past 1908 (would have been 100) but business might still have continued under this name
0218	1 B		9	L6 Colorless	cup mold	N	Y	Whole	2.3	3.20	5.5	paper label covers almost the entire bottle (body, neck, lip). Identical to BG 0217. Label reads "ERMON... ONEY // ...UT UP // BY D... // ANAR..."	text reads "PURE VERMONT HONEY" "...UT UP BY" "D.H. GEER & SON" "ANAR... Boston"	Honey	Boston		cup mold dates 1850-1910; manufactured by David H. Geer & Son in Boston at least around 1893-1896. Geer was born in 1808, and still operating his company under the name D. H. Geer & Son at least until 1897. Could not have been alive past 1908 (would have been 100) but business might still have continued under this name
0219	1 B		9	L6 Colorless	cup mold	Y	N	Whole	2.9	3.18	4.75	prescription lip, tooled finish. Base embossed "W... & CO // U. S. A."				"W... & CO // U. S. A." for base embossing. 1857-1901	cup mold dates 1850-1910
0220	1 B		9	L6 Aqua	cup mold	Y	N	Whole	2.7	3.3	5.25	patent lip, tooled finish. Base embossed "JP"; Side 1 "BOSTON"; Side 2 "BURNETT"	BURNETT/BOSTON Fike 1987:156; Reynolds 1983:182; Switzer 1974:69-70; B&B Wilson 1971:25		Boston	"JP"	Joseph Burnett opened an apothecary in 1845 according to the city directory for Boston; previously Burnett was in partnership with Theodore Metcalf & Co. By 1937 the family-owned business was exclusively manufacturing flavoring extracts
0221	1 B		9	L6 Aqua	post mold	Y	N	Whole	2.11	3.3	9.0	tapered ring finish. Front panel embossed "SCOTT'S / EMULSION"; Side 1 "WITH LIME & SODA"; Side 2 "COD LIVER OIL"	SCOTT'S / EMULSION // COD LIVER OIL // WITH LIME & SODA Baldwin 1973:437; Rhodes 1988:352-356-7 Fike P. 196 fig. 206 drawing of bottle	Cod Liver Oil			started in 1876, post mold dates from 1840-1900
0222	1 B		9	L6 Aqua	modded	Y	N	body				"...EPARED"					
0223	7 B		9	L6 Colorless	indeterminate	N	N	body									
0224	1 B		9	L6 Aqua	indeterminate	N	N	body									
0225	2 B		11	L8 Colorless	indeterminate	N	N	body									
0226	4 C		1	L1 Solarized	indeterminate	N	N	body									
0227	10 C		1	L1 Aqua	indeterminate	N	N	body									
0228	1 C		1	L1 Colorless	modded	N	N	body									
0229	1 C		1	L1 Olive	indeterminate	N	N	body									
0230	58 C		1	L1 Colorless	indeterminate	N	N	body									
0231	2 C		1	L1 Colorless	indeterminate	N	N	body									
0232	1 C		1	L1 Colorless	indeterminate	Y	N	body				embossed with one illegible letter "RE"					
0233	2 C		1	L1 Colorless	modded	N	N	Base				incomplete					
0234	1 C		1	L1 Colorless	modded	Y	N	Base				incomplete				"...RT"	

Artifact # (BG)	Quantity	Unit	Level	Stratigraphic Level	Manufacturing Technique	Embossed (Y/N)	Paper Label (Y/N)	Part of Bottle	File Finishes	File Bases	Bottle Height (in inches)	Notes from bottle	Full Name/Identification	Product Description	Product Location	Base Text and Interpretation	Notes
0235	2 C		1	L1	Colorless	indeterminate	N	N	finish	incomplete		not large enough of a piece to identify					
0236	7 C		1	L1	Amber	molded	N	N	body								
0237	5 C		1	L1	Amber	Machine Made	Y	N	base	3.20		base reads "...trong"				"...trong"	stripling on machine made bottles from 1940s or later
0238	35 C		1	L1	Amber	indeterminate	N	N	body								
0239	1 C		1	L1	Amber	Machine Made	N	N	Neck and	2.16		external screw top					external thread screw tops on machine made bottles are from the 1920's or later
0240	1 F		1	L1	Lime Green	indeterminate	N	N	body								
0241	1 F		1	L1	Dark Green	indeterminate	N	N	body								
0242	3 F		1	L1	Amber	indeterminate	N	N	body								
0243	6 F		1	L1	Aqua	indeterminate	N	N	body								
0244	3 F		1	L1	Solarized	indeterminate	N	N	body								solarized glass from 1820-1930
0245	1 F		1	L1	Colorless	molded	N	N	body								
0246	27 F		1	L1	Colorless	indeterminate	N	N	body								
0247	2 F		1	L1	Colorless	indeterminate	N	N	body			slight pattern impressed					
0248	1 F		1	L1	Colorless	molded	N	N	base	incomplete							
0249	1 F		1	L1	Colorless	indeterminate	N	N	body			part of one letter embossed (C'U?)					
0250	1 F		2	L2	Aqua	indeterminate	N	N	body								
0251	2 F		2	L2	Colorless	indeterminate	N	N	body								
0252	1 F		2	L2	Colorless	indeterminate	N	N	base	incomplete							
0253	1 C		3	L2	Aqua	indeterminate	N	N	body								
0254	7 F		4	L3	Colorless	indeterminate	N	N	body								
0255	1 F		4	L3	Aqua	molded	N	N	body								
0256	2 F		4	L3	Aqua	molded	N	N	body			bitters bottle					
0257	1 F		4	L3	Aqua	indeterminate	N	N	body			etched letter (illegible) in a circle					
0258	1 C		6	L6	Cobalt Blue	indeterminate	N	N	lip	2.3		head style lip					
0259	2 C		6	L6	Amber	indeterminate	N	N	body								
0260	1 C		6	L6	Aqua	mold blown	N	Y	neck, finish, and body	2.7		part of paper label on body (possibly reads "SAW...". Patent lip, tooled finish		Bluing?	if Sawyer Crystal Bluing then Boston	Sawyer's Blue Co in Boston MA since 1864. (from the Federal Reporter 1887)	
0261	1 C		6	L6	Aqua	cup mold	Y	Y	Whole	2.15	3.20	2.75	ink well. bottom embossed in backwards letters "A F G W U". Paper label wrapped around body "N... HITE // M... GE."	ink		"A F G W U"	cup mold dates 1850-1910
0262	1 C		6	L6	Aqua	cup mold	Y	Y	Whole	2.7	3.3	4.5	Patent lip with neck ring, tooled finish. Not much of the paper label remains, but may read "J. W. BRA...". Base embossed with "1"	extract?		"1"	could be medicine or an extract bottle based on its shape; cup mold dates 1850-1910
0263	24 C		6	L6	Aqua	cup mold	Y	N	Near Complete	2.1	3.21	7.0	S&P stands for Stickney & Poor of Boston	condiment (likely peppercorne)	Boston		cup mold dates 1850-1910; peppercorne bottle that looks like this would be from 1880-1910
0264	2 C		6	L6	Colorless	mold blown	Y	N	Neck, Finish and Should	2.9		prescription lip, tooled finish, embossed graduated tick marks and "UNCLES". Two pieces cross mend		handy nuser?	Philadelphia, New York, Boston		

Artifact # (BG)	Quantity	Unit	Level	Stratigraphic Level	Manufacturing Technique	Embossed (Y/N)	Paper Label (Y/N)	Part of Bottle	Fake Finishes	Fake Bases	Notes from bottle	Full Name/Identification	Product Description	Product Location	Base Text and Interpretation	Notes
0265	1 C		6	L6 Colorless	mold blown	Y	N	Neck Finish and Should	2.9		prescription lip, tooled finish, embossed graduated tick marks and "OUNCES"		handy nurse?	Philadelphia, New York, Boston		
0266	1 C		6	L6 Colorless	mold blown	N	N	Neck and Lip	2.9		prescription lip, tooled finish					
0267	2 C		6	L6 Colorless	mold blown	N	N	body			tick marks indicating graduated volume of bottle		handy nurse?	Philadelphia, New York, Boston		
0268	3 C		6	L6 Aqua	molded	N	N	neck and body	2.17		external screw threads, ground finish, large mouth (jar)					wide mouth external screw ground lip from 1858-1910
0269	6 C		6	L6 Colorless	mold blown	Y	N	body			embossed seals with "HANDY // NURSER" with WT & CO logo between the two lines. All six pieces cross mend to form two separate seals. Look at website for more info on bottle form		handy nurse	Philadelphia, New York, Boston		
0270	2 C		6	L6 Colorless	post mold	Y	N	Base		3.12	base embossed "PAT FEB 24 1891 // W. T. & CO // B. // U. S. A."		handy nurse	Philadelphia, New York, Boston	PAT FEB 24 1891 // W. T. & CO // B. // U. S. A. - top for base embossing 1857-1901	
0271	4 C		6	L6 Colorless	turn molded	N	N	base		3.20	pieces cross mend					cup mold dates 1850-1910
0272	1 C		6	L6 Colorless	cup mold	N	N	base		e	embossing, but illegible (M?)					
0273	1 C		6	L6 Aqua	indeterminate	Y	N	body								post mold bottom from 1840-1900
0274	2 C		6	L6 Colorless	post mold	N	N	base		e						
0275	2 C		6	L6 Colorless	cup mold	N	N	base		e						cup mold dates 1850-1910
0276	1 C		6	L6 Colorless	indeterminate	Y	N	body			"8" and tick mark embossed		handy nurse??	Philadelphia, New York, Boston		
0277	1 C		6	L6 Colorless	indeterminate	Y	N	body			"R"					
0278	9 C		6	L6 Colorless	molded	N	N	body								
0279	42 C		6	L6 Aqua	indeterminate	N	N	body								
0280	133 C		6	L6 Colorless	indeterminate	N	N	body								
0281	1 C		7	L6 Olive	indeterminate	N	Y	body			paper label reads "...mium Chloride, // Sodium Bromide // ...odium iodide // Sodium Ca. ate, // ...mineral //, in ..."	most common ingredients of mineral water				
0282	1 C		7	L6 Colorless	cup mold	Y	Y	Whole	2.9	3.3	4.25	...M. KE. ...Cotton Street & ...STE ...Date. ...	prescription	Cotton Street (MA? Portland?)		Label DOES NOT MATCH the embossing of the bottle. They seem to be unrelated. google book listing for book by Frye: Illustrated catalogue of surgical instruments and appliances: George C. Frye, druggist & apothecary, corner Franklin and Congress Streets, Portland, Me. 1880. 260 pages; cup mold dates 1850-1910; pharmacy in 1868
0283	2 C		7	L6 Colorless	unidentified	N	N	base		3.20	pieces cross mend					
0284	1 C		7	L6 Colorless	unidentified	Y	N	body			tick marks for graduating volume with embossed "4", "5", "6", "7"		handy nurse?	Philadelphia, New York, Boston		
0285	3 C		7	L6 Colorless	cup mold	Y	N	base		3.20	"W...." on base				"W...."	cup mold dates 1850-1910

Artifact # (BG)	Quantity	Unit	Level	Stratigraphic Level	Manufacturing Technique	Embossed (Y/N)	Paper Label (Y/N)	Part of Bottle	Fake Finishes	Fake Bases	Bottle Height (inches)	Notes from bottle	Full Name/Identification	Product Description	Product Location	Base Text and Interpretation	Notes
0286	1 C		7	L6 Cobalt Blue	cup mold	N	Y	Whole	2.3	3.20	6.0	bead style lip, tooled finish. Paper label fairly illegible.	...LL // acid? C?				cup mold dates 1850-1910
0287	14 C		7	L6 Colorless	mold blown	Y	N	body				embossed "W & C" logo with text "WM R WARNER & CO PHIL."			Philadelphia		William R. Warner established his Philadelphia based business in 1866 after being a pharmacist for 10 years. Warner's interests had included the manufacture of sugar-coated pills. In 1950 the name became Warner-Huabut, Inc. Products for 1900 included Tono Sumbul Cordial, a Tonic & Heart Stimulant, Hydrobromate Caffeine, Bronchial Throat Tablets, Effervescent Salts, Lathia & Vichy Tablets, etc.
0288	1 C		7	L6 Amber	indeterminate	N	N	body									
0289	1 C		7	L6 Colorless	mold blown	N	N	Neck and finish	2.7			patent lip, tooled finish. Cork inside bottle neck					
0290	1 C		7	L6 Colorless	molded	N	N	body	2.24	3.3	6.0	collared ring style, tooled finish. Base embossed "6" or "9". Side 1 embossed "CASTORIA"; Side 2 embossed "DR S. PITCHERS". Paper label on front and back panels. See photo for text.	DR. S. PITCHERS // CASTORIA; File 1957:177; Reynolds 1953:178; B&B Wilson 1971:72 drawing of bottle reads "...pour ...augmen... c'est n... ..neinet nu... es para Crancas de f... 12 mezes, ... Gotta... amos, 1 a 2 colier... ultos, ...berndas...coher de... cantidad... Sacudir... tes."	Castoria (laxative)	Boston	"6" or "9"	label is half in french and half in spanish; "Pitcher's Castoria" was patented by Dr. Samuel Pitcher of Barnstable, Massachusetts, in 1868. It was variously packaged in aqua panel glass bottles embossed "Dr. S. Pitcher's Castoria, Boston, Mass., Paid May 12 68" or only with "Pitcher's Castoria". The name was changed in 1877 to Fletcher's Castoria when it was acquired by Charles H. Fletcher, and marketed by the Centaur Company. The medicine was then packaged in panel clear glass embossed in script "Chas. H. Fletcher's Castoria", cup mold dates 1850-1910
0291	1 C		7	L6 Aqua	cup mold	Y	Y	Whole									
0292	48 C		7	L6 Colorless	indeterminate	N	N	body									
0293	1 C		7	L6 Cobalt Blue	indeterminate	N	N	body									
0294	1 C		7	L6 Cobalt Blue	indeterminate	N	N	finish	2.3			bead style finish					

Artifact # (BG)	Quantity	Unit	Level	Strati- graphic Level	Manufacturing Technique	Embossed (Y/N)	Paper Label (Y/N)	Part of Bottle	Fike Finishes	Fike Bases	Bottle Height (in inches)	Notes from bottle	Full Name/Identification	Product Description	Product Location	Base Text and Interpretation	Notes
0295	22 C		7	L6 Colorless	cup mold	Y	Y	base, body, neck		3.20		many pieces cross read. Paper label on various pieces. Base embossed "CARLSBAD".	CARLSBAD Fike 1987: 158 photo with paper label photo 36 in Fike	laxative of sprudel salts	Germany, New York	"CARLSBAD", company name is Carlsbad	Celtic knot in photo matches my paper label. Photo caption reads: "Bohemian imported laxative of sprudel salts introduced in 1863" P. 158 says: "Advertisement: "Carlsbad Sprudel Salt is obtained from the Sprudel Spring (Bohemia) by evaporation - Aperient, Laxative, Diuretic, Accelerates Absorption, Stimulates Nutrition, Aids Digestion, Corrects Acidity, Fieser & Mendelson Co. Sole Agents for the U.S., 6 Barclay Street, New York City. Introduced in 1863". SHA Bottle website says cup mold dates 1850-1910
0296	15 C		7	L6 Aqua	indeterminate	N	N	body									
0297	1 C		7	L6 Aqua	molded	N	N	body									
0298	1 C		7	L6 Aqua	mold blown	N	N	Neck and finish	2.24			collared ring style, tooled finish					
0299	5 C		7	L6 Aqua	indeterminate	Y	N	body				pieces of embossed letters: "30...", "...ED", "58", "T"					
0300	37 C		7	L6 Aqua	molded	N	N	body				bluing still inside of bottle glass		bluing			bluing inside bottle, but not necessarily the original use of the bottle
0301	3 C		7	L6 Aqua	mold blown	N	N	finish and neck	2.7			patent lip, tooled finish, bluing still inside of bottle		bluing			bluing residue inside bottle (not necessarily the original use of the bottle though)
0302	7 C		7	L6 Aqua	cup mold	Y	N	base and body		3.12		bluing still inside of bottle glass. Embossing reads "S. Y. ... // CRYSTAL // BLUEIN..."	Sawyer Crystal Bluing	Bluing	Boston		cup mold dates 1850-1910, Sawyer's Blue Co in Boston MA since 1864. (from the Federal Reporter 1887)
0303	6 C		7	L6 Aqua	molded	N	Y	body				paper label Reads "SAW... S // SAW... ER // DIRE... TIONS // ...orce... the holes in ... ew // wit... And sh... in small... // ... MASS", bluing still evident in bottle	Sawyer Crystal Bluing	Bluing	Boston		Sawyer's Blue Co in Boston MA since 1864. (from the Federal Reporter 1887)
0304	1 C		8	L6 Colorless	post mold	Y	N	Whole	2.9	3.11	5.25	prescription lip, tooled finish, embossed front panel reads "WEBSTERS // PHARMACY // WARREN AVE. // BOSTON" with mortar/pestle image that has the number "63"	prescription	63 Warren Ave., Boston		post mold dates to 1840-1900; Opened pharmacy in Boston in 1870 with son George. Stephen died in 1886, but business persisted under his son at least until 1905. In 1915 L.W. Griffin is in the building instead.	
0305	1 C		8	L6 Colorless	cup mold	N	Y	Whole	2.9	3.2	4.25	Label on one panel only. Text includes "WE... // Balim... // WINT... // ...ENT // BR... St. Boston"			Boston		cup mold dates 1850-1910

Artifact # (BG)	Quantity	Unit	Level	Strati- graphic Level	Manufacturing Technique	Embossed (Y/N)	Paper Label (Y/N)	Part of Bottle Finishes	File Bases	Bottle Height (in inches)	Notes from bottle	Full Name/Identification	Product Description	Product Location	Base Text and Interpretation	Notes
0306	1	C	8	L6	Colorless	mold blown	N	Y	Whole	2.16	3.20	7.5	external screw finish, paper label in the shape of a crest on the body, then a separate paper label covers the neck of the bottle. Label text reads "CHILLI SAUCE // MANUFACTURED BY ... PRESERVE... ST OF CAR... From also says "CHILLI SAUCE and ... PRESERVE... this is the T.A. Sinder Company	Chilli Sauce		external thread finishes on ketchup bottles date to 1890's or later, bought out in 1923
0307	1	C	8	L6	Colorless	indeterminate	N	N	body				patent lip			
0308	1	C	8	L6	Colorless	indeterminate	N	N	finish	2.7						
0309	5	C	8	L6	Aqua	molded	N	N	body							
0310	2	C	8	L6	Aqua	indeterminate	N	N	body							
0311	1	C	8	L6	Aqua	molded	N	N	base		incomplete					
0312	1	C	8	L6	Aqua	cup mold	Y	N	base		3.3		embossed "...N" on side embossed "WILSON...//...C DRUGGISTS // BOSTON U.S.A."	B O & G. C. WILSON/BOTANIC DRUGGISTS / BOSTON Fike 1987:113	Boston	cup mold dates 1850-1910 Benjamin Osgood and George Carlos Wilson established their business in 1846 and this company was still operating in 1931, according to Boston city directories
0313	2	C	8	L6	Aqua	molded	Y	N	body							style of ink bottle made in the mid 1870's until 1910 (after that it was machine made)
0314	2	C	8	L6	Aqua	mold blown	N	N	finish and neck	2.3			bead finish with collared neck ring, ring shoulder cone ink,	ink		
0315	1	C	8	L6	Aqua	indeterminate	N	Y	body				paper label is very faint. "...UR...// ...amps and ...// ans, B...//... N..." B...//...ns, N..."	actually says "...EURO...// ...amps and ...// Sprains, B...//...ns, N..."	medicine	
0316	1	C	8	L6	Colorless	cup mold	N	N	Whole	2.17	3.20	2.0	extem thread, wide mouth jar (possibly with vaseline still inside)			cup mold dates 1850-1910; also wide mouth external screw jars with ground lips date from 1858- 1910
0317	1	C	8	L6	Cobalt Blue	cup mold	Y	N	Whole	2.3	3.20	2.75	bead lip, tooled finish, embossed on base: "6" on body "BROMO- SELTZER // EMERSON // DRUG CO // BALTIMORE MD"	BROMO SELTZER-EMERSON/D RUG CO/BALTIMORE, MD.	Bromo-seltzer	Baltimore, MD "6", after 1907 there would have been an "M" embossed on the base Maryland Glass Corp... Cork enclosures were in use until 1928 and early variants possessed small mouths.", cup mold dates 1850-1910
0318	1	C	8	L6	Cobalt Blue	cup mold	Y	Y	Whole	2.3	3.20	2.5	bead lip, tooled finish, embossed on base: "2" on body "BROMO- SELTZER // EMERSON // DRUG CO // BALTIMORE MD". Paper label around body, but illegible	BROMO SELTZER-EMERSON/D RUG CO/BALTIMORE, MD.	Bromo Seltzer	Baltimore, MD "2", after 1907 there would have been an "M" embossed on the base Maryland Glass Corp... Cork enclosures were in use until 1928 and early variants possessed small mouths.", cup mold dates 1850-1910
0319	1	C	8	L6	Colorless	cup mold	N	Y	Whole	2.9	3.20	4.5	prescription lip, tooled finish. Closure still in tact (copper alloy metal, cork, etc, aka "wired down cork"). Paper label around body but no words survive			cup mold dates 1850-1910

Artifact # (BG)	Quantity	Unit	Level	Stratigraphic Level	Color	Manufacturing Technique	Embossed (Y/N)	Paper Label (Y/N)	Part of Bottle	Fake Finishes	Fake Bases	Bottle Height (in inches)	Notes from bottle	Full Name/Identification	Product Description	Product Location	Base Text and Interpretation	Notes
0320	2 C		9	L10	Colorless	indeterminate	N	N	body									
0321	1 C		9	L10	Aqua	indeterminate	N	N	body									
0322	1 C		?	L6	Aqua	cup mold	Y	N	Whole	2.19	3.20	7.0	finish has bead with two collars, hand tooled, body embossed : "WORCESTERSHIRE SAUCE// LEA & PERRINS", base embossed "J 61 D // S", collared crown		Worcestershire Sauce		"J 61 D // S"	sauce first sold in US in 1839
0323	1 C		?	L6	Aqua	cup mold	Y	Y	Whole	2.19	3.20	7.0	finish has bead with two collars, hand tooled, body embossed : "WORCESTERSHIRE SAUCE// LEA & PERRINS", base embossed "J 61 D // S". Paper label on body "...and for //ty to sa... palat... // eries ...Sauce...//...D to ... which... // reli...//Marks' Act... "Collared Crown	also includes the Lea Perrins signature band on all of their products. Text says " and for... // eries... // his Sauce... // D to ... of which... // ...Sauce (??) reli... // ...Marks' Act ..."	Worcestershire Sauce		"J 61 D // S"	sauce first sold in US in 1839
0324	1 C		?	L6	Colorless	cup mold	Y	N	Whole	2.9	3.18	4.0	prescription lip, tooled finish, base reads "W T & CO // U.S.A". Bottle inside is covered in yellow powder		prescription?		"W T & CO // U.S.A", tpq for base embossing: 1857-1901	
0325	1 C		?	L6	Colorless	cup mold	Y	N	Whole	2.9	3.18	3.5	prescription lip, tooled finish, base reads "W T & CO // U.S.A".		prescription?		"W T & CO // U.S.A", tpq for base embossing: 1857-1901	
0326	1 C		?	L6	Cobalt Blue	cup mold	Y	N	Whole	2.3	3.20	2.75	bead lip, tooled finish, embossing on body reads: "BROMO SELTZER // EMERSON // DRUG CO // BALTIMORE MD"	BROMO SELTZER/EMERSON/DRUG CO./BALTIMORE, MD.	Bromo-seltzer	Baltimore, MD	after 1907 there would have been an "M" embossed on the base	"Isaac E. Emerson compounded and trademarked Bromo Seltzer in 1889. The bottles were manufactured by Hazel-Atlas until 1907, followed by the Maryland Glass Corp... Cork enclosures were in use until 1928 and early variants possessed small mouths.", cup mold dates 1850-1910
0327	1 C		?	L6	Colorless	indeterminate	N	N	Whole	2.21	3.20	2.25	small glass vial		pills			
0328	3 G		1	L1	Line Green	indeterminate	N	N	body									
0329	1 G		1	L1	Yellow	indeterminate	N	N	body									
0330	4 G		1	L1	Amber	indeterminate	N	N	body									
0331	4 G		1	L1	Aqua	indeterminate	N	N	body									
0332	1 G		1	L1	Colorless	modded	N	N	body									
0333	16 G		1	L1	Colorless	indeterminate	N	N	body									
0334	4 G		1	L1	Solarized	indeterminate	N	N	body									solarized glass from 1820-1930
0335	1 G		1	L1	Solarized	modded	N	N	body									solarized glass from 1820-1930
0336	2 G		1	L1	Colorless	indeterminate	Y	N	body									
0337	1 G		1	L1	Colorless	modded	Y	N	body									
0338	2 G		2	L2	Colorless	indeterminate	N	N	body									
0339	1 D		2	L2	Amber	indeterminate	N	N	body									

Artifact # (BG)	Quantity	Unit	Level	Stratigraphic Level	Manufacturing Technique	Embossed (Y/N)	Paper Label (Y/N)	Part of Bottle	Fake Finishes	Fake Bases Height (in inches)	Notes from bottle	Full Name/Identification	Product Description	Product Location	Base Text and Interpretation	Notes
0340	1 D		2	L2 Solarized	indeterminate	N	N	body								SHA bottle website says solarized glass from 1820-1930
0341	2 D		2	L2 Aqua	indeterminate	N	N	body								
0342	3 D		2	L2 Colorless	indeterminate	N	N	body								
0343	1 D		2	L2 Colorless	cup mold	N	N	Whole	2.9	3.3	5.25	prescription lip, tooled finish				SHA bottle website says cup mold from 1850-1910
0344	1 D		4	L3 Cobalt Blue	indeterminate	N	N	body								
0345	3 D		4	L3 Colorless	indeterminate	N	N	body								
0346	1 D		4	L3 Aqua	indeterminate	N	N	body								
0347	1 D		5	L3 Dark Green	indeterminate	N	N	body								
0348	1 D		5	L3 Colorless	indeterminate	N	N	body								
0349	2 D		5	L3 Aqua	indeterminate	N	N	body								
0350	1 D		5	L3 Aqua	mold blown	N	N	body	2.8			ring lip, applied finish				applied finishes from 1800-1890
0351	1 D		?	L6 Colorless	cup mold	Y	Y	Whole	2.9	3.3	5.25	prescription lip, tooled finish Embossed on side panel 1: "A S HINDS" side 2: "PORTLAND ME" Base embossed "B // III". Paper label on both front and back panel lists of text, see photo. Cork inside bottle.	honey and almond cream	Portland, ME	"B // III"	if honey/almond cream, then: product introduced in 1875 and company absorbed by Lehn & Fink in 1907, looks still like almond cream bottle, though must were the smaller sized bottle that they used to give away
0352	1 D		?	L6 Aqua	cup mold	N	Y	Whole	2.7	3.3	3.5	patent lip, tooled finish. Paper label on front and back panel. Text includes "... WIS ROCK AND TAR ... // GHS, Colds, Asthma, Hoarseness, Bronchitis and // ... Diseases of the Throat and Lungs // The Manufacturing Chemist // ... and St. Junction Merri- Boat ..." Back "FOLLOW DIRECTIONS CARE // ... ctions for ... Shake the bottle before using ... adult, 1 teaspoonful every ... etc. see photo. Cork inside bottle	cold medicine	Boston		Thomas Jenks was previous owner, then Lewis sometime in the 1880's; Lewis was still in that location through 1898 (if not later)

Artifact # (BG)	Quantity	Unit	Level	Stratigraphic Level	Manufacturing Technique	Embossed (Y/N)	Paper Label (Y/N)	Part of Bottle	Fake Finishes	Fake Bases	Bottle Height (in inches)	Notes from bottle	Full Name/Identification	Product Description	Product Location	Base Text and Interpretation	Notes
0353	1	D	?	L6 Colorless	cup mold	Y	Y	Whole	2.7	3.21	5.0	patent lip, but wide mouthed, tooled finish. 10 sided jar. Bottom embossed: "H. J. HEINZ CO. // 79 // PITTSBURGH U.S.A. // PATD JUNE 9 1891" Paper label remains around body with part of logo, and around neck		hoarseadish, mustard, or apple butter	Pittsburgh, PA	H. J. HEINZ CO. // 79 // PITTSBURGH U.S.A. // PATD JUNE 9 1891	produced this type of jar (#79) until 1903 http://standard.digbooks.ca/waf/standard.digbooks.ca/Machinery-Factory/bottle-produced-Heinz-Company-glass-factory-located-Sharpsburg-machine-made-Heinz-Hazel-Atlas-Glass-Company/
0354	1	D	?	L6 Amber	mold blown	N	N	body				paper label "...ERS // K... OIL // DRESSING // FOR // LADIES ... // BOS..."	Kip Oil Dressing for Ladies	leather maintenance	Boston??		BG#0355 and BG#0356 might be from the same vessel. "Kip Oil Dressing" is for oiling kip, a type of soft calf leather. BG#0355 says "...ERS // KIP OIL // DRESSING // FOR // Bo..."
0355	1	D	?	L6 Aqua	molded	N	Y	body				paper label "...pretur // Botheder. // ...n Balsierer von // ...gen, Stiefeln und // Gummi Schuhen, // fowie fur // Reifeitfellen ...eden // und fenne Sed...aren. // Directions // Clean the article to be // dressed and apply the // Dressing evenly with ... // ...ponge attached // ...ork..."	translates: "... boots and goushes // as well as for // travel bags ... // and your..."	leather maintenance	related to Germany...	BG#0355 and BG#0356 might be from the same vessel. "Kip Oil Dressing" is for oiling kip, a type of soft calf leather. BG#0355 says "...ERS // KIP OIL // DRESSING // FOR // Bo..." BG#0356 adm BG#0395 cross mend (see digital photo). New text readable is "Appretur" which is german for "finish" or "waterproofing", also now readable is the word "Schuhen" in a list of "schuhen, Stiefeln, und Gummi Schuhen"	
0356	1	D	?	L6 Aqua	molded	N	Y	body				paper label "is warranted // crack the ... // soil the clot..."		leather maintenance??			
0357	1	D	?	L6 Aqua	molded	N	Y	body				paper label is illegible					
0358	1	D	?	L6 Aqua	molded	N	Y	body				paper label is illegible					
0359	1	D	?	L6 Aqua	molded (2 pieces)	N	N	whole	2.15	3.20	3.5	small vial		pills			
0360	1	D	?	L6 Aqua	molded	N	N	body									

Artifact # (BG)	Quantity	Unit	Level	Strati- graphic Level	Manufacturing Technique	Embossed (Y/N)	Paper Label (Y/N)	Part of Bottle	Fike Finishes	Fike Bases	Bottle Height (in inches)	Notes from bottle	Full Name/Identification	Product Description	Product Location	Base Text and Interpretation	Notes
0361	1	D	?	L6 milk	cup mold	Y	Y	base and body		3.3		embossed side panel 1: "METCALF CO." Side 2 "...TON MASS", paper label on front and back panels. Includes text "THE THEODORE MET. CO. COMPOUND CON. ... // EXTRACT OF ... // Water - Wh ...	Back says: "THE THEODORE MET. CO. ... // COMPOUND CON. ... // TED EXTRACT OF // Water-Wh. ... // ...NILL. ... // ...EST EXTRACT O. ... // ATIVE STRENGTH. // ...R. A. FLAVOR ... KEE. ... // ...Y EXTRACT TO ... // W. OF WHICH IT // ...SAID. ... // URE. // ...aly" front says: "W. ... WHITE // FOR. ... a. // C. sia. as // DIRECTION // One Half teaspoonful // to a qu. ... // T. METC. ... METCALF CO. // BOSTON, MASS. Fike 1987/70 Does match the milk glass bottle description in Fike	vanilla extract	Boston		Ad from 1895, Water-White Vanilla extract. "Theodore Metcalf & Company was established in 1837 (Pharmaceutical Era, 1 Nov 1891). ... Directories included the company until 1943. In 1884 Metcalf won an award for his new invention of water white vanilla.
0362	1	D	?	L6 Colorless	post mold	Y	Y	Whole	2.9	3.6	3.5	prescription lip, tooled finish. Embossing on front panel reads: "STEPHEN GALE // PHARMACIST // WASH ST & CHELSEA SQ"; base reads "W T & CO // U.S.A". Paper label barely remains and is illegible.	paper label has dotted lines for writing, like the other prescription bottles	this address likely the intersection of Washington Street and Chelsea St, at the corner of City Square in Charlestown, MA	"W T & CO // U.S.A", tpq for base embossing: 1857-1901	post mold from 1840-1900. TPQ for base is 1857-1901. Stephen Gale died in Aug 1, 1903, and was formerly from Portland, ME	
0363	1	D	?	L6 Colorless	cup mold	Y	Y	Whole	2.9	3.17	5.5	prescription lip, tooled finish. Embossing on front panel reads: "JOHN F. NEILL // BOTANIC DRUGGIST // 19 UNION ST. BOSTON". Paper label on opposite panel, but illegible.		19 Union St, Boston		He went into business on Feb. 8, 1894 at this address. 1894 started business	
0364	1	D	6	L6 Colorless	molded	Y	N	body				"N"					
0365	3	D	6	L6 Aqua	indeterminate	N	N	body									
0366	1	D	6	L6 Aqua	molded	N	N	neck	incomplete								
0367	3	D	6	L6 Colorless	molded	N	N	body									
0368	10	D	6	L6 Colorless	indeterminate	N	N	body									
0369	2	D	7	L6 Aqua	mold blown	N	N	body finish	2.8			ring lip, applied finish, pieces cross mend, also likely cross mend with BG #0350					
0370	1	D	7	L6 Colorless	mold blown	N	N	finish and neck	2.9			prescription lip, tooled finish					
0371	1	D	7	L6 Colorless	molded	Y	N	body				"...MARK..."					

Artifact # (BG)	Quantity	Unit	Level	Stratigraphic Level	Manufacturing Technique	Embossed (Y/N)	Paper Label (Y/N)	Part of Bottle	Fike Finishes	Fike Bases	Bottle Height (inches)	Notes from bottle	Full Name/Identification	Product Description	Product Location	Base Text and Interpretation	Notes
0372	1	D	7	L6 Aqua	cup mold	Y	N	Whole	2.7	3.20 x 2.1	5.0	patent lip, tooled finish. Embossing on body reads "MINARDS // LINIMENT // BOSTON". 7 panels for half of the body, smooth circle for the other half	MINARDS/LINIMENT / BOSTON Fike 1987.136	liniment	Boston		Ad states "Minard's Liniment, King of Pain," The King of All Liniments For Man or Beast. Cures Diphtheria, Rheumatism, Sore Throat, Frost Bites, Swelling, Bruises, Sprains, Burns, Headache, Neuralgia... Minard's Liniment Mfg. Co., W. J. Nelson, Boston, successors to Nelson & Co., Boston." Product of Levi Minard. The company moved out of Boston and into Framingham, MA in 1904. bottles changed at this time. Cup mold dates 1850-1910
0373	5	D	7	L6 Colorless	modded	N	N	body									
0374	14	D	7	L6 Colorless	indeterminate	N	N	body									
0375	1	D	7	L6 Aqua	modded	N	N	body									
0376	2	D	7	L6 Aqua	indeterminate	N	N	body									
0377	13	D	7	L6 Colorless	mod blown	N	N	Near Complete	2.3	3.20		pieces cross meet to form a very small val. head finish		pills			
0379	5	D	9	L10 Amber	indeterminate	N	N	body				hand tooled finish					
0380	1	D	9	L10 Amber	mod blown	N	N	finish and neck	2.11								
0381	2	D	9	L10 Aqua	mod blown	N	N	base and neck		incomplete		pieces cross meet					
0382	1	D	9	L10 Aqua	indeterminate	N	N	body									
0383	1	D	9	L10 Colorless	modded	N	N	body									
0384	4	D	9	L10 Colorless	indeterminate	N	N	body									
0385	8	D	1	L1 Amber	indeterminate	N	N	body									
0386	1	D	1	L1 Solarized	modded	N	N	body									solarized glass from 1820-1930
0387	3	D	1	L1 Lime Green	indeterminate	N	N	body									
0388	7	D	1	L1 Solarized	indeterminate	N	N	body									solarized glass from 1820-1930
0389	2	D	1	L1 Colorless	modded	N	N	body									
0390	29	D	1	L1 Colorless	indeterminate	N	N	body									
0391	4	D	1	L1 Aqua	indeterminate	N	N	body									
0392	1	D	1	L1 Aqua	modded	Y	N	body				"CO... // ...K REG... // ...ENT..." (Coke bottle)		Coke			looks like a Coke Bottle, that kind of label existed in US in 1934 into the 1960s
0393	3	D	2	L6 Colorless	indeterminate	N	N	body				might have a label					
0394	5	D	2	L6 Aqua	indeterminate	N	N	body				might have a label					
0395	3	D	2	L6 Aqua	indeterminate	N	Y	body				label on flat panels of bottle glass, but illegible	one piece has label with "M", another has "S", three of them might also have tomatoes?	ketchup?!			BG#0356 and BG#0395 cross read. New text readable is "Appetizer", which is genuine for "finish" or "waterproofing", also now readable is the word "Schuhel" in a list of "Schuhel, Stiefel, und Gummi Schuhel"

Artifact # (BG)	Quantity	Unit	Level	Strati-graphic Level	Manufacturing Technique	Embossed (Y/N)	Paper Label (Y/N)	Part of Bottle	Fake Finishes	Fake Bases	Bottle Height (in inches)	Notes from bottle	Full Name/Identification	Product Description	Product Location	Base Text and Interpretation	Notes													
0396	11 D		?	L6 Amber	post mold	Y	N	base and body		3.2		one panel reads "PAINES" the other reads "...OUND"; many pieces cross mend	PAINES//CELERY COMPOUND Baldwin 1973:371; Fike 1987:85; B&B Wilson 1971:66	Celery Compound	Vermont		Label would have said: "PAINES' CELERY COMPOUND, A True Nerve Tonic, An Active Alterative, A Reliable Laxative and Diuretic. It Restores Strength, Renews Vitality, Purifies the Blood, Regulates the Kidney's, Liver and Bowels. PRICE \$1.00. Prepared by WELLS, RICHARDSON & CO., SOLE PROPRIETORS, BURLINGTON, VT." Introduced in 1882 by Milton K. Paine, Windsor, VT. Wells, Richardson & Co. became agents and owner in the late 1880's. post mold base dates from 1840-1900													
																		0397	1 D	?	L6 Colorless	molded	N	N	body			unidentified pattern embossed		
																		0398	2 D	?	L6 Colorless	molded	Y	N	body			"STAN..." and "REG..." embossed on body		
																		0399	2 D	?	L6 Colorless	molded	N	N	body					
																		0400	6 D	?	L6 Colorless	indeterminate	N	N	body					
																		0401	9 D	?	L6 Aqua	molded	N	N	body					
																		0402	12 D	?	L6 Aqua	indeterminate	N	N	body					
																		0403	2 D	?	L6 milk	molded	N	N	finish and neck	2.21		wide mouth with ground channel on rim		
																		0404	1 D	?	L6 Aqua	mold blown	N	N	finish and neck	2.9		prescription lip, tooled finish		
																		0405	1 D	?	L6 Aqua	cup mold	Y	N	base neck		3.2	embossed "B 1.7" on base might have a label		
0406	1 D	?	L6 Aqua	indeterminate	N	N	body																							
0407	3 D	?	L6 Aqua	indeterminate	N	N	body																							
0408	1 D	?	L6 Amber	indeterminate	N	N	body																							
0409	1 D	?	L6 Colorless	indeterminate	N	N	body																							
0410	1 D	?	L6 Colorless	cap mold	Y	N	Whole	2.19	3.20	9.5		tooled finish, crown finish; embossed "S. S. PIERCE CO // BOSTON // REGISTERED"	S.S. Pierce Co is a Boston Grocer that distributes food across New England	soda	Boston		crown finish patented 1892													
0411	1 D	?	L6 Colorless	mold blown	N	N	finish and neck	2.19				tooled finish, crown finish					patented 1892, but tooled crown tops used only until 1915 (then machine made bottles completely took over)													
0412	1 D	?	L6 Colorless	cup mold	Y	Y	Whole	2.9	3.18	3.5		prescription lip, tooled finish, base embossed "W T & CO // USA", paper label across body, but illegible	prescription?		"W T & CO // USA", top for base embossing: 1857-1901															
0413	1 D	?	L6 Colorless	molded	N	Y	Whole	2.21	3.20	2.25		small vial with paper label across entire body. Text includes: "CARTER'S" "LIVER" "PILLS", "Trademark"	most likely "CARTER'S LITTLE LIVER PILLS"	Liver Pills		ad from The Illustrated London News, Aug. 20, 1890 illustrating liver pills, established 1856														
0414	12 D	?	L6 Colorless	cap mold	Y	N	Near Compl etc	2.9	3.20			most pieces cross mend. Prescription lip, tooled finish. Base reads "METCALF CO // TM // BOSTON"	METCALF CO//BOSTON, MASS. Fike 1987:70 embossing on base does not match any one bottle in file	Boston	"METCALF CO // TM // BOSTON"	Theodore Metcalf & Company was established in 1837; Directories included the company until 1943.														
0415	2 D	?	L6 Amber	molded	N	N	body																							
0416	11 D	?	L6 Aqua	molded	N	N	body																							
0417	18 D	?	L6 Aqua	indeterminate	N	N	body																							

Artifact # (BG)	Quantity	Unit	Level	Stratigraphic Level	Manufacturing Technique	Embossed (Y/N)	Paper Label (Y/N)	Part of Bottle	Fake Finishes	Fake Bases	Bottle Height (in inches)	Notes from bottle	Full Name/Identification	Product Description	Product Location	Base Text and Interpretation	Notes
0418	1 D		?	L6 Colorless	mold blown	N	N	finish and neck	2.15			two rings on neck, finish has been cracked off and crushed/trapped					
0419	7 D		?	L6 Aqua	cup mold	Y	N	base and body		3.2		embossed panels 1: "...AKES FIVE // ...ALLONS OF A //DELICIOUS DRINK; panel 2: "MANUFACTURED BY // THE CHARLES E. HIRSES CO; panel 3: "...PHIA PA // ...S. A.; panel 4: "HIRS IMPROVED // ROOT BEER"	Rootbeer	Philadelphia		1877 Hise introduces root beer	
0420	1 D		?	L6 Colorless	cup mold	N	Y	Whole	2.7	3.2	3.5	patent lip, tooled finish. Paper label across body. Text includes "...TALLET...S // POTASSIUM...R // ...TALLET...S // POTASSIUM...R // THE ...E... // BOSTON"	"...TALLET...S // POTASSIUM...R // ...PR... // THE...E. L... // BOSTON,..."	Boston			
0421	1 D		?	L6 Colorless	post mold??	N	N	Whole	2.16	3.20	3.5	external thread with ground lip					post mold dates from 1840-1900; external thread ground wide mouth jars date from 1858-1910
0422	1 D		?	L6 Colorless	cup mold	N	Y	Whole	2.9	3.2	2.25	prescription lip, tooled finish, label or newspaper text across body. Text includes "according..."	"according... and"				
0423	1 D		?	L6 Colorless	cup mold	N	Y	Whole	2.9	3.2	2.25	prescription lip, tooled finish, label or newspaper text across body. Text includes "according...4... Dudl... Roxbury", To age and cure-//... For Sick"	A.A. Barnham Jr., Pharmacist, 459 Dudley St. Cor. Dennis, Boston (intersection of Dudley and Dennis St)	459 Dudley St, Boston		listed as a member in rolls of members for the National Pharmaceutical Association, membership beginning in 1891, and latest reference found 1918	
0424	1 D		?	L6 Colorless	cup mold	N	N	Whole	2.9	3.18	4.25	prescription lip, tooled finish					
0425	1 D		?	L6 Aqua	cup mold	N	N	base and body		3.20							
0426	1 D		?	L6 Aqua	mold blown	N	N	finish and neck	2.9			prescription lip, hand tooled					
0427	1 D		?	L6 Aqua	cup mold	Y	N	base and neck		3.3		embossed "208" on base				"208"	
0428	1 D		?	L6 Aqua	cup mold	Y	N	base		incomplete		embossed on base "W T & CO // U. S. A."				"W T & CO // U.S.A." tpq for base embossing-1857-1901	
0429	1 D		?	L6 Aqua	cup mold	N	N	base		incomplete							
0430	4 D		?	L6 Colorless	molded	N	N	body									
0431	15 D		?	L6 Colorless	indeterminate	N	N	body									
0432	1 D		?	L6 Amber	cup mold	N	Y	Whole	2.24	3.20	5.5	Paper label around body and neck. Text includes "ORIGINAL..." "PREPARED ONLY FOR..." "CHICAGO, NEW YORK & LONDON" "PRICE SIXTY CENTS" "FORMULA"	neck label reads: "...NE... // amount // ... // diluted ... // teaspoonful // DO NOT" front label reads: Reads: "ORIGINAL ELIXER // BOVINE // BEEF // ... // PREPARED ONLY BY // BOVINE // CHICAGO, NEW YORK & LONDON // PRICE SIXTY CENTS"	Bovine Chicago, New York, and London			
0433	1 D		?	L6 Aqua	mold blown	N	N	finish and neck	2.11			ring lip, hand tooled, some residue remains in neck and cork					

Artifact # (BG)	Quantity	Unit	Level	Stratigraphic Level	Manufacturing Technique	Embossed (Y/N)	Paper Label (Y/N)	Part of Bottle	Fake Finishes	Fake Bases	Bottle Height (in inches)	Notes from bottle	Full Name/Identification	Product Description	Product Location	Base Text and Interpretation	Notes
0434	1	D	?	L6 Aqua	cup mold	N	N	base and body		3.20							
0435	1	D	?	L6 Colorless	molded	Y	N	base		incomplete		embossed on base " ... T & CO / U. S. A "				" ... T & CO // U.S.A " :tpq for base embossing 1857-1901	
0436	6	D	?	L6 Aqua	molded	N	N	body									
0437	1	D	?	L6 Aqua	indeterminate	N	N	body									
0438	1	D	?	L6 Colorless	cup mold	N	N	base		incomplete							
0439	1	D	?	L6 Colorless	indeterminate	N	N	body									
0440	1	D	?	L6 Colorless	molded	N	N	body									
0441	1	D	?	L6 Colorless	cup mold	N	N	Whole	2.3	3.20	3.5	rolled over lip, wide mouthed external threads with ground lip.					
0442	1	D	?	L6 Aqua	cup mold	N	Y	Whole	2.16	3.20	6.25	Paper label around body, mostly illegible. Text includes "...pure..." , "...in the world"					

APPENDIX 2

PHOTODOCUMENTATION FOR PRESERVED PAPER LABELS



BG#0057



BG#0058



BG#0158



BG#0188



BG#0217



BG#0218
131



BG#0261



BG#0262



BG#0281



BG#0282



BG#0286



BG#0291



BG#0303



BG#0305



BG#0306



BG#0318



BG#0323

142



BG#0351



BG#0352



BG#0353



BG#0355



BG#0356



BG#0357

148



BG#0358



BG#0361



BG#0362



BG#0363



BG#0395



BG#0413



BG#0420



BG#0422



BG#0423



BG#0432



BG#0442

REFERENCES

Amadan, Eilzabeth

- 1972 National Register of Historic Places Inventory – Nomination Form: James Blake House, Boston, Massachusetts. United States Department of the Interior, National Park Service.

American Pharmaceutical Association

- 1886 Proceedings of the American Pharmaceutical Association, American Pharmaceutical Association, Philadelphia. Accessed via Google Books.

Appadurai, Arjun

- 1986 The Social Life of Things: Commodities in Cultural Perspective. Cambridge University Press, Cambridge.

Baughner, Sherene and Robert W. Venable

- 1987 Ceramics as Indicators of Status and Class in Eighteenth-Century Commercial Agricultural Economy. In Consumer Choice in Historical Archaeology, Suzanne M. Spencer-Wood, editor, pp. 31-54. Plenum Press, New York, NY.

Baughner-Perlin, Sherene

- 1982 Analyzing Glass Bottles for Chronology, Function, and Trade Networks. In Archaeology of Urban America: The Search for Pattern and Process, Roy S. Dickens, Jr., editor, pp. 259-290. Academic Press, New York.

Beaudry, Mary C.

- 1989 The Lowell Boot Mills Complex and Its Housing: Material Expressions of Corporate Ideology. *Historical Archaeology* 23(1):19-32.

Beaudry, Mary C. and Stephen A. Mrozowski

- 2001 Cultural Space and Worker Identity in the Company City: Nineteenth-Century Lowell, Massachusetts. In *The Archaeology of Urban Landscapes: Explorations in Slumland*, Alan Mayne and Tim Murray, editors, pp. 118-172. Cambridge University Press, Cambridge.

Bedford, P. W. (Editor)

- 1889 *Pharmaceutical Record and Weekly Market Review*. Vol. 9, Pharmaceutical Record Company, New York. Accessed via Google Books.

Bedford, P. W. (Editor)

- 1890 *Pharmaceutical Record and Weekly Market Review*. Vol. 10, Pharmaceutical Record Company, New York. Accessed via Google Books.

Bedford, P. W. (Editor)

1891 Massachusetts Items. *Pharmaceutical Record and Weekly Market Review*. Vol. 11 pp332, Pharmaceutical Record Company, New York. Accessed via Google Books.

Berkland, Ellen

2007 Boston City Archaeologist, Boston Landmarks Commission. Field notes and records.

Bonasera, Michael C. and Leslie Raymer

2001 Good for What Ails You: Medicinal Use at Five Points. *Historical Archaeology* 35(3)49-64.

Boston Almanac and Business Directory

1872 Medicines. In *The Boston Almanac and Business Directory*. Sampson, Davenport, and Co., Vol. 37 pp270, Boston. Accessed via Google Books.

Boston Almanac and Business Directory

1885 Apothecaries. In *The Boston Almanac and Business Directory*. Sampson, Davenport, and Co., Vol. 50 pp194, Boston. Accessed via Google Books.

Boston Almanac and Business Directory

1889 Apothecaries. In *The Boston Almanac and Business Directory*. Sampson, Murdock, and Co., Vol. 54 pp194, Boston. Accessed via Google Books.

Boston Almanac and Business Directory

1891 Apothecaries. In *The Boston Almanac and Business Directory*. Sampson, Murdock, and Co., Vol. 56 pp196, Boston. Accessed via Google Books.

Boston Almanac and Business Directory

1892 Apothecaries. In *The Boston Almanac and Business Directory*. Sampson, Murdock, and Co., Vol. 57 pp203, Boston. Accessed via Google Books.

Bourdieu, Pierre

1984 *Distinction: A Social Critique of the Judgement of Taste*, translated by Richard Nice. Harvard University Press, Cambridge, MA.

Boyle, Peyton (editor)

1887 *Sawyer Crystal Blue Co. v. Hubbard*. *The Federal Reporter*. Vol. 31 pp388, West Publishing Company, Saint Paul, MN. Accessed via Google Books.

- Branster, Marc C. and Terrance J. Martin
1987 Working-Class Detroit: Late Victorian Consumer Choices and Status. In
Consumer Choice in Historical Archaeology, Suzanne M. Spencer-Wood, editor,
pp. 301-320. Plenum Press, New York, NY.
- Brighton, Stephen A.
2008 Degrees of Alienation: The Material Evidence of the Irish and Irish American
Experience, 1850-1910. *Historical Archaeology* 42(4):132-153.
- Britt, Steuart Henderson (editor)
1970 Consumer Behavior in Theory and in Action. John Wiley and Sons, Inc.
New York.
- Busch, Jane
1987 Second Time Around: A Look at Bottle Reuse. *Historical Archaeology* 21(1):67-
80.
- Cheney, John, et al.
1982 Site Excavations and Analysis of the Pearl Street Dump Site Gardner,
Massachusetts. Report to the Massachusetts Historical Commission, 25-435.
- Clark, E. E.
1882 Apothecaries. Clark's Boston Blue Book. Edward E. Clark, Boston. Accessed
Via Google Books.
- Connecticut Agricultural Experiment Station
1896 Honey. The Connecticut Agricultural Experiment Station Bulletin: Report on
Food Products. No. 116, Connecticut Agricultural Experiment Station, New
Haven. Accessed via Google Books.
- Cook, Lauren J., Rebecca Yamin, and John P. McCarthy.
1996 Shopping as a Meaningful Action: Toward a Redefinition of Consumption in
Historical Archaeology. *Historical Archaeology* 30(4):50-65.
- Craig, Hugh, (editor)
1914 The N.A.R.D. Journal. Vol. 19, No. 14, National Association of Retail Druggists,
Chicago. Accessed via Google Books.
- Craig, Hugh, (editor)
1915 The N.A.R.D. Journal. National Association of Retail Druggists, Chicago.
Accessed via Google Books.

Cushman, David

- 1984 The Shattuck Street Dump Site: Patterns of Domestic Consumption in a Late 19th Century Working Class Community. Report to the Massachusetts Historical Commission, 25-545.

DeCunzo, LuAnn

- 1987 Adapting to Factory and City: Illustrations from the Industrialization and Urbanization of Paterson, New Jersey. In Consumer Choice in Historical Archaeology, Suzanne M. Spencer-Wood, editor, pp. 261-296. Plenum Press, New York, NY.

Donohue, Barbara

- 1998 Site Examination of the Taunton Elementary and Middle School Project, Taunton, Massachusetts. Report to the Massachusetts Historical Commission, 25-1811.

Dorchester Beacon

- 1894 No Title. Dorchester Beacon. Boston, MA

Dorchester Beacon

- 1895 Blake House. Dorchester Beacon. 7 December. Boston, MA.

Dorchester Beacon

- 1896 Among the Women's Clubs. Dorchester Beacon. 18 January. Boston, MA

Dorchester Beacon

- 1916 No title. Dorchester Beacon. Boston, MA.

The Era Druggists' Directory

- 1905 The Era Druggists' Directory. Vol. 11, D.O. Haynes and Co., New York. Accessed via Google Books.

Fadely, Don

- 2011 Barker's Hirsutus.
<<http://www.hairraisingstories.com/Products/HIRSUTUS.html>>.

Fike, Richard

- 1987 The Bottle Book: A Comprehensive Guide to Historic, Embossed Medicine Bottles. Gibbs M. Smith, Inc. Peregrine Smith Books, Salt Lake City.

Fox, Irving P. (editor)

- 1899 The Spatula: an Illustrated Monthly Publication for Druggists. Vol. 6, No.1, The Spatula Publishing Co., Boston. Accessed via Google Books.

Fox, Irving P. (editor)

1904 The Spatula: an Illustrated Monthly Publication for Druggists. Vol. 11, No.1, The Spatula Publishing Co., Boston. Accessed via Google Books.

Garrow, Patrick H.

1987 The Use of Converging Lines of Evidence for Determining Socioeconomic Status. In *Consumer Choice in Historical Archaeology*, Suzanne M. Spencer-Wood, editor, pp. 217-232. Plenum Press, New York, NY.

Greenough, Jones & Co.

1873 Cambridge Directory for 1873. No. 22 pp103. Boston. Accessed via Google Books.

Griffenhagen, George B. and Mary Bogard

1999 History of Drug Containers and their Labels. American Institute of the History of Pharmacy, Madison, WI.

Gontz, Allen M.

2007 Ground Penetrating Radar Survey of the Blake House, Dorchester, MA. Report to the City Archaeology Program, Department of the Environment, City of Boston, from Department of Environmental, Earth and Ocean Sciences, University of Massachusetts Boston, Boston, MA.

Heberling, Paul M.

1987 Status Indicators: Another Strategy for Interpretation of Settlement Pattern in a Nineteenth-Century Industrial Village. In *Consumer Choice in Historical Archaeology*, Suzanne M. Spencer-Wood, editor, pp. 199-216. Plenum Press, New York, NY.

Hechtlinger, Adelaide

1979 The Great Patent Medicine Era: Or Without Benefit of Doctor. Madison Square Press, Grosset and Dunlap, Inc., New York.

Henry, Susan L.

1987 Factors Influencing Consumer Behavior in Turn-of-the-Century Phoenix, Arizona. In *Consumer Choice in Historical Archaeology*, Suzanne M. Spencer-Wood, editor, pp. 359-382. Plenum Press, New York, NY.

Henry, Susan L.

1991 Consumers, Commodities, and Choices: A General Model of Consumer Behavior. *Historical Archaeology* 25(2):3-14.

Hill, Sarah H.

- 1982 An Examination of Manufacture-Deposition Lag for Glass Bottles from Late Historic Sites. In *Archaeology of Urban America: The Search for Pattern and Process*, Roy S. Dickens, Jr., editor, pp. 291-327.

Historic Preservation and Design

- 2005 Historic Structure Report and Restoration Plan. Report to The Dorchester Historical Society, from Historic Preservation and Design, Salem, MA.

Hunt, William J. Jr. (compiler),

- 1995 Embossed Medicine Bottle Labels: An Electronic Finding Aid for the Identification of Archeological Specimens. National Park Service, Midwest Archeological Center, Lincoln, Nebraska. Revised August, 1997.

Jones, Olive, Catherine Sullivan, George L. Miller, E. Ann Smith, Jane E. Harris and Kevin Lunn

- 1989 The Parks Canada Glass Glossary for the Description of Containers, Tableware, Flat Glass, and Closures. National Historic Parks and Sites Canadian Parks Service, Ottawa.

Klein, Terry H.

- 1991 Nineteenth-Century Ceramics and Models of Consumer Behavior. *Historical Archaeology* 25(2):77-91.

LeeDecker, Charles H., Terry H. Klein, Cheryl A. Hold, and Amy Friedlander.

- 1987 Nineteenth-Century Households and Consumer Behavior in Wilmington, Delaware. In *Consumer Choice in Historical Archaeology*, Suzanne M. Spencer-Wood, editor, pp. 233-260. Plenum Press, New York, NY.

Lindsey, Bill

- 2011 Historic Glass Bottle Identification and Information Website – Bottle Typing/Diagnostic Shapes: Medicinal/Chemical/Druggist Bottles. Society for Historical Archaeology and Bureau of Land Management. ONLINE.

Lorrain, Dessame

- 1968 An Archaeologist's Guide to nineteenth Century American Glass. *Historical Archaeology* 2(1):35-44.

Massachusetts Charitable Mechanic Association

- 1893 Memoranda of Exhibits and Awards. Report of the Eighteenth Triennial Exhibition of the Massachusetts Charitable Mechanic Association. Press of Rockwell and Churchill, Boston. Accessed via Google Books.

- Mayo, Caswell A. and Thomas J. Keenan
 1893 Trade Notes. American Druggist and Pharmaceutical Record. Vol. 23 pp323, American Druggist Publishing Company, New York. Accessed via Google Books.
- Mayo, Caswell A. and Thomas J. Keenan
 1893 Boston. American Druggist and Pharmaceutical Record. Vol. 24 pp66, American Druggist Publishing Company, New York. Accessed via Google Books.
- Mayo, Caswell A. and Thomas J. Keenan
 1894 Boston. American Druggist and Pharmaceutical Record. Vol. 24 pp67, American Druggist Publishing Company, New York. Accessed via Google Books.
- Mayo, Caswell A. and Thomas J. Keenan
 1897 American Druggist and Pharmaceutical Record. Vol. 31, American Druggist Publishing Company, New York. Accessed via Google Books.
- Mayo, Caswell A. and Thomas J. Keenan
 1898 American Druggist and Pharmaceutical Record. Vol. 33, American Druggist Publishing Company, New York. Accessed via Google Books.
- McBride, W. Stephen, and Kim A. McBride
 1987 Socioeconomic Variation in a Late Antebellum Southern Town: The View from Archaeological and Documentary Sources. In Consumer Choice in Historical Archaeology, Suzanne M. Spencer-Wood, editor, pp. 143-162. Plenum Press, New York, NY.
- Miller, D.
 1987 Material Culture and Mass Consumption. Blackwell, New York.
- 1997 Capitalism: An Ethnographic Approach. Oxford.
- Miller, George L. and Catherin Sullivan
 1984 Machine-Made Glass Containers and the End of Production for Mouth-Blown Bottles. Historical Archaeology 18(2):83-96.
- Mrozowski, Stephen A.
 2006 The Archaeology of Class in Urban America. Cambridge University Press, Cambridge.

- Mullins, Paul R.
1999 *Race and Affluence: An Archaeology of African American and Consumer Culture*. Kluwer Academic Publishers, New York.
- 2004 *Ideology, Power, and Capitalism: The Historical Archaeology of Consumption*. In *The Blackwell Companion to Social Archaeology*, Lynn Meskell and Robert Preucel, editors, pp. 195-212. Blackwell, Oxford.
- Orser, Charles E., Jr.
1987 *Plantation Status and Consumer Choice: A Materialist Framework for Historical Archaeology*. In *Consumer Choice in Historical Archaeology*, Suzanne M. Spencer-Wood, editor, pp. 121-138. Plenum Press, New York, NY.
- Parsons, Charles W. (editor)
1893 *The Pharmaceutical Era*. Vol. 10, D.O. Haynes and Company, Detroit, MI. Accessed via Google Books.
- Parsons, Charles W. (editor)
1894 *The Pharmaceutical Era*. Vol. 11, D.O. Haynes and Company, New York. Accessed via Google Books.
- Porter, Eugene H. (editor)
1893 *The North American Journal of Homeopathy*. Vol. 8, pp IV, The Journal Publishing Club, New York. Accessed via Google Books.
- Purser, Margaret
1992 *Consumption as Communication in Nineteenth-Century Paradise Valley Nevada*. *Historical Archaeology* 26(3):105-116.
- Reckner, Paul E. and Stephen A. Brighton
1999 *Free from All Vicious Habits: Archaeological Perspectives on Class Conflict and the Rhetoric of Temperance*. *Historical Archaeology* 33(1):63-86.
- Rosenberg, Chaim M.
2007 *Goods for Sale: Products and Advertising in the Massachusetts Industrial Age*. University of Massachusetts Press, Amherst.
- Shephard, Steven Judd
1987 *Status Variation in Antebellum Alexandria: An Archaeological Study of Ceramic Tableware*. In *Consumer Choice in Historical Archaeology*, Suzanne M. Spencer-Wood, editor, pp. 163-198. Plenum Press, New York, NY.

Smith, Monica L.

- 2007 Inconspicuous Consumption: Non-Display Goods and Identity Formation. *Journal of Archaeological Method and Theory* 44:412-438.

Southborough Historical Society

- 2010 History of the Joseph Burnett Company. Southborough Historical Society, Southborough, MA
<http://www.southboroughhistory.org/History/Burnett%20Company/History_of_J_Burnett_Company.htm>.

Spencer-Wood, Suzanne, and Scott D. Heberling

- 1987 Consumer Choices in White Ceramics: A Comparison of Eleven Early Nineteenth-Century Sites. In *Consumer Choice in Historical Archaeology*, Suzanne M. Spencer-Wood, editor, pp. 55-84. Plenum Press, New York, NY.

Staski, Edward

- 1984 Just What Can a 19th Century Bottle Tell Us? *Historical Archaeology* 18(1):38-51.

Veblen, T.

- 1899 The Theory of the Leisure Class: An Economic Study of Institutions. Mentor. New York.

Walters, C. Glenn

- 1978 Consumer Behavior: Theory and Practice. Richard D. Irwin, Inc. Homewood, IL.

Western Druggist

- 1893 New England Letter. *Western Druggist*. Vol. 15, G. P. Engelhard and Co., Chicago. Accessed Via Google Books.

Whitten, David

- 2011 Glass Factory Marks on Bottles. <<http://www.myinsulators.com/glass-factories/bottlemarks.html>>.

Winn, J.F. (Editor)

- 1891 Kernels of Current Literature. *Practice: The Journal for the Busy Doctor*. Vol. 5, No. 8 pp218, Everett Waddey Co., Richmond, VA. Accessed via Google Books.

Wurst, LouAnn and Randall H. McGuire

- 1999 Immaculate Consumption: A Critique of the “Shop till you drop” School of Human Behavior. *International Journal of Historical Archaeology* 3(3):191-199.

Zimmer, Edward

1977 A Documentary Study of the James Blake House in Dorchester: Title, Structure, and Restoration. Student Paper, American and New England Studies Program, Boston University, Boston, Massachusetts.

Zurawski, Carol and Whitney, Lynn

1979 Seventeenth Century Survey of Dorchester. David Starbuck, ed. Boston University. Boston.