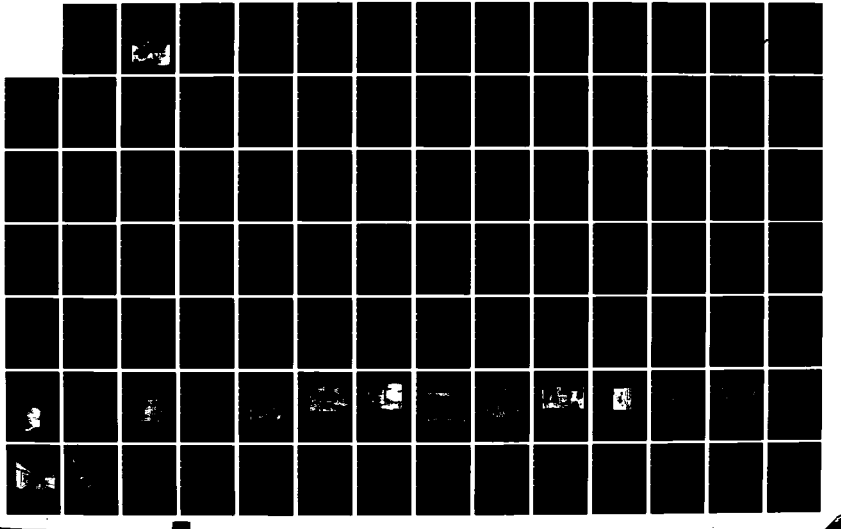
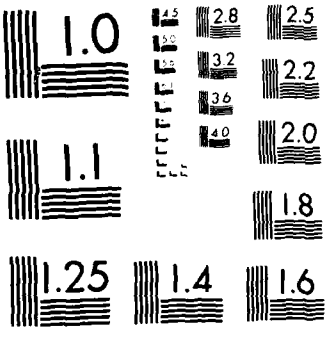
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Analysis of Archaeological, Geological and Historical Artifacts and Documents, Pertaining to the Midden Excavation at "Woodville"—Unit 4, James G. Fulton, Flood Protection Project, Chartiers Creek , Pennsylvania

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Neville House at "Woodville"

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ANALYSIS OF ARCHAEOLOGICAL, GEOLOGICAL AND HISTORICAL ARTIFACTS AND DOCUMENTS, PERTAINING TO THE MIDDEN EXCAVATION AT "WOODVILLE"--UNIT 4, JAMES G. FULTON, FLOOD PROTECTION PROJECT, CHARTIERS CREEK, PENNSYLVANIA

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A Report Prepared Under the Supervision of James B. Richardson III, Ph.D. and Submitted to the U.S. Army Corps of Engineers, Pittsburgh District in Fulfillment of Contract Number DACW59-81-0003, January 1985.

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A very special word of thanks must be directed to Mrs. Forrest R. (Jeanne) Jackson of Ukiah, California, with whom a steady if intermittent correspondence has been maintained since November of 1981. Mrs. Jackson is a first cousin of William Ebbs Wrenshall, III and Sarah Wrenshall Steinmark. She is also a proficient genealogist and historian of both the Cowan and Wrenshall families. Jeanne is the granddaughter of Richard Cowan Wrenshall, water colorist and photographer, who was born at Woodville Farm on November 16, 1845. His paintings and photos as well as a great many letters (Xerox copies and transcriptions of which were kindly provided by Mrs. Jackson) have significantly added to the known historical inventory for the Woodville property.

In the fall of 1979, shortly before their deaths, the opportunity arose of talking with Mr. and Mrs. Wilbert Smiley, long-time residents of a home "next door" to the extant structure at Woodville. Mr. Smiley for many years served as a caretaker for the Woodville structure when it was owned by Joseph and Mary Bennington Wrenshall Fauset. Mr. and Mrs. Smiley supplied many valuable insights into the Woodville estate and how it and the surrounding territory had changed over the years since their arrival in 1917.

Mr. Charles Nixon of Scott Township, Pennsylvania, has proved a constant source of new lines of historical inquiry over the years. His own research on the Episcopal Church near Woodville known as "Old St. Luke's" has provided important contextual information for interpreting the Chartiers Creek Valley cultural landscape from the 18th century to the present time. Mr. Charles A. Yoder, president of the Old St. Luke's Restoration Committee, made available much information on the history of that church and of the Neville family's connections with it.

Beginning in January 1984, Ms. Diana Thornton, an undergraduate anthropology major at the University of Pittsburgh, began the lengthy and tedious process of transcribing the earliest of the Christopher Cowan account books from the William Ebbs Wrenshall, III collection. While much remains to be done with this data base, it is entirely appropriate that Diana is acknowledged at this point for her perseverance and attention to detail in this important primary research.

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Because 36AL29 was such a recent site, much of the historical information dealing with products could be obtained from extant companies. Unfortunately, only a few responded to inquiries. Consumer Relations of the Warner Lambert Company contributed information concerning BROMO-SELTZER bottles. Edwin C. Lehew, Production Manager and Archivist for the H. J. Heinz Company, was extremely helpful in identifying and dating almost every Heinz container fragment in the "GMM" assembelage.

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We also would like to express our deep gratitude to James Purdy and his staff of the Army Corps of Engineers, Pittsburgh District for their support of this project over the past six years.

This complex and multifaceted report is the result of the knowledge and time of well over one hundred persons and we wish to thank each one for their contributions.

inextricably linked with the family of John Neville. In the 18th century, Neville moved with his family from Winchester, Virginia to what was then western Virginia and to what today is Allegheny County, Pennsylvania. At that time, this land near the three rivers was divided in its political allegiances between Pennsylvania and Virginia. The competing state claims were not legally resolved until 1780. Prior to that, John Neville, like many of his neighbors, thought of himself and of the Pittsburgh area as an extension of Virginian life and customs. It is to this Virginian cultural orientation that the architectural appearance of the mansion house at the Woodville estate owes its origin.

John Neville was born July 26, 1731 "...on the headwaters of the Occoquan River in Virginia, probably in that part of Prince William County" (which was) "afterwards Fauquier" (County) (Felton 1932:1). He was a descendant of Richard Neville, Earl of Warrick, and the son of George Neville and Anne Burroughs. His mother was a cousin of Lord Fairfax (Hogg 1935:3; Felton 1932:1). Margaret Felton's (1932) study of John Neville indicates that his father had been kidnapped in England as a child and brought to the New World (Felton 1932:1).

John Neville married Winifred Oldham (born 1736), the daughter of John Oldham and Anne Conway (reputed to be a second cousin of George Washington; Wrenshall 1940) on August 24, 1754 (Felton 1932:1). The Oldham family had emigrated to the Virginia colony from England in 1635 and was related to the Scottish Earl of Sinclair (Felton 1932:1).

Winchester, Virginia was a small and unimportant town when it was settled in 1752 (Hogg 1935:1), though its reputation and prominence increased four years later (during the Seven Years War) when George Washington established his headquarters there with the erection of Fort Loudoun (Hogg 1935:2). It is unclear exactly when John and Winifred Oldham moved to Winchester, but Felton (1932:2) puts the date after 1755.

John Neville's introduction to the lands of the Ohio River Valley occurred during this same period and probably can be traced to his connection with George Washington, to whom, as already noted, he appears to have been related by marriage. Felton (1932:2) suggests that Neville served with Washington in 1754, during his campaign against the French and Indians in the Ohio Valley, and at Fort Necessity, erected at Great Meadows in present Fayette County, Pennslyvania. In July 1753, John Neville also is thought to have served in the ill-fated Braddock expedition against the French at Fort Duquesne (Felton 1932:2; Hogg 1935:2).

Presley Neville, the oldest child and only son of John and Winifred Neville, was born in Winchester, Virginia on September 6, 1755 (Hogg 1935:3), so the family's residence in that town certainly dates to that period at least. This date also means that John Neville was at home nine months or so earlier (i.e., January 1755). One can deduce from this that Presley was conceived after the summer 1754 Washington campaign, but before the onset of the summer 1755 Braddock campaign. The emotive component which one may distill from this is that as he

the enduring intellectual rewards that are feasible within the context of so-called "contract archaeology" are allowed to wither on the vine. The archaeohistorical segment of the Woodville Farm project is thus an example of positive intellectual feedback developed within a "contract" setting. It is also ample demonstration of the patent utility of cultural resource management studies in furthering traditional anthropological and historical research goals.

From the preceding discussion, four major points are now apparent about the interpretative quality of what follows in the remainder of this report section:

1. Most earlier historical research has centered on the prestigious Neville family and has thereby tended to over-accentuate the short-lived connection of John and Presley Neville with the estate at Woodville.

2. Nearly all previous data on the Woodville Farm, its architecture, layout and other elements of its land use history have been developed (where this has been done at all) as interests peripheral to the history of the Neville family itself.

3. The Cowan, Wrenshall and Fauset families' years of tenure at Woodville, spanning nearly the entire 19th century and all of the 20th up to 1975, have received disproportionately scant attention from historians. To some extent, this probably has resulted from the fact that all three families are related by marriage to the Nevilles. This gives some truth to the oft-cited statement that the estate remained in the "same" family throughout its history.

4. All of the primary historical documentation obtained from the Wrenshall family pertains to the Cowan and Wrenshall tenure at Woodville. Although once examined and studied this exceedingly large corpus of information will contribute substantially to our knowledge of the Woodville estate, it is only now being catalogued, transcribed, prepared and studied.

Despite the limitations that follow from these points, it is possible to outline the major trends in property ownership and land-use. It is also possible to highlight the family history of those who owned the Woodville estate at various times and to discuss something of the personal lives of those who lived there over the years. This is best done by chronologically examining the historical background of each of the four principle families who contributed to the some 200 year history of this venerable estate and its sole surviving original structure.

THE NEVILLES

The Woodville estate is situated in Collier Township, Pennsylvania; it is northwest of Chartiers Creek, which is often called Shirtees Creek in earlier accounts. This creek is a major tributary of the Ohio River and enters it from the south opposite the foot of Brunot's Island below Pittsburgh. The history of Woodville is

in general terms what has been learned from the archaeohistorical research on the Woodville Farm. The remainder of this report section discusses various aspects of this work, but it is important to state here that there is much more primary document research which will need to be accomplished before an even remotely complete history of the Woodville Farm can be written. Much of this work is now in various stages of progress or completion; however, a great deal of what is said in the remainder of this section is provisional in nature and subject to change as new data come to light. While the documentary research discussed below is sufficient in its completeness and historical accuracy for cultural resource management purposes, a great wealth of scattered, previously unassessed documentation reflecting details of life at Woodville throughout the 19th century has been uncovered in the course of this work.

This information is primarily in the form of account books, bills and voluminous family correspondence and was produced by those who were born, raised, lived and, in some cases, died at Woodville Farm. The economic and social history aspects of this previously untapped data base go far beyond the requirements or immediate goals of this report; however, occasional references made within this corpus of information - frequently but not always tangential comments to such things as the "mansion house," to names of servants, neighbors or to now-vanished elements of the cultural landscape - greatly assist in interpreting the archaeological data base, in reconstructing the cultural landscape, and in recapturing a sense of the dynamics of a 19th century farm in southwestern Pennsylvania. Importantly, this is told to us in the words of those who were themselves part of this historical fabric of space and time which we wish to understand and, to a limited extent, to "recreate."

What remains to be learned about the Woodville Farm and about the Neville, Cowan and Wrenshall families who lived there during the 19th century, is largely a matter of the time and effort necessary to plough through the extant archival information which the Wrenshall family had the foresight to preserve. The enormity of this undertaking is apparent by noting that just the Cowan and Wrenshall account books in the possession of William Ebbs Wrenshall III of Ingomar, Pennsylvania, represent over 1000 pages of ledger entries. One must add to this the two boxes of uncatalogued, untranscribed correspondence dating from as early as the first quarter of the 19th century and all of the additional, equally extensive documents belonging to other family members (i.e., Mrs. Sarah Wrenshall Steinmark of Akron, Ohio and Mrs. Jeanne Wrenshall Jackson of Ukiah, California). With this in mind it is easier to appreciate the enormity of the research task which is yet to be accomplished. Once completed, however, this archival inventory and its analysis will constitute one of the longest and most complete historical assemblages now known from southwestern Pennsylvania.

This wealth of historical information is also ample testimony to the stimulation that project-specific cultural resource management work can lend to "traditional" historical scholarship by opening new avenues of research interest. Sadly, this aspect of cultural resource management work is not frequently acknowledged or discussed. Too often

performed at a particular location, that is, it takes place within fixed geographical limits. Within those often restricted spatial limits, various research questions and possibly cultural resource management questions are posed. The archaeological work is then performed to aid in answering those questions by resolving the self-imposed research and managerial "problems." Almost inevitably, this process also poses a new and (usually) more refined tier of questions for subsequent research or investigation.

Cultural resource management questions or "objectives" (to use the usual jargon) ideally do not depart radically from the kinds of questions which archaeologists (i.e., social scientists who are trained as anthropologists with a specialty in archaeological methodology) themselves customarily ask of their data. These questions can and do take many forms but in the most basic sense they must address at least four of the five "journalistic W's:" Who?, What?, When? and Where?. (The fifth "W," Why?, is fundamental but often the most removed from the physical data. The resolution of "Why?" is also dependent upon variables such as document or artifact preservation over which the researcher often has no control; it therefore remains the most difficult and elusive of the questions asked in any project.)

Logically enough, cultural resource management "questions" are proximate ones; the "answers" are used in very specific decision-making processes and to formulate policy about the best way to reconcile the frequently confrontational nature of present day land-use demands and the almost always more nebulous "material culture heritage" which any plot of land potentially harbors beneath the surface of the ground.

The problem oriented nature of archaeological field work at sites of the historic time period, whether of the cultural resource management variety or of more traditional origin, makes particular demands upon and contours the character of the background historical research, which temporally is very often is conducted "around" the actual field excavation project itself. The primary goal of this type of historical research, or "archaeohistory" tends to be pragmatic, rooted in the material culture world and serves an explicitly explanatory role. That is to say, "archaeohistory" helps to place recovered archaeological materials within a better defined cultural context. In an oversimplified way of looking at it, "archaeohistory" is the historical half of "historical archaeology." In this interpretative use of history, documentary information stands as another "artifactual" representative of past human behavior just as a collection of bottle sherds or ceramics reflects certain design styles, functions, degrees of preservation and differential cultural adaptations. Like their artifactual counterparts, archaeohistorical data vary in their completeness and in what might be termed their potential for accurate interpretation. Archaeohistorical data are not, however, regarded here as the authoritative baseline "against which" archaeological data are "checked," compared or made to fit; rather, they are simply another piece of the much larger anthropological puzzle which is every archaeological excavation.

With this background digression voiced, it now remains to set out

AN HISTORICAL BACKGROUND OF "WOODVILLE FARM," ALLEGHENY COUNTY, PENNSYLVANIA

by

Ronald C. Carlisle

INTRODUCTION

A great deal of historical information has been assembled by many writers over the years on a two story frame dwelling of "Virginia vernacular" architectural style that faces southeast along U.S. Route 50 in Collier Township, Allegheny County, Pennsylvania. This structure, frequently if colloquially known as the "Neville house," was built sometime in the last quarter of the 18th century by the Neville (also spelled variously, even by the family, as Nevil, Nevill or Neville; see Felton 1932:69) family.

There are historical reasons why this structure is often called the "Neville house," despite the fact that John Neville, locally the most famous of that family, is most frequently associated with a nearby estate, "Bower Hill," and that his only son, Presley, lived there only sporadically and apparently not at all after 1792 (Hogg 1935:12). The Neville family played an important, indeed pivotal role in the military, economic, political and social development of what is today southwestern Pennsylvania. Thus, much of what we now know about the "Neville house" has developed as peripheral or background information arising from a primary historical concentration on the Nevilles themselves. Compared with the more general interest that historians have expressed in the Nevilles, little has been researched or written about the "mansion house at Woodville Farm," a less historically biased term for the same structure.

The terms, "Neville house" and "Woodville" reflect much more than two linguistic tags for one structure; they are indicative of two very different historiographic trends or tendencies. One of these trends centers upon the Neville family and draws upon a remote (though real) connection between one of the oldest standing structures in southwestern Pennsylvania and one of its most historically discussed families. The other, if less often pursued trend focuses on the structure itself as the "central character" or stage in a much longer historical drama extending from the 18th century to the present day. The latter trend is the one pursued here. A small digression is necessary at this juncture, however, to explain the purpose of this approach.

By their very nature, archaeological investigations of historic period sites and the background historical research which accompanies them are "problem oriented." The "archaeohistorical" study of such sites favors, indeed demands, the pursuit of the second of the historiographic trends noted above. Archaeological field work is

Table 1 con't.

Totals		70,925	100.00	56.29
Organic Objects				
	Bone	2508	54.80	1.99
	Shell	1043	22.79	0.83
	Leather	568	12.41	0.45
	Wood	170	3.71	0.13
	Cloth	156	3.41	0.12
	Miscellaneous	132	2.88	0.10
Totals		4577	100.00	13.18
Synthetic Objects				
	Rubber	72	29.27	0.06
	Celluloid	24	9.76	0.02
	Plastic	102	41.46	0.08
	Unknown	48	19.51	0.04
Totals		246	100.00	0.20
Metal Objects				
	Identifiable	3163	19.05	2.51
	Unidentifiable	8716	52.51	6.92
	Fasteners	4721	28.44	3.75
Totals		16,600	100.00	3.63
Prehistoric Artifacts				
	Lithics	90	89.11	0.07
	Ceramics	10	9.90	0.01
	Worked Bone	1	0.99	0.00
Totals		101	100.00	0.08
Miscellaneous		274	100.00	0.22
Totals		274	100.00	0.22

ORGANIZATION OF THIS REPORT

The figures run consecutively within each section. This is to facilitate the eventual publishing of each major analysis chapter. In the historical section by Ronald C. Carlisle, figures 3, 6, 8, 9 and 11-21 are xeroxed copies of the originial photographs provided by Mrs. Forrest R. Jackson of Ukiah, California. She was unable to send the orginals due to their personal and historical value or able to obtain a photographer to make duplicates.

TABLE 1

Classes, Categories, and Frequencies

CLASS	CATEGORY	# of COUNT	# of CLASS	TOTAL
Ceramicware				
	Decorated Porcelain	5062	15.21	4.02
	Undecorated Porcelain	3453	10.38	2.74
	Decorated Whiteware	4864	14.62	3.86
	Undecorated Whiteware	8663	26.04	6.88
	Glazed Stoneware	1147	3.45	0.91
	Unglazed Stoneware	37	0.11	0.03
	Glazed Redware	2108	6.34	1.67
	Unglazed Redware	797	2.40	0.63
	Decorated Yellow ware	316	0.95	0.25
	Undecorated Yellow ware	504	1.51	0.40
	Decorated Semi-Vitreous	1527	4.59	1.21
	Brick Fragments	400	1.20	0.32
	Flower Pots	2934	8.82	2.33
	Miscellaneous Ceramics	479	1.44	0.38
	Porcelain Marks	536	1.61	0.43
	Semi-Vitreous Marks	61	0.18	0.05
	Whiteware Marks	383	1.15	0.30
	Totals	33,271	100.00	26.41
Glassware				
	Whole Glass Bottles	541	0.76	0.43
	Glass Bottle Necks and Rims	3469	4.89	2.75
	Whole Glass Jars	170	0.24	0.13
	Glass Jar Rims	1268	1.79	1.01
	Glass with Marks	5670	7.99	4.50
	Decorated Glass	4706	6.64	3.74
	Clear Glass Containers	27,267	38.44	21.64
	Blue Glass Containers	2736	3.86	2.17
	Light Blue Glass Containers	6260	8.83	4.97
	Green Glass Containers	2030	2.86	1.61
	Light Green Glass Containers	2244	3.16	1.78
	Brown Glass Containers	2978	4.20	2.36
	Amythyst Glass Containers	645	0.91	0.51
	Yellow Glass Containers	72	0.10	0.06
	Red Glass Containers	22	0.03	0.02
	Milk Glass Containers	1022	1.44	0.81
	Miscellaneous Glass	1615	2.28	1.28
	Glass Bottle/Jar Bases	3320	4.68	2.64
	Window Glass	4890	6.75	3.80

ranking system. The categories of whiteware, porcelain and semi-vitreous wares were subdivided into patterns only. The category of glass maker's marks has no subcategory divisions, explicit groups, or implicit subgroups.

The artifacts were processed in the archaeology laboratories of the Department of Anthropology, University of Pittsburgh and the Section of Anthropology, Carnegie Museum of Natural History. Each piece was washed, numbered, and separated into 6 classes and 52 categories in preparation for analysis. These categories were based upon the artifact classes and are listed in Table 1. Each artifact was then entered onto data forms for inclusion in the computer program (see Analysis Conclusions section). The processing to data entry was the preliminary stage in the analysis of the Neville House assemblage and this process took two years, using part-time staff, work-study students, Museum Practicum students, and volunteers.

Due to the size of the data base, it was decided that only the large categories of diagnostic items would receive further analysis beyond simple identification. Each category became the responsibility of one of the authors. The methods of analysis were developed on the basis of an initial sorting and identification, and are explained in the introductions to each major class or category. Each artifact was handled a minimum of five times (excavation, screening, washing, numbering, and computer input) and as many as seven times (analysis of decorative patterns and maker's marks or product labels).

The majority of the artifacts dated to the late 19th and early 20th centuries, and the mean date for the assemblage is 1907. This late date posed a significant problem to the researchers, for this period is just now receiving archaeological attention. There is a paucity of comparative data in archaeological sources for the 1870's through the 1930's. The sources for identification of the artifacts are from catalogues of the period, ceramic and bottle collector guides and price lists, ceramic and bottle antique books, and correspondence with extant manufacturers still producing the artifacts. A major reference library was accumulated which has been of great utility in other projects that the Carnegie Museum of Natural History has undertaken in historic archaeology in the Pittsburgh area.

The computerization of the total artifact assemblage was conducted at the computer center of the University of Pittsburgh and was directed by John Eddins. Over one thousand units of computer time were used on this project.

Class: Class is the largest division of the 125,994 artifacts. The objects were seperated on the basis of the material that the artifacts were manufactured from in five of the classes (ceramic, glass, metal, organic and synthetic objects) and in one case (prehistoric) by time period (see Table 1).

Category: Categories are broad groupings of like artifacts which were seperated on the basis of manufacturing technique, decorative patterns, maker's marks, and so forth (see Table 1).

Subcategory: Middle range groupings that divide a category into a limited number of subsets, usually based upon form, manufacturing or decorative techinque. For example, the category jars and jar rims has two subcategories; those jars with threaded lips and, those without, while the yellow ware category was further subdivided into decorated yellow ware, undecorated yellow ware and Rockingham ware subcategories.

Group: A further breakdown of the subcategory based usually upon one overall determining form, manufacturing,or decorative characteristic. For example, the subcategory of decorated yellow ware is further subdivided by differences in vessel form: bowls and chamber pots.

Subgroup: A limited set of artifacts, similar in form, manufacturing technique, decoration and function. For example, the decorated yellow ware bowls were further divided into white banded, white and brown banded, brown banded and blue banded subgroups.

Variety: Is based upon slight structual and decorative variations. For example, the subgroup white and brown banded yellow ware has two varieties, a 3 and a 13 banded decoration on the exterior of the vessel.

The rankings within each class are not equivalent for the criteria for the inclusion of an artifact in a specific category, subcategory, grouping, subgrouping or variety. It is not comparable due to the fact that material, form, function and decoration does not crosscut classes.

Application of this ranking system to different classes by the researchers does not demonstrate exact equivalence in terms of the inclusiveness of ranks or the nature of criteria of inclusion. In addition, not all categories were broken down according to the entire

A combination of the historical and archaeological research will be utilized to answer the questions and hypotheses posed above.

The historical documentation of Neville House revealed that there were four successive families that occupied the property known as Woodville. The plantation was built sometime in the 1780's by John Neville for his son Presley. The estate remained in his possession until 1814 when it was sold to Christopher Cowan, whose wife was a niece of John Neville's wife. The property passed into the hands of his daughter, Mrs. John Wrenshall, in 1835 and continued in the ownership of the Wrenshall family until 1974 when Mary Wrenshall Fausett sold the property to The Pittsburgh History and Landmarks Foundation. The historical research identified the linear depression in which the midden was located as a millrace. The first mention of this feature as such was found in the Cowan account books of 1831 and 1832. Two mills were mentioned as existing on the property; a shingle mill and a grist mill. The millrace appears to have been abandoned some time in the 1860's (see Historical section) and it is at this time that it could have begun to receive quantities of discarded objects. The dating of the midden through historical research and archaeological artifact analysis will be detailed in the following sections.

ARTIFACT ANALYSIS

Classificatory schemes for historical archaeological assemblages presents a major problem in terms of the criteria used to formulate a hieratical ranking system of large bodies of artifacts. The nineteenth century was a period of mass production of products to specific standards using specific manufacturing techniques. These manufacturing methods, whether ceramics, glass, synthetics or metals, changed through time as new technologies were invented to produce even greater quantities of material culture.

Many historic classification schemes relie upon the known function or form of the artifact within the European cultural milieux. In the Narbornne report (Moran et.al., 1982: 82) major divisions are based upon the material of manufacture (e.g. ceramics). Only ceramics were futher subdivided into more finite classes (e.g. earthenwares) or types (e.g. creamware), while the remainder of the artifacts were described under functional designations (e.g. bottles, table glass, combs, buttons, etc.).

For the purpose of analysis, the artifact assemblage from the Neville House midden was organized according to a hierachy of rankings or groupings, based upon shared composition, structual or decorative characteristics. This classification is based upon six levels of abstraction: class, category, subcategory, group, subgroup and variety. This hierachy extends from the broad inclusiveness of class, category and subcategory, to the limited specificity of group, subgroup and variety. This system is similar to that of the classification of the Silcott data inventory (Adams et.al. 1975: 85), except that this ordering includes four additional levels of organization.

The six levels of classification are defined as follows:

and a new contract (No. DAC59-81-0003) was let for the processing, analysis, and report preparation.

RESEARCH QUESTIONS AND HYPOTHESES

Prior to the 1979 excavations, it was assumed that the contents of the midden would yield artifacts that spanned the total time period of the House occupation, from the 1780's through the first half of the 20th century. The research program was to determine if the artifact assemblage reflected the changing economic and social status of the occupants of the House over a circa 175 year period.

The artifact analysis and the integration of this data with the historical and geneaological records proceeds largely by formulating questions and hypotheses about the occupants of Neville House and what they reflect about pattern and process during the 19th century in western Pennsylvania. The questions that were asked of the data include:

1. Who was responsible for the artifacts deposited in Feature 21?

2. What is the temporal range of the artifacts recovered?

3. What is the range of the material represented in the total assemblage?

4. Are the sources of the artifacts of a domestic or industrial nature?

5. What percentage of the artifacts are local, regional, national, or imported manufacture?

6. What does this assemblage suggest about the adoption of technological innovations?

7. What do the artifacts reflect concerning the status, acceptance and use of products by the occupants of the house?

Two hypotheses were formulated after the midden testing in 1977.

1. The artifact assemblage will mirror the socio-economic status of the occupants of Woodville (the Neville, Cowan, Wrenshall, and Fausett, families) over a circa 175 year period. It should reflect their affluence and position in western Pennsylvania society and economy.

2. The analysis of the midden deposition will reflect technological trends, functions, and trade distribution patterns of many of the artifact classes and categories. This will in turn reveal information on the behavioral patterns and preferences of their purchasers and consumers over the circa 175 year span.

INTRODUCTION

by

James B. Richardson III

Woodville, commonly referred to as Neville House, is located in Collier Township, Allegheny County, Pennsylvania (see Map 1). This two story structure, once the home of Presley Neville, is owned by the Pittsburgh History and Landmarks Foundation and is listed on the National Register of Historic Places. The house is the only remaining sructure of a large farm with numerous outbuildings owned by the Neville family, prominent both locally and nationally.

In 1977, excavations were conducted near the front of the dwelling which was to be removed due for the construction of a bridge on Pennsylvania Route 50, part of the overall construction relating to the James G. Fulton Flood Protection Project (Richardson and Carlisle 1977; see Map 2). During the excavations, the remainder of the Neville property was surveyed to determine if any further significant cultural resources were extant in the areas due to be impacted by the U.S. Army Corps of Engineers as construction continued. It was at this time that a linear depression to the north of the House was discovered containing a large historic midden which had been partially disturbed by bottle collectors.

Due to the historic importance of Neville House and the fact that this home was continuously occupied from the 1780's through 1974, the U.S. Army Corps of Engineers selected the Section of Anthropology, Carnegie Museum of Natural History, Carnegie Institute (contract DACW 59-79-C-0108) to excavate the refuse midden, analyze the recovered data, and submit a report on the results.

Excavation of the midden (36AL29) was initiated on August 24, 1979 and continued through November 12, 1979. The initial projected excavation period was forty days, but due to the fact that the midden proved to be both vertically and horizontally more extensive than initial testing had revealed, the excavation period was extended. When completed, the midden measured ca. 75 feet in length and ca. 45 feet in width. A total area of 1200 square feet was hand excavated and all of the midden was water processed using one-quarter inch mesh screen. The depth of the excavation to sterile soil or underlying rock formation varied throughout, and it is estimated that 3410 cubic feet of soil was removed. The midden, Feature 21, proved to be the only superficial archaeological feature on the site. It was underlain by a series of relatively sterile fill features that reflect the previous use of the midden depression as a millrace.

The excavations produced 125,994 artifacts, dating to the prehistoric and historic periods. The prehistoric artifacts accounted for only 104 items, with the remainder dating to the period of occupation of Neville House by its various owners. On the basis of the enormous artifact assemblage, the original contract was renegotiated

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embarked on the Braddock campaign, John Neville had no guarantee that he would ever see his firstborn child. It is certain too that Winifred could have had no guarantee that her husband would ever return from this second trip to the Ohio Valley. There is no way of knowing whether John Neville actually saw, either in 1754 or 1755, much or anything of the area around the Monongahela and Ohio rivers that he eventually would own. Probably he did not, though certainly he had access to many who had (including Washington himself).

Whatever familiarity he gained with the Ohio River Valley during the Seven Years War, John Neville apparently was still living in Winchester, Virginia after the war, for he was elected sheriff of Frederick County, Virginia in 1763 and was re-elected in 1764 (Felton 1932:2). He was also a member of the first Berkeley County, Virginia commission when that county was created out of Frederick County on May 15, 1772 (Felton 1932:2-3). For 5 annual payments, he rented a building to the new Virginia county for use as a jail until a separate structure was completed in 1774 (Felton 1932:3).

On the eve of the American Revolution, John Neville found himself caught up to an extent in the devisive rivalry between Virginia and Pennsylvania for political supremacy in the area around Pittsburgh. Virginians considered the Pittsburgh area to be part of Augusta County which had its county seat at Staunton, Virginia (Buck and Buck 1939:164). The political restlessness between Virginia and Pennsylvania pitted two local factions against one another. The Virginian faction was headed by Royal Governor Lord Dunmore's agent in the Ohio Valley, Dr. John Connolly. The Pennsylvanian faction was centered at Hannastown, the county seat of Westmoreland County, and was led by Arthur St. Clair. The intercolonial rivalry commenced in earnest after the removal of British troops from Fort Pitt in 1772. It intensified over the next few years with arrests and counterarrests on both sides in the face of a mounting Indian threat all along the western frontier. The Virginian faction was firmly in control of the garrison at Fort Pitt, which they renamed Fort Dunmore.

The widening split with England, and the common threat to the settlers of both colonies from Indian attacks on the frontier settlements along the Ohio River, ultimately proved greater menaces than did the competing claims of Virginia and Pennsylvania. In the summer of 1775, Lord Dunmore left Virginia for the safety of a British man-of-war, followed closely in July by Dr. Connolly. In September, Captain John Neville arrived to assume command at Fort Dunmore (Pitt) at the head of a militia of 100 men formed in Virginia's Shenandoah Valley. He was appointed to this command by the Virginia Provincial Convention on August 7, 1775 (Felton 1932:6-7), and he remained in command from September 11, 1775 until he turned the fort over to General Edward Hand on June 1, 1777 (Ferguson 1938:25; Felton 1932:15; Downes 1969:183).

Although John Neville reappeared in the Pittsburgh area in September of 1775, there are indications that he was preparing to move into the Ohio Valley before this time. Early in 1775, he sold his property in Berkeley County, Virginia for $12,000 Virginia currency

(Felton 1932:5). In May of that year, he was selected by the inhabitants of Augusta County, Virginia as a county committee member and received a grant of 1000 acres from Lord Dunmore in what is now Allegheny County, Pennsylvania (Felton 1932:4-5). He must have been highly regarded by his peers, for he was also selected as a representative to the Virginia Convention of Delegates at Richmond. The purpose of the Convention was to select Virginia's participants in the First Continental Congress. Unfortunately, illness prevented Neville from attending (Felton 1932:5).

It is conceivable that John Neville's interests in land speculation in the Upper Ohio River Valley date from his receipt of Lord Dunmore's 1000 acre grant which Felton (1932:4) places in Chartiers Township, Allegheny County, Pennsylvania. Certainly, Neville was not alone in seeing the potential for the development of these lands as well as for profit from land speculation. Much of his time in future years would revolve around the buying and selling of Ohio Valley land. Some years later, in 1796, he was appointed receiver of money resulting from the sale of public lands in the seven ranges of the Northwest Territory (Moon 1969:345).

Whatever Neville's ultimate motivations for settling in the Pittsburgh area may have been, the fall of 1775 found him busily engaged at Fort Pitt in general military duties (Felton 1932:9-10). Unfortunately, there is no complete record of how this time at the fort was spent. In June of 1776, however, Neville was promoted to the rank of major (Felton 1932:11) and was commissioned a justice for Yohagania County, Virginia on December 23rd of that year (Felton 1932:13); he declined the commission, however, in order to retain his command at Fort Pitt.

During 1776, Neville also purchased the large island in the Ohio River 5 mi below Pittsburgh which to this day retains the Neville name. At this time, however, it was known as Montour's Island and earlier yet as Long Island. Believed to have been occupied by a band of Shawnee ca. 1698, the island land subsequently passed to the Shawnee half-breed, Peter Montour. It was included as part of a 5000 acre tract (the island itself is ca. 868 acres in area) given to Major William Douglas in 1763 for services to the British Crown during the Seven Years War. Douglas in turn sold title to the island to Colonel Charles Simms of Virginia, from whom Neville purchased the property (Jones 1950:1, 6). After the Revolution, the island, then heavily wooded in oak, maple and locust, was included in a Pennsylvania land grant to General William Irvine. This grant was successfully challenged in court by Neville, and years later immigrants to the island rented valuable island farmland from John Neville's descendant, John Craig (Jones 1950:7).

Neville's stay in the Pittsburgh area during the American Revolution was not a lengthy one. Two years and three months to the day (December 11, 1777) after his arrival at the Forks of the Ohio, he left to join in the fighting against the British in the eastern theater of the war. While still at Fort Pitt, Neville had been promoted to the rank of lieutenant colonel of the 12th Virginia Regiment (which was

combined with the 8th Virginia Regiment on December 11, 1777, the same day Neville left Pittsburgh for the Eastern Department (Felton 1932:15)). Between his departure from Pittsburgh and December 14, 1778, John Neville was a field officer with the 8th Virginia Regiment. On that date, this regiment was combined with the 4th Virginia Regiment.

Neville served much of the remainder of the Revolution in the Eastern Department fighting in such famous battles as Trenton, Germantown, Princeton and Monmouth (Felton 1932:16). In 1780, the 4th Virginia Regiment was sent to the Southern Department and fought in the battle of Charles Town on which fell to the British on May 12, 1780. Together with other captured officers, both John and Presley Neville were sent by the British to Haddrell's Point across the Cooper River as prisoners of war (Felton 1932:5).

It is an interesting sidelight to this facet of the story that both Nevilles had the opportunity at Haddrell's Point to talk with men who had recently served in the Ohio Valley. General Lachlan McIntosh, the former commander of the Western Department and the French artillerist and engineer, Louis Antoine Jean Baptiste, Le Chevalier de Cambray-Digny (Carlisle 1977) had also been captured at Charles Town and sent to Haddrell's Point. General McIntosh had succeeded General Hand at Fort Pitt in 1778 and launched an unsuccessful expedition against the British at Fort Detroit in the fall of the same year. In the process he constructed Fort McIntosh near the mouth of the Beaver River and Fort Laurens in Ohio (Carlisle 1979; Gramly 1978). McIntosh and Cambray would have had much recent information on conditions in the Ohio Valley that must have been of great interest to both Nevilles. Unfortunately, we do not know whether or not conversations between these men did in fact take place, though it seems a distinct possibility. This would have been one of the few direct sources of Ohio Valley news available to the Nevilles after they left Pittsburgh at the end of 1777.

For his part, Presley Neville's military career was frequently linked to service with his father. He received his first commission as a lieutenant in August, 1775 and was promoted to captain the following year. In October, 1778 he was made a lieutenant colonel (Hogg 1935:4). It is not entirely clear whether Presley served under his father at Fort Pitt in the fall of 1775, but a cash payment was made to him on November 7, 1775 for "sundries furnished to John Neville's men" (Hogg 1935:7). Presley subsequently fought at the battle of Trenton and had a horse shot from beneath him at Brandywine. At the battle of Short Hills in New Jersey, he commanded an advance corps that skirmished near Christina (Hogg 1935:4). During the battle of Germantown, he was one of the few survivors of a detachment that tried to burn Chew's House. After the battle of Monmouth, he sailed for Rhode Island with the Comte d'Estaing's French fleet (Hogg 1935:4-5).

The capture of Presley Neville and his father at the fall of Charles Town in 1780 has already been noted. Under the prevailing rules of warfare, officer prisoners of equal rank were usually exchanged for one another. Some, such as the French officer Cambray

(Carlisle 1977), waited several years after their capture to be formally "exchanged" so that they might once again take part in the war. Hogg (1935:5) indicates that Presley Neville was exchanged in 1781, rejoining the army in time to serve at Yorktown in the last great battle of the American Revolution.

How Presley Neville spent his earlier life is not well known, save for the facts that he attended the Newark Academy in Delaware, and thereafter the University of Pennsylvania in Philadelphia from which he was graduated with honors in 1775 at the age of 19 (Hogg 1935:3). Trained in both classical studies and French (Hogg 1935:3), Presley's scholastic abilities were apparently quite good. He delivered the salutary address of his graduating class to the assembled Continental Congress (Hogg 1935:3). It was perhaps this familiarity with French manners, language, and customs which helped him to acquire the position of aide-de-camp to the Marquis de Lafayette during that Frenchman's first two years in the American Revolution (1777-1778). It undoubtedly also helped to sustain the friendship between the two men that is said to have continued throughout their lives (Hogg 1935:4).

The Revolutionary War experiences of John and Presley Neville are peripheral to our main purpose of better understanding the origins and historical development of the Woodville estate. It is essential to track their comings and goings, however, and particularly to monitor the chronology of events during the war years. A precise reckoning of place and time may help to reveal the origin of both Presley's Woodville estate and that of his father's, Bower Hill, which was built on the east side of Chartiers Creek across the valley from Woodville.

Unfortunately, the genesis of both plantations is still far from perfectly known. Hogg (1935:6) is of the opinion that John Neville built "some sort of house...prior to the outbreak of the Revolution." As of yet, we simply do not know whether he found the time, given the responsibilities and duties of command at Fort Pitt between September 11, 1775 and December 11, 1777, to build or to have built for him during 1775 any structure on the 1000 acres granted to him by Virginia. Certainly he did purchase Neville Island during this time, but there is no definite proof that even the most rudimentary structure was begun on the Chartiers Creek property during this turbulent and dangerous period. The exposure of the Chartiers Creek Valley to the ever-present threat of Indian attack was enhanced by the presence of the Catfish Path (Wallace 1971:32) that passed through or paralleled much of the valley and connected Catfish (Washington, Pennsylvania) with Pittsburgh. In many ways, the Neville land holdings in the Chartiers Creek Valley were the Ohio Valley frontier until well into the post-Revolutionary period. Any structure which the Nevilles might have contemplated building, or which they may actually have constructed there between 1775 and 1780, would have been in very real danger of imminent destruction from Indian raids. Even in the latter part of the war, and indeed throughout the 1780s and into the mid-1790s, there was no guarantee of safety. Two families in Washington County were slain 1787; two men were killed in the area by Indians in 1789. Presley Neville himself wrote of the fear that pervaded the frontier in 1791 (quoted by Hogg 1935:8). This lurking, omnipresent, and unpredictable

danger had in no way passed until 1795 (and even then only in hindsight) with the conclusion of the Treaty of Greeneville following the Battle of Fallen Timbers one year earlier. This, of course, is many years after both the Woodville and Bower Hill estates are known to have been built, and is in fact one year after Bower Hill was burned to the ground--ironically not by Indians at all but by disgruntled western Pennsylvania farmers during what has come to be called the "Whiskey Rebellion."

Considering all of this information, there are good reasons to suppose that the construction of extensive or sophisticated buildings on the Bower Hill and Woodville estates did not take place at the earliest until later in the Revolutionary War years:

1. John Neville was physically present in the Ohio Valley from September 1775 until December 1777. In command at Fort Pitt, however, his main attentions would have been focused there and on the more general problem of the defense of the frontier settlements. Correspondence written by him during this period indicates the great attention that he devoted to preparations for the defense of the area. Although unverified, perhaps some simple structure may have been erected at this time on the Chartiers Valley lands granted by Virginia, but it is not known if this property actually included the Woodville or Bower Hill tracts. Presley Neville was probably also in Pittsburgh during this time though we know virtually nothing of his comings and goings.

2. There was an ever-present danger of Indian attack, particularly on isolated structures such as might have been built in the Chartiers Creek Valley. During the period from 1775-1780 or slightly later, construction of elegant but isolated "mansion houses" at both Woodville and Bower Hill would have been foolish in the extreme.

3. The whereabouts during this period of John Neville's wife, Winifred, and their daughter, Amelia (12 years old in 1775), are not known. It is possible that they returned to Winchester, Virginia, or, less likely, that they stayed close to Fort Pitt. With John and Presley's military service commitments that kept both of them away from the Ohio Valley from 1777-1780 or 1781, what need was there for an elaborate house seven miles ride from Fort Pitt?

4. John Neville's purchase of Montour's (Neville) Island in 1776 may indicate that at that time he was undecided about where to build his home in the Ohio Valley. (In fact, John Neville ultimately did retire to Montour's Island, where he died in 1803.) John and Presely Neville eventually came to own a great deal of land in the Pittsburgh area. It is therefore not possible to equate their purchase or receipt of any single land tract with a desire or plan to settle it themselves.

These suppositions notwithstanding, Hogg (1935:7) states that, following his exchange as a prisoner of war, Presley Neville visited

his home on Chartiers Creek, remaining there until February 18, 1781 when he was dispatched by Colonel Daniel Brodhead, then in command at Fort Pitt, to deliver a letter to General Washington. His stay in the Chartiers Creek Valley must indeed have been short since he had not been exchanged until 1781. Hogg's source of information for this statement is Louise Phelps Kellogg (1917:333, note 1), who does indeed record that Neville returned to his home on Chartiers Creek. Unfortunately, Kellogg does not indicate the origin of this statement which is presented in a capsule sketch of Presley Neville, and it is consequently difficult to evaluate its authenticity.

Following his trip to General Washington with Brodhead's message, Presley Neville returned, not to Pittsburgh but to Winchester, Virginia where he married Nancy Morgan, the daughter of General Daniel Morgan, on October 15, 1782. Daniel Morgan was an old friend of John Neville and a member of an influential Virginia family. After their wedding, Presley and Nancy Neville are said to have returned "to their home on Chartiers Creek" (Hogg 1935:7). Once again, however, the original source of this information is unclear, and one cannot dismiss the possibility that this is an assumption on Hogg's part.

One other bit of information does lead one to think that the Nevilles had established their Chartiers Creek Valley plantations by at least 1782. According to Margaret Felton (1932:21), Edwin Shenkel's manuscript, "The Negro in Allegheny County, Pennsylvania, from 1789 to 1813," which was compiled from records in the Office of the Clerk of Quarter Sessions, contains the information that, between 1782 and 1789, 11 slave children were born on John Neville's estate; between 1789 and John Neville's death in 18[illegible], [illegible] additional slave children were born on his lands. Considering the earliest of these dates, 1782, and the relatively high cost of slave ownership and maintenance (Fletcher 1971:118), it is likely that [illegible] Neville had established and was operating his plantation in the Chartiers Creek Valley by ca. 1782 or slightly later. This was probably at Woodville. Hogg (1935:11) believes that John Neville moved from the Woodville estate across Chartiers Creek to the Bower Hill plantation shortly after 1784. Presumably, this would have left Presley and Nancy in possession of the Woodville Farm.

Hogg (1935:11) records that during his research on Presley Neville he was given access by Mary Fauset, then a resident of the Woodville estate, to a 1784 map of the road from Pittsburgh to Washington, Pennsylvania. This structure, he observed, was the only one of "consequence" along the entire length of the road.

If the scenario outlined above is indeed correct, the actual settlement of the Chartiers Creek Valley plantations antedated the recording of the land warrants and patents for them. The warrantee map for what is now Collier Township, Pennsylvania (Bureau of Land Records, Department of Community Affairs n.d. Plat Map 23) indicates that Woodville, an estate of 400 1/2 acres was surveyed on June 22, 1786 "in pursuance of Virg.(inia) Cert.(ificate)." The warrant to accept the property was given on October 6, 1786, and the property was patented the following day. Settlement prior to actual recording of the patents

and warrants was not an unusual situation, however. One must also remember that Neville had received a large property grant from Virginia, while after 1780 his plantations were part of Pennsylvania. They subsequently became part of Washington County (erected in 1781) and, after its establishment in 1788, of Allegheny County. Disputed, often overlapping land claims and inexact boundaries arising from "metes and bounds" surveying were major frontier problems. John Neville himself was at one time elected to the State Board of Property which helped to adjudicate these conflicting claims (Felton 1932:28). Since Allegheny County, Pennsylvania, was not set up until 1788, land records filed here may record settlements already in existence as of that date, but they do not necessarily provide a reliable date of origin for properties such as the Woodville plantation. As we have seen, this event may have occurred as early as 1774 but perhaps more probably sometime between 1780 and 1782 (or even as late as 1784).

There is, of course, better information that John Neville established Woodville prior to the founding of Allegheny County. This is the plat map for Collier Township, Pennsylvania (Bureau of Land Records, Department of Community Affairs n.d. Plat Map 23). This map shows that many of John and Presley Neville's neighbors warranted and patented their property at nearly the same time the Nevilles did (1786), quite often a year earlier (i.e., 1785).

Daniel South owned the tract called South Hall which adjoined Woodville on the southeast. This 211 acre tract was surveyed on July 1, 1787 but was not patented until April 9, 1788. Presley Neville's 437 acre 10 perches tract known as Farm Hill adjoined Woodville on the northwest and was warranted February 17, 1786. It was, however, not surveyed until September 14, 1814 and was patented to Neville's brother-in-law, Isaac Craig on March 19, 1818, the year of Presley Neville's death in Neville, Ohio. North and east of the Woodville property was Peter Painter's tract known as Heidelberg. This had been surveyed for Painter on October 25, 1769 (the land office for claims in this area opened in April of that year) and together with Henry Wright's tract (known as Old Fort) south of Woodville represents one of the truly early land surveys in this segment of the Chartiers Creek Valley.

John Neville acquired title to Peter Painter's Heidelberg tract not long after the Woodville property itself was warranted and patented. This 132 acre land parcel was encompassed within a large bend in Chartiers Creek. It was warranted to John Neville on April 5, 1788 and patented to him April 14th of that year. The effect of this land acquisition was that it secured for Neville an expanded property frontage on Chartiers Creek, which formed the eastern border of both the Woodville and Heidelberg tracts. Woodville itself extended in a long, fairly narrow corridor from just south of the mansion house to Robinson's Run, a prominent tributary of Chartiers Creek that flows to the north northwest of the house.

Geographically, the Woodville tract, particularly after the 1788 jointure with Peter Painter's Heidelberg tract, was well-situated in many respects. Its extensive frontage on Chartiers Creek afforded

prime bottomland for farming. The creek itself was a perennial source of water as were Wood Run (Hopkins 1876:39), which crossed the southern end of the tract near the mansion house, and Robinson's Run which formed the northern terminus of the tract. The availability of these water sources also may have stimulated the development of mills used for a variety of purposes. Chartiers Creek afforded a reliable source of water transport for grain and other farm and mill products.

It is evident that the historical data available from the Allegheny County patent maps tells us a great deal about the natural setting of Woodville and its potential as a farm, or, as John Neville would have envisioned it, a self-sufficient plantation in the Virginian mould. The 1786 patent information is also the first record that the property was formally known as Woodville. For this reason, this year is sometimes equated with the beginning of the Woodville Farm and with the Neville occupancy of it. As we have seen, however, it seems almost certain though inferential that the Nevilles were living upon and operating the Woodville plantation some years prior to the 1786 survey date.

In addition to the two previously named tracts, Woodville and Farm Hill, the Nevilles also owned other tracts along this stretch of Chartiers Creek. John Neville's Bower Hill property was on the east side of the creek though back from it. Presley also owned a tract called Wheat Farm and another known as The Avenue. The latter extended along the east bank of Chartiers Creek just upstream from Woodville and south of William Lea's property, known as Summerhill. The Avenue, a tract of 224 acres 144 perches, was warranted on August 21, 1786 and surveyed February 2, 1787. The property, however, seems never to have been patented to him.

It was on William Lea's Summerhill tract on the opposite side of Chartiers Creek from Woodville that the first Episcopal church in Allegheny County, St. Luke's, was erected. William Lea was a participant in the 1758 Forbes expedition against Fort Duquesne. He was also an early resident in the Chartiers Creek Valley area having arrived by ca. 1770 (Crumrine 1904-1905:295). A daughter of Lea's is said to have been baptized at or near the site of St. Luke's in 1774 (A. Warner & Company 1889:66). Both John and Presley Neville were early parishioners of the church which was probably built directly adjacent to the course of the Catfish Path, or as it was later known, the Pittsburgh and Washington Pike. There is even informed speculation (Charles A. Yoder 1978, pers. comm.) that the site of the church was the previous locus of the Fort Chartiers mentioned by Colonel George Croghan in communiques to General Gage on three occasions in 1765. Alternatively, Mr. Yoder (1978, pers. comm.) suggests, Wright's Blockhouse may have stood at or near the site of the church ca. 1765.

Henry Wright was an early land owner of the tract known as Old Fort, and Wright family members are buried in the nearby St. Luke's graveyard (Charles A. Yoder 1978, pers.comm.). It is unclear how many structures may have been built at St. Luke's (or Old St. Luke's as it is now known). The baptizing of William Lea's daughter in 1774 is said to have taken place in a log building (A. Warner & Company 1889:66).

The names of John and Presley Neville and that of Isaac Craig do not appear to have been associated with the church much before 1790 when a frame building may have replaced the earlier log structure (Charles A. Yoder 1978, pers. comm.). Interestingly, however, the 10 perches-square lot for the church was not bequeathed to the congregation by William Lea until the completion of his will of 1802. The earliest burial recorded by A. Warren & Company (1889:66) for St. Luke's is the 1795 interment of Jane Williams. The current stone church on the site was begun in 1852 (Transcription from Parish Register, St. Luke's Church, Chartiers, Allegheny County, Pennsylvania 1978:1; provided by Charles A. Yoder 1978, pers. comm.). It seems that John Neville was responsible for the rearing and training of one of the earliest pastors of St. Luke's, Francis Reno, who officiated there until the "Whiskey Rebellion" of 1794 and subsequently ministered both at St. Luke's and in Pittsburgh before leaving the Pittsburgh area.

Although the story of "Old St. Luke's" is tangential to our primary interest here in the Nevilles and the beginnings of the Woodville estate, the Neville family is, nevertheless, intimately connected with the history of that church. In its turn, the church story also reflects importantly on the character of 18th century life in this portion of the Chartiers Creek Valley.

The lengthy preceding account has indicated that it is not possible (given present knowledge) to define precisely when the Neville families, John and Winifred, Presley and Nancy, took up residence in the Chartiers Creek Valley. An argument for a conservative estimate of 1780-1784 has been developed in the preceding pages based largely on inferences drawn from the chronology of both men's experiences during the Revolutionary War. There is the possibility, given what is known of Presley Neville's subsequent predispositions, that both men essentially developed their Chartiers Creek properties in absentia using overseers, hired hands and slaves to conduct the actual day-to-day operations of both Woodville and Bower Hill. After their release from Haddrell's Point as prisoners of war, it seems that both men did return to the Ohio Valley. This was a brief respite, however, from both war duties and political responsibilities. We have already discussed the fact that Presley Neville was dispatched by Colonel Brodhead with a message for General Washington in February 1781 and that he apparently did not return to the Pittsburgh area until after his marriage to Nancy Morgan in October 1782.

For his part, John Neville was even busier than his son as the Revolutionary War drew to a close. He was breveted as a brigadier general through resolution of the Continental Congress on September 30, 1783 (Felton 1932:16). In the same year, he was elected to the Supreme Executive Council of Pennsylvania which met in Philadelphia (Felton 1932:25). This, of course, required his presence at the opposite end of the state and far from both family and from his steadily increasing land holdings in western Pennsylvania. For example, he received 7,777 2/3 acres of land from Virginia as a result of his Revolutionary War service (Felton 1932:24). This sum of course does not include properties or property warrants which he purchased from others. Indeed, the fact that at one time or another John and Presley Neville

owned so much land in western Pennsylvania is one of the great problems in tracing the deed history of any one parcel of it. In November, 1784 John Neville was nominated for the posts of both President and Vice-President of the Supreme Executive Council but was defeated by John Dickinson and James Irvine, respectively (Felton 1932:26). His other duties with the Supreme Executive Council demanded that much of his time between his election in 1783 and the last year in which he served, 1786, was passed in Philadelphia. This seems to have been primarily in the fall, winter and spring of the year. Felton (1932:27) records that he was present in Philadelphia during the following periods:

November 10, 1783 - March 4, 1784
April 5, 1784 - April 30, 1784
September 9, 1784 - April 27, 1785
August 25, 1785 - April 20, 1786
July 5, 1786 - October 10, 1786.

For the most part, only summers could be devoted (and then not completely) to managing his estate interests at home. Certainly this is a very important part of the year for any farmer, but it is remarkable how little time Neville actually accrued in western Pennsylvania during this three year period. Even when at home, he was not free to tend solely to his own business. Upon his departure from Philadelphia on April 27, 1785, the Council authorized him to appoint a caretaker for the newly refurbished buildings at Fort McIntosh, then occupied by troops under the command of General Josiah Harmer (see Carlisle 1979:49-50; Felton 1932:26). November 21, 1787 found Neville back in Philadelphia as a representative from Washington County, Pennsylvania to the state convention called to ratify the proposed Federal Constitution (Felton 1932:29).

Much like his father, Presley Neville was also engaged in numerous business, military and political activities in the post-Revolutionary period that were not conducive to living the life of a country gentleman at Woodville. This, in fact, does not appear to have been a goal of Presley's life. By temperament, his father seems to have been much better suited to the quieter life of the plantation. As already documented, Presley had received a good education and had seen extensive service in the Revolution. A growing fascination with the profit potential of land speculation in the Pittsburgh area also contributed to a desire to be in Pittsburgh itself, at the hub of local business activity (see Hogg 1935:15).

For the 10 year period between his return to the Chartiers Creek Valley with his new bride in 1782 and the year 1792, Presley was probably in residence at the Woodville estate. This may have been required as much by his father's frequent absences from his own estate at Bower Hill across the valley during this period as by the demands of Presley's own rapidly growing family (which ultimately numbered 14 children). It may have been during this period in which John Neville was away much of the time that the oft-discussed system of visual communications between Bower Hill and Woodville was established. Although we cannot know this for sure, it seems a reasonable assumption that Winifred Neville would want to have remained in contact with her

only son across the valley. Unfortunately, much of the "information" on this aspect of life at these two farms has come down to us from an historical fiction, The Latimers, written by Henry Christopher McCook. Where this author received his information and how reliable it may be is difficult to determine. Margaret Felton's (1932) thesis on John Neville draws upon it from time to time, but that approach is not emphasized here.

We do know that Presley's maternal aunt, Mary Ann Oldham (b. 1741; d. 1813) and Major Abraham Kirkpatrick (b. 1749; d. 1817) were married at the Woodville estate on November 26, 1786 in the first marriage reported by John Scull's Pittsburgh Gazette (Hogg 1935:11). Aside from this event, however, very little information has survived to reveal the details of day-to-day life at the estate during this period. From what is known, however, Presley may have had difficulty in managing the operation of the estate. Hugh Henry Breckenridge, certainly no friend of the Neville family and anything but an impartial observer, recorded that Presley never did anything to improve the Woodville property or its productivity (Hogg 1935:11). At least part of the problem of attempting to establish a southern style plantation in western Pennsylvania was the difficulty of finding conscientious workmen or tenants to take over the operation of the farm or to manage it from day to day during times when Presley found it necessary to be away from home.

Both John and Presley Neville, of course, were slave holders. In fact, John was the largest single slave holder in Allegheny County. At the taking of the first decennial census in 1790, the entry for John Neville shows that in his household were two free white males over the age of 16 (one of whom obviously was Neville himself; the identity of the other is unknown), one free white male under the age of 16, four free white females (one of whom was Neville's wife, Winifred), three other free persons (whether black or white is not specified) and, finally, 18 slaves (reported by Felton 1932:24). The 1790 census shows that Presley Neville also had nine slaves at Woodville (reported by Hogg 1935:11). Between 1789 and 1813, 12 additional slaves were born into Presley's household, all of whom served him until their maturity at the age of 21 (Hogg 1935:11).

Although the Nevilles held the largest number of slaves in Allegheny County in 1790, slavery itself had peaked in Pennsylvania years earlier. In 1751, there were an estimated 11,000 black slaves found (though this number includes slaves in the so-called lower counties which are now part of Delaware; Fletcher 1971:116). By the time of the 1790 census, the number of slaves in Pennsylvania had dropped sharply to 3,737 (Fletcher 1971:116). Ten years thereafter, the number had dropped sharply again to 1,706, and by 1840 only 40 slaves were found in the state (Fletcher 1971:116). The March 1, 1780 Pennsylvania abolition act, the first such passed in America, provided for the gradual abolition of slavery. All adult slaves were to be freed by July 4, 1827, and children born before then were to be freed when they reached the age of 21 (Fletcher 1971:119).

It is nearly impossible to know what the exact relationship

between owner and slave may have been, or more likely, developed into on either the Woodville or Bower Hill estates. There is reason to think that the slave system was not adaptable to these smaller Pennsylvania farms (Hogg 1935:12). Financially, the slaves were probably a drain on both of the Neville estates. The Neville experience in the Chartiers Creek Valley can be viewed essentially as the operation of an anachronistic cultural concept which attempted to impose a plantation system on smaller farms in an unsuited geographical setting and to use that system to produce crops which did not require intensive labor. It its own way, this cultural orientation was as misplaced in the Chartiers Creek Valley as the unmistakably Virginian architectural style of the Woodville mansion house seems to us today.

For whatever reason or combination of reasons, in 1792 Presley Neville determined to move from his Woodville estate to Pittsburgh where he rented a home facing the Monongahela River on Water Street situated between Market Street and Chancery Lane (Hogg 1935:12-13). Once in Pittsburgh, Presley quickly revitalized his military, political and land speculation interests. In 1793, he was elected to the State House of Representatives (then in Philadelphia) where he served for the next three years and one additional session (Hogg 1935:42). In the same year he was appointed Deputy Surveyor for the portion of Allegheny County that had been formed out of Washington County. Subsequently, his duties were expanded to include the entire county (Hogg 1935:16). Although the job might potentially have provided him with a good deal of valuable information on real estate, the profits from his surveyor's job were dismal (Hogg 1935:16). Presley himself amassed a considerable amount of real estate in Pittsburgh as well as in the Reserve Tract across the Allegheny River. He also continued to buy heavily in the Chartiers Creek Valley and elsewhere, including Washington County. For example, he owned property on Robinson's Run, Raccoon Creek, Peters Creek, Kings Creek and other areas of southwestern Pennsylvania as well as land on Lake Erie which he purchased from the Pennsylvania Population Company (Washington County, Pennsylvania, Register of Deeds, Books 1 and 2; Hogg 1935:18). At one time or another Presley held title to some 7000 acres of Allegheny County land (Hogg 1935:18).

Presley's military connections were renewed in 1791 when he was appointed to the post of county lieutenant for Allegheny County's militia. In 1793, along with his surveying and legislative duties, Neville also held the post of brigade inspector (Hogg 1935:20-22). He continued to hold various military positions and rose to the rank of major-general of the 15th Pennsylvania Division in 1807. His active military service did not end until 1811 (Hogg 1935:24-25).

During this entire period, Presley Neville spent relatively little time at Woodville though much of his correspondence from Philadelphia when the legislature was in session dwells on the details and difficulties of maintaining the Woodville farm. One letter of March 4, 1796 is contained in the Isaac Craig Papers and is quoted by Hogg (1935:12). It is indicative of not only the difficulties Neville was encountering in making the farm pay for itself but also reveals some of the names of men who were then working the estate for him as well as a few scant details of the architectural composition of the estate at

that time:

> "I will thank you to inform Harlin that I have made contracts for all the grain there, and if he uses one bushel more than the hundred of corn I allowed him and what will pay for the threshing, that I shall make him account for the same besides turning him from the big house, the little house, and all the houses on that unfortunate farm. George Fowler uses all one year, Alex the next, Menough, then Harlin; I have heard tell of 'two pluck one,' but this is even a worse game than any." (Emphasis has been added to highlight personal names and architectural data.)

From this letter one can deduce that tenants, overseers, and/or slaves were not only eating up the profits of the farm but were also occupying its buildings, including the "big house" itself. The inference is also here that at least by this time (and probably earlier), Nancy Neville and the children had taken up permanent quarters in Pittsburgh leaving Woodville to the "hired help" and the slaves.

The so-called "Whiskey Rebellion," which erupted in southwestern Pennsylvania in July of 1794, was the first defiant internal challenge to the authority of the Federal government, and it brought the Neville family to national attention. A few comments on the rebellion are necessary at this juncture since the insurrection resulted in the destruction of the mansion house at Bower Hill. This otherwise peripheral event therefore has a direct impact on our understanding of the character and tempo of the Nevilles' experiences at their Chartiers Creek plantations. Moreover, the aftermath of this incident and John Neville's restitution claims for his burned property offer us unduplicated insights into the architecture, layout and interior furnishings of the Woodville estate's companion plantation at Bower Hill.

Although he and virtually every other legislator from western Pennsylvania had opposed the tax on whiskey made from that area's grain, John Neville had been appointed Inspector of Revenue in 1791 (Hogg 1935:41), and he made dutiful attempts to enforce the law. On June 1, 1793 he advertised in the Pittsburgh Gazette that stills could be registered and the tax paid at his Bower Hill home, at the home of Robert Johnson, also in Allegheny County, at Benjamin Well's home in Fayette County and at Philip Regan's home in Westmoreland County (Felton 1932:41).

The center of opposition to the excise tax was itself concentrated near Neville's Bower Hill home (Hogg 1935:27). Threats were made against Neville and even against local farmer/distillers who complied with the law by registering their stills. Anti-Federalist sentiments and hatred of the excise tax grew with the wheat throughout the spring of 1794, smoldering to the point of combustion by summer. In June, Neville once again published the registration locations for stills in the Fourth Survey District (Felton 1932:44), an action that further angered the region's farmers.

Federal Marshal David Lennox was dispatched to the western end of the state to serve writs on those who refused to register their stills or pay their taxes. For this purpose, Lennox and John Neville rode out one day in mid-July a few miles from Bower Hill to the Peters Creek property of a farmer and still owner named Miller. They were riding away from Miller's field when a shot was fired. Although neither man was injured, Lennox quickly rode back to Pittsburgh, and Neville returned to Bower Hill (Hogg 1935:28;Felton 1932:46).

The effect of this incident, small though it was in reality, was amplified by the generally unsympathetic and hostile attitude of many farmers in western Pennsylvania who saw the whiskey tax as an unwanted and unwarranted imposition on their fiercely independent lives.

The day after the episode at Miller's -- Wednesday July 16, 1794 -- a disgruntled mob of about 100 started out for Bower Hill from Mingo Creek in Washington County when they heard the news of the events at Miller's farm. Originally, they had gathered at Mingo Creek as a muster against a possible Indian attack, but this purpose was soon lost in favor of venting their anger against Neville.

One cannot help but wonder how much the seemingly pervasive fear of Indian attack contributed to the general anxiety level of these settlers living along the Pennsylvania frontier in those years and the extent to which their fears contributed to the events of the Whiskey Rebellion. The battle of Fallen Timbers, of course, would end the gnawing uncertainty of an unexpected, savage attack usually directed against individuals or isolated settlements, but this did not take place until August of 1794. The widespread terror of random Indian atrocities levied against a civilian populace was not an unreasonable one; it had been fueled by the dismal failure of the military--the Federal military at that--to cope with the problem effectively. Military commands under both Generals Josiah Harmar and Arthur St. Clair had met with serious defeat at Indian hands in 1790 and 1791, respectively. This theme of "frontier stress" has not been pursued (so far as this author is aware), but it cannot be dismissed out of hand a potential cause or aggravating factor in the severe treatment meted out to John Neville in 1794 by his neighbors. Neville was locally the most visible and well-known representative of Federal authority. The burning of Bower Hill -- an act that was viewed within many quarters as gross over-reaction--is itself perhaps interpretable as an event with wider and less direct origins than the levying of a tax.

Confronted with the advance of the Mingo Creek mob, some of whom he certainly knew, Neville hurriedly prepared to defend his home. The attackers are said to have been met "...by a surprise volley from the Negro quarters" (Hogg 1935:28). This is an interesting comment, which Hogg derives from Hugh Henry Breckenridge's account of the incident. It suggests that Neville's slaves were not only armed but were willing to fight in defense of their master's property. In the July 16th exchange of fire, which lasted about 25 minutes, five of the insurgents were wounded.

Twelve soldiers under Major Abraham Kirkpatrick, Neville's

To date, the results of this research are uneven at best, and it would be erroneous to think that a dramatically refined perspective of this era in Woodville's history has yet been achieved. Nevertheless, a preliminary assessment of the estate itself during the "Neville years" now exists upon which future work can build. In this context, it is worth noting that Woodville was only one of several estates and other properties owned by John Neville, and its importance to the Neville family should not be overestimated by virtue of the fact of its physical survival to the present day. Indeed, the farm apparently was sufficiently "unimportant" in Presley Neville's own mind that he lived there on a year-round basis for only 10 years or so (ca. 1782-1792). Drawn by the twin allures of politics and business, Presley's ambitions were achievable only by his presence in the developing urban centers of the day--Philadelphia and Pittsburgh. If anyone in the Neville family developed a truly suburban lifestyle--alternately focussing on the economic potentials of the city and the county--it was John Neville not his son. As if to underscore the less than prominent position it apparently held for the Nevilles, Woodville Farm is seldom directly discussed in their correspondence (though it is presumed that a good deal of important documentary information that might have touched directly on this point was lost during the "Whiskey Rebellion" when many of John Neville's personal papers were burned).

In contrast, the affective ties that developed between the Cowan and Wrenshall families and their Woodville estate were dramatically different from those of the Nevilles to judge from the available primary documents. This era in the history of the farm, the 19th and 20th centuries, is abundant with account books, letters, paintings and photographs--a remarkable proliferation in historical quality compared to the much more limited documentary legacy that has survived from the period of Neville family ownership. For Christopher Cowan and his wife, Elizabeth M. "Eliza" Kirkpatrick (Figure 4), Woodville Farm became home, a principal place of residency and a refuge from the outside world. This is a distinctly different attitude (or so it seems) from that of the Nevilles. The extant account books, letters and other documentary information written during the Cowan and Wrenshall years (Table 4) provide an almost day-to-day description of events in the lives of these people that unfortunately is not available for the Nevilles. These books are incompletely transcribed and assessed at this writing, and their potential for achieving archaeohistorical goals is yet to be completely realized. It is important, however, to note this essential difference in the character of the historical data base. Prior to 1817 that historical data base is limited in size, general in tone and includes information that is usually peripheral or secondary to the physical description of the Woodville plantation. After 1817 (the first year for which an account book exists), the data not only increase in volume but they become very specific about the farm, its operation, and about what is best described as the pulse of daily farm life in 19th century western Pennsylvania.

Figure 4 has presented the essential genealogical connections among the Neville, Cowan, Wrenshall and Fauset families that are necessary to understand the passage of farm ownership from one family to another and from one generation to the next within a family. As can be seen in Figure 4, the property did not pass from Presley Neville to any of his 14 children. After it was sold to Stephen Barlow in 1814, the estate was purchased by

Pittsburgh to Ohio about 1816. The same year, Morgan Neville brought suit against his father and Isaac Craig to force them to settle the estate of his grandfather, John Neville (Allegheny County, Pennsylvania, Court of Common Pleas, Execution Docket for 1816). Despite the General's specific instructions in his will that his executors (his son and Craig) should settle his affairs within 30 days of his death, the matter remained unresolved for 13 years.

There is good reason to think that Presley's debts played an important part in his decision to leave Pittsburgh and move farther west to Clermont County, Ohio. As early as 1782, he held warrant to 7,000 acres in the Virginia Military Reservation lands in that state which he obtained for seven years service as a lieutenant colonel during the Revolution. He did not patent this property (situated between the Scioto and Little Miami rivers) until 1811, but in 1788 he had sent out surveyors to examine 1,400 acres of it. In 1808, he dispatched a land agent to lay out the town of Neville along the banks of the Ohio River (about 30 miles northeast of Cincinnati) and to offer lots for sale. After the town had been set up in 1811, 12 inlots and 56 outlots were added the following year (Hogg 1935:79-80). Presley was living in the town in 1816 where he occupied a "large double, hewed-log house" (Hogg 1935:80).

Two years later, on December 1, 1818, Presley Neville died at age 63; he was originally interred at his new home in Neville, Ohio but his body was subsequently removed (June 1819) to Pittsburgh and reinterred at the Trinity Cathedral cemetery. The Pittsburgh funeral procession was led by the Mayor, the Recorder and members of the Select and Common Council (Hogg 1935:80).

At the settlement of Presley Neville's estate in 1821 the administrator, Thomas Chess, revealed that he could find no evidence of any remaining real estate. Thus, despite the thousands of acres that had passed through his hands over the years, Presley Neville died nearly penniless (Hogg 1935:78-79, 80). Nor did the settlement of his estate cover his outstanding debts. Some years after his father's death, Morgan Neville told General Lafayette (Presley's old Revolutionary War comrade) during the General's celebrated American trip in 1825 that most of his own inheritance had gone toward paying off residual debts. It is said that Lafayette thereupon wrote out a check for $4,000 (Hogg 1935:80-81).

THE COWANS

Most of this overview of the Woodville estate has been devoted to the years of Neville family ownership. In so doing, this author is guilty of the same faults he attributed to others earlier in this discussion. The purposes for this, however, differ to a degree from those of other authors. This research into the Neville family and their relatively short occupancy of the Woodville Farm has focussed on what is known about the origin of that estate, its layout, appearance and something of the dynamics of its operation vis-a-vis other estates in the area (notably Bower Hill). Another objective has been to develop a chronological perspective of the private and public histories of John and Presley Neville and to assess the impact these men had in shaping the character of life at the late 18th and early 19th century Woodville estate.

bank, the Office of Discount and Deposit, which operated on Second Street between Market and Ferry streets in what was then the heart of Pittsburgh's business district. The preceding year, he had been elected a burgess of the city. Like his father, Presley was inextricably connected to the Federalist philosophy of government, the popularity of which was in general decline after 1794 or thereabouts. Presley was often the object of editorial attack from a local Republican paper, The Commonwealth, and its editor, Ephraim Pentland. It was Pentland who challenged Neville supporter Tarlton Bates to a duel during the elections of 1805, killing this young man who also was engaged to Neville's eldest daughter (Hogg 1935:62-63).

The Nevilles had a brief but unfortunate connection with Aaron Burr in 1806 when Morgan Neville, Presley's son, joined Burr in his now infamous descent down the Ohio River. This resulted in a direct challenge to the national government, as Burr's intentions proved to be no less than the establishment of a new country under his control in the American Southeast. In 1808, Presley Neville held his last public office, that of Allegheny County Prothonotary (Hogg 1935:73-74).

For reasons that are not entirely clear, Presley Neville was the defendant in a number of civil court cases between 1803 and his death in 1818. Nearly all of these resulted in monetary settlements against Neville: William McKnight was awarded $1,380 in 1812; Joseph Barker, $2,200 plus court costs; Nicholas Cunningham, $514; J. R. Coates, $514. Presley also owed money to the Bank of Pennsylvania as well as to relatives such as Abraham Kirkpatrick ($2,138). Hogg (1935:77) accounts for more than $13,000 in judgments against Neville arising from more than 30 law suits adjudicated between 1810 and 1813.

What lies behind these financial problems is not certain, but Presley attempted to meet his legal and financial obligations by selling off portions of his considerable landholdings, as well as property that had belonged to his father and to his father-in-law, General Morgan. In 1807, for example, he sold 470 acres on Chartiers Creek for $4,500, a second property for $3,708 and a third on Front Street in Pittsburgh (Allegheny County, Pennsylvania, Register of Deeds Book 7:183). In 1810, 415 additional acres were sold in St. Clair Township at $8.00 per acre (Allegheny County, Pennsyvania, Register of Deeds Book 17:91). Three years later all of his father's estate holdings, including Wingfield, Reno Place and Bower HillFarm, were sold for a combined total of $30,000 (Allegheny County, Pennsylvania, Register of Deeds Book 10:379). Woodville Farm was sold in 1814 to Stephen Barlow, a director of the Office of Discount and Deposit of the Bank of the United States, for the sum of $12,000 (Allegheny County, Pennsylvania, Register of Deeds Book 10:472-473). This year thus marks the passage of the Woodville estate out of direct Neville family ownership, and it appears that the estate was sold to help cover Presley's debts. As an interim owner for the bank it is hardly surprising that Barlow held the property for a short time. The earliest of the known Christopher Cowan account books for the operation of the Woodville estate under his ownership begins in 1817, but it seems that the Cowan family may have taken up residence there as early as 1815 (see below).

Before discussing the tenure of the Cowan and Wrenshall families at Woodville, we should add a few words about the latter years of Presley Neville's life. Hogg (1935:62) suggests that Neville "retired" from

goods stored in these structures, however were valued, sometimes out of all proportion to the structure in which they might logically be found. For example, Neville valued his two story granery/corn house at $80, but a "...quantity of old hay and a year's crop of rye, threshed in the barn but not cleaned ..." was worth $133.33 1/3. His uncollected crop standing in shock was worth $400.

A most revealing if brief picture of slave conditions on the Neville's Chartiers Creek plantations also emerges from John Neville's damage claims. As discussed earlier (see Tables 2 and 3), the structure referred to as "a small house where lived a family of Negroes" was assessed a replacement value of only $27, the same value assigned to the poultry house. These two structures were the least valuable among all the buildings Neville itemized. All the bedding and clothes for 14 slaves at Bower Hill were also destroyed during the 1794 insurrection, a loss calculated by Neville at $80 or about $5.71 per slave. By comparison, Neville also listed as destroyed among his personal possessions "sundry books of various kinds," $80, and clothing losses of approximately $267 for himself, Mrs. Neville and two granddaughters, an average (undoubtedly low in the case of the two adults) of $66.67 each. It is probable then that the value of John Neville's own clothes in replacement value may have met or exceeded the combined clothing and bedding costs of all his slaves. If the Neville's own bedding losses of $320 are added to those for clothing, the amount ($587) is 7.3 times as great as comparable damages reckoned for the slave population of the estate. Clothing and bedding losses per person for the Nevilles (including for these purposes the two granddaughters) therefore amount to ca. $147 or nearly 26 times that of an individual plantation slave.

Although peripheral to our primary interest in the Woodville plantation, the data cited on previous pages for Bower Hill are probably indicative of similar adaptations at the Woodville Farm. As noted previously, mansion houses at both plantations originally were of the same size (20 feet x 40 feet) and of frame construction. Both mansions originally had detached, log construction summer kitchens. The log kitchen at Woodville may represent an adaptive reuse of an earlier structure following the erection of the frame mansion house at an as yet unknown time; however, the choice of logs rather than sawn lumber in both the Woodville and Bower Hill kitchens may also reflect simple economy since such structures were notably susceptible to fire. This naturally leads into a discussion of the relative monetary value of log vs. frame structures in western Pennsylvania at the end of the 18th century, but this is a topic well beyond the scope of this document. From what we now know of them, both Neville plantations, and particularly the mansion houses, were similar in overall size and choice of construction material. Since both farms also presumably represent the aesthetic and spatial conceptualizations of the same man, it is reasonable to suppose that at least some of the physical aspects and appearance of one of them may be applicable to the other as well. The accuracy of this assertion may be strengthened if Presley Neville never made much improvement to the Woodville estate (as Hugh Henry Breckenridge maintained).

Throughout the waning years of the 18th century and into the first decade of the next, Presley Neville contented himself with a variety of state-wide and local political, educational, religious, and financial affairs. In 1804, he was one of 11 directors of western Pennsylvania's first

TABLE 2 con't.

Functional Category	Type of Structure	Number of Structures	Comments
Domiciles	"a small house where lived a family of Negroes"[a]	1	This is the only reference to what possibly were slave quarters at Bower Hill. Neville does not specifically call the residents of this structure slaves, so we cannot rule out at least the possibility that this "family" may have been free blacks. Elsewhere in his accounting, Neville mentions the loss of labor in having 14 slaves run off the plantation in 1794. Note in Table 1 the comparatively low valuation of the "negro house." In these terms, it was on a par only with the large poultry house.
Food Preparation	square log kitchen w/ two rooms, a floor, shingle(?) roof and stone chimney	1	This probably was within about 10 feet of the mansion house if the arrangement at Woodville is a valid indication of house/kitchen separation distance. The use of log construction in the kitchen and frame construction for the dwelling house parallels the construction techniques used at Woodville where the (now) attached kitchen is also built of logs.

one of the nine structures (11%) listed by Neville, it represents ca. 58% of the replacement value of all the destroyed structures and ca. 33% of Neville's total claim for restitution. When the values of the mansion house and the large frame barn are considered together, they account for fully 86.7% of the replacement cost among the nine structures discussed in Neville's restitution claim and 49.3% of

TABLE 2

Reconstruction of the Architectural Composition of the Neville Estate at the Bower Hill Plantation ca. 1794 by Functional Category

Functional Category	Type of Structure	Number of Structures	Comments
Domiciles	two story frame house 20 feet x 40 feet	1	Burned in 1794; the principal structure of the plantation
	framed dwelling houses one structure possibly single story, 20 feet x 30 feet in size, with four windows and 60 lights	2	It is not known if these structures were on the property at the time of the 1794 "Whiskey Rebellion" or whether they were built after the rebellion. Neville's 1799 rental notice for Bower Hill does not clairify this. The U.S. Direct Tax for 1798 may refer to one of these structures. In that year, the tax records reveal that John Neville occupied a single story, 20 feet x 30 feet house in St. Clair Township. The structures probably were guest houses or, in one case, accommodations for an overseer or other estate employee. John Neville possibly moved into one of these subsidiary domiciles after the mansion house at Woodville was burned in 1794.

TABLE 1 con't.

Structure Description	Value (in dollars)	Comments
a small stable with plank floors, racks and mangers	33.33 1/3	--
a small house where lived a family of Negroes	26.66 2/3	--

[a]Abstracted from Felton 1932: Appendix G. The original accounting appeared in a Letter from the Secretary of the Treasury accompanying his report on the petition of Benjamin Wells referred to him and the Counter Petition of Sundry inhabitants of Fayett (sic) County 2nd April 1800, and referred to the Committee of Claims.

since it is drawn from John Neville's own record of structures destroyed in the 1794 insurrection. Other buildings on the plantation grounds almost surely survived the insurrection and therefore were not included in Neville's list of damages. Some buildings (e.g., privies, coal sheds, etc.) may have had such small monetary value that they were excluded from Neville's list, but this seems a remote possibility considering that his accounting includes charges for such menial items as "seven new bags" ($7.00)

Ironically, it is only by virtue of the destruction of some of the estate's buildings, furnishings and personal belongings that anything is now known of their prior existence. Real and personal property that survived the "Whiskey Rebellion" are lost to us today. The burning of John Neville's personal papers, account books and other records, which were also destroyed when the mansion house was set ablaze in 1794, robbed us of any chance to document the complete physical appearance of the Bower Hill plantation through strictly historical (i.e., literary) means. Archaeological demonstrations of the existence, size, appearance and spatial relationships among all of the structures at Bower Hill have never been attempted and may not now be feasible due to extensive building and other land disturbance activities in this active suburb of Pittsburgh.

One can use the estimated replacement cost values given by John Neville for the buildings destroyed at Bower Hill (see Table 1) to construct an approximate hierarchy among these structures based on monetary value (Table 3). Total replacement value of all buildings was calculated to be ca. $4,154 (to the nearest whole dollar). This accounts for approximately 57% of the damage done to his Bower Hill estate and for which Neville made a restitution claim of $7,304 (to the nearest whole dollar). Among the structures, the mansion house, at $2,400, was by far the most valuable. Although it accounts for only

TABLE 1 con't.

Structure Description	Value (in dollars)	Comments
		Neville's list. The list also includes the loss of a Franklin stove at Bower Hill. These stoves can be vented either into a chimney or can use their own metal flues. If such stoves were in use at Woodville, it may affect the reconstruction of where chimneys were placed in the original house. See the text discussion on the possible repositioning of the end chimneys when and if the gable ends of the house were extended.
large square log kitchen with single roof and stone chimney, two rooms on a floor.	200	"Single" probably means shingle roof.
a large frame barn just finished with first story of stone 80 feet x 30 feet calculated for 50 head of cattle below	1200	Possibly a bank barn?
a large, two story framed granery and corn house with garners complete, for four horses, bear skin covers	80	A garner is a grain bin.
a blacksmith shop	80	The value includes all of the tools that were destroyed by fire.
a small barn with thatched roof with a good table and threshing floor	106.66 2/3	--
a large poultry house with a shingle roof in which were a number of ducks, turkeys, dung-hill fowls and some fat shoats	26.66 2/3	A shoat is a young hog, usually less than one year old.

data on the make up of the Bower Hill estate are probably very indicative of the kinds of buildings that also stood at Woodville. A list of the structures for Bower Hill, abstracted from Neville's own accounting, is presented in Table 1.

To this list one presumably can add the two frame dwelling houses and one additional barn that Neville mentioned in the rental advertisement for Bower Hill in 1799, although there is no absolute way of knowing whether these "dwelling houses" were constructed before or after the "Whiskey Rebellion." Neville took care to mention the post-insurrection construction of one of the large barns found on the estate. (This was no doubt an inducement to potential renters of the property. It was also a public reminder of the destruction visited on Neville's estate by his neighbors to whom he was now offering the property for rent. The irony of the situation must surely have not escaped the General.)

The composite picture that emerges of the physical appearance of the Neville plantation at Bower Hill (and by extrapolation what the Woodville estate may also have comprised during the same period) is presented in Table 2.

Based on the information presented in Tables 1 and 2, one can begin to reconstruct the appearance of the Bower Hill plantation as it was just before the "Whiskey Rebellion" in 1794. It consisted of as few as nine or as many as 11 primary structures (i.e., domiciles for the Nevilles and possibly for farm overseers or estate managers), a secondary structure (i.e., the principal barn) and a diverse assortment of tertiary structures (e.g., the log kitchen, granery, blacksmith shop, slave quarters, etc.). This list, of course, includes a minimum number of the types of buildings that the estate must have comprised

TABLE 1

John Neville's List of Structures Destroyed at Bower Hill During the "Whiskey Rebellion" of 1794[a]

Structure Description	Value (in dollars)	Comments
two story frame dwelling 20 feet x 40 feet	2400	Neville adds: "neatly finished, painting and papering complete, done in the best materials." It is interesting to note that the dimensions of the mansion house at Bower Hill, 20 feet x 40 feet, are the same as those recorded for a structure belonging to Presley Neville in St. Clair Township (presumably Woodville) in the U.S. Direct Tax for 1798. The $2400 valuation was for the house itself and excluded furnishings and possessions which are separately enumerated in

> are well known for their industry, and knowledge in farming. From one to four able, lusty Negro fellows, the oldest one 24 years of age, and the youngest about 15, three of them as good plowman as any in the states, and two of them very good wagoners, these may be had at .15 per year and their clothing, which must be cheap considering the wages now giving--horses, milk cows, oxen, sheep, hogs and all kinds of farming utensils, with a cart and wagon, may also be had with the place on very reasonable terms.
>
> John Nevill

The notice was repeated in the Gazette on April 6, 1799 but did not run again. It is not known to whom General Neville may have rented the property or even if a renter was found.

Two and one-half years later, General Neville's town house in Pittsburgh was also put up for rent. Notices ran in every issue of the Gazette between October 9th and November 27, 1801 (quoted in Felton 1932:70-71):

> To Be Rented
>
> and possession given immediately A large two story Frame House, situated on the banks of the Monongahela River, at the corner of Ferry Street, now occupied by the subscriber. There is a convenient kitchen adjoining the House, together with a good garden and Stable. The House is in complete repair, being lately newly painted. For further particulars enquire of the subscriber
>
> John Nevill

This seems more like the property that was occupied by Presley Neville as described in the U.S. Direct Tax for 1798 (see above). At this time, however, we simply do not know if this was the case or whether John Neville had moved his in-town residence from James Morrison's single story brick dwelling to the structure described in the 1801 Gazette advertisements. In any event, he soon thereafter moved to Montour's Island where he resided until his death on Friday, July 29, 1803. He was first buried in the churchyard of the First Presbyterian Church of Pittsburgh. In October 1902, his remains were removed to Allegheny Cemetery (Figure 3).

We have speculated in preceding pages about the appearance of the mansion house at Woodville in Presley Neville's day. While we know nothing more from the extant accounts of that time about the appearance of other buildings on the estate or their spatial relationship to the mansion house, Presley's own letter of 1796 previously cited signifies that such buildings did exist. Can we say anything then about the possible layout of structures at the estate? Fortunately, there is a record compiled by John Neville of the possessions and buildings destroyed at Bower Hill during the "Whiskey Rebellion" (see Felton 1932: Appendix G). Although one probably cannot extrapolate directly from the architectural composition of the Bower Hill plantation to Woodville, Neville's list of destroyed buildings is helpful in reconstructing the types of structures that one might have found on an upper class late 18th century estate in southwestern Pennsylvania. Since both Bower Hill and Woodville were built by the same family (indeed, the same man) at about the same time and in the same area,

(spelled Nevel in the tax records) both lived on and owned a 20 feet x 30 feet single story frame house on two acres in St. Clair Township that had four windows of 60 lights. This structure was presumably one of the two dwelling houses at Bower Hill that Neville mentions in a rental notice of 1799 (see below). In 1798, it was valued at $180 by the affiliant assessor and $144 by the principal assessor. He also apparently rented a town house in Pittsburgh since the same tax records state that John Neville then occupied a single story 18 feet x 18 feet brick structure in Pittsburgh that was owned by James Morrison; this dwelling had four windows with 18 lights (U.S. Direct Tax for 1798, Microcopy 372, Roll 24, Volumes 712-716).

Presley Neville's Pittsburgh town house in 1798 was on property (9600 ft^2) owned by George Wallace. This was a 30 feet x 35 feet two story frame structure with 15 windows of 276 lights and was valued respectively at $1800 and $1440 by the affiliant and principal assessors. A separate kitchen also stood on the property; this was not an unusual practice at the time, as it reduced the possibility of fire within a dwelling and also avoided overheating the house in the summer. Comparison between the U.S. Direct Tax valuations for the Woodville Farm mansion and Presley's town house is informative because it indicates that his Pittsburgh home was more than four times as valuable in 1798 as was his Chartiers Creek property.

Maintenance of two domiciles, one at Bower Hill, the other in Pittsburgh, may have been a concession to John Neville's advancing age and one that helped him avoid the seven mile ride to and from Pittsburgh; he was 67 years of age in 1798 with only five years to live.

Neville retained ownership of the Bower Hill property after the "Whiskey Rebellion" in 1794. In 1797, his wife, Winifred Neville, died. From all indications, this was a terrible blow to the General for shortly thereafter, in June of 1797, John Neville made out his own will (though it was not signed until April 1801). This left the majority of his estate to his children, Presley Neville and Amelia Neville Craig, the wife of Isaac Craig (Allegheny County, Pennsylvania, Register of Wills, Book 1:178-180). After Winifred's death, John began to put his affairs in order and prepared to move to Montour's Island. On March 23, 1799, he advertised the Bower Hill property for rent in the Pittsburgh Gazette. This notice (quoted by Felton 1932:69-70) gives an excellent indication of the composition of the estate in that year--including the fact that "two framed dwelling houses" were then on the property and thus may have been spared even after the principal house had been burned in 1794:

> My plantation, known by the name of Bower Hill, seven miles from the town of Pittsburgh, for one or more years, not exceeding seven. There is on this place about 300 acres of cleared land, two large barns, one of which has been built since the insurrection, with two framed dwelling houses--the fences are in good repair, well staked and ridered, and about 40 acres of good timothy meadow, a good part of which is watered, and scarcely a single bush growing in the whole--none need apply but those who

2). This is almost certainly correct. The small "addition" to the main structure is of log construction covered with weatherboards. It may well be the older of the two major segments of the house and although undated may actually be the original or at least the earliest extant structure on the Neville's Woodville estate.

Measuring from what McGrew took to be the southern end of the original frame structure to the opposite gable edge yields an unsymmetrical structure approximately 46 1/2 feet in length, about 6 1/2 feet longer than this structure was reported to have measured in 1798. Is it conceivable that an addition was also made to the northern end of the structure, perhaps when the end chimney was constructed or rebuilt? This would essentially have mirrored the construction technique thought to have been used at the southern end of the house and, if correct, presents a very different image of what the house was like when Presley Neville owned it. To obtain that picture, one must mentally strip off the ell-shaped porch and Gothic dormer mouldings and windows and reduce the length of both gable ends to achieve a symmetrical Georgian style dwelling. This reconstruction also requires the repositioning of the dormer on the roof of the east elevation, slipping it back over the window in the lower story (see Figure 2). It probably was moved to its present location when the gable ends were lengthened for this gives at least an illusion of symmetry to the house in its "new," lengthier configuration. One must hasten to add here that the assumption that the house was lengthened at both gable ends, not just at the southern end as others have observed, is a hypothesis that will need to be further tested by detailed field inspection. The important facts in this hypothesis are the 20 feet x 40 feet dimensions of the house as it appeared on the 1798 U.S. Direct Tax form. So far as can be determined, an interpretation of the structure's original appearance has not previously been attempted with this fact in mind.

Similarly, the information, contained in the U.S. Direct Tax for 1798, that the dwelling then had 10 windows with 140 lights suggests a different organization of windows than is now the case. In all probability there were two windows in the lower story east elevation (just as there are now if one "subtracts" the presumed gable end additions) and two dormer windows arranged directly above. This arrangement may have been repeated on the opposite (west) elevation with perhaps two gable windows in the upper story (though this is conjectural). Alternatively, we must consider the possibility of a third dormer centered above the first story doors in both elevations with no end windows.

These "off the cuff" remarks on the possible appearance of the Woodville mansion house as it looked in John and Presley Neville's days are, at this point, nothing more than speculation based upon the scant information presented in the 1798 tax record. Speculative though they may be, they do suggest that additional, objective study of the architectural history of this fascinating structure is needed to reformulate its appearance at various critical periods in its long and evolving architectural life.

The 1798 tax accounting also reveals that General John Neville

respected by the people, and, if necessary will be protected by the militia" (quoted by Hogg 1935:35).

Despite the swell of anti-Neville feelings that developed in western Pennsylvania throughout the summer and into the fall of 1794, Presley ran without opposition and was re-elected to his seat in the Pennsylvania legislature in October of that year (Hogg 1935:46). Due to the local unrest, however, he was unable to travel to Philadelphia for legislative sessions until December 13th (Hogg 1935:46-47).

Throughout his tenure in the state legislature, Presley remained a staunch Federalist, voting for a strong frontier defense and militia and road improvements. He also supported bills for free education of the poor, for financial aid to the Cannonsburg Academy (later Washington & Jefferson College in Washington, Pennsylvania) and to the seminary in Bucks County. His life-long interest in education and educational institutions resulted in lengthy service (once as president) on the Board of the Pittsburgh Academy, which later became the University of Pittsburgh (Hogg 1935:51, 53, 54, 65).

In 1796 he asked not to be renominated for his legislative seat, a step that Hogg (1935:56) believes was a turning point in Presley's political career. On two occasions, in 1798 and again in 1800 Neville was a candidate in the congressional elections but was defeated both times by another prominent western Pennsylvanian, Albert Gallatin.

The U.S. Direct Tax for 1798, commonly referred to as the "glass tax" because it was levied on the number of panes of window glass in a building, is an important document in shaping what we know about the appearance of the Woodville estate in the closing years of the 18th century. The tax records (U.S. Direct Tax for 1798, Microcopy 372, Roll 24, Frame 0596) show that Presley's two story frame construction house at Woodville, then listed in St. Clair Township, measured 20 feet x 40 feet and had 10 windows with 140 lights (i.e., individual panes of glass). No outbuildings are recorded. It is certain that the Nevilles were not living at Woodville at this time. In fact, Presley was in Kentucky when several friends put him up for the congressional election in that year (Hogg 1935:58). James McCrarey is listed on the 1798 tax form as the occupant of the house though Neville remained its owner. We do not yet know anything more about McCrarey though it is reasonable to think that it was he who operated the farm for Neville. The house was then valued at $400 (U.S. Direct Tax for 1798, Microcopy 372, Roll 24, Frame 0623). This figure is the one levied by the affiliant tax assessor; the principal assessor had valued the house for tax purposes at $320, but the affiliant assessor's determination was the one on which final agreement was reached.

If the 20 feet x 40 feet masurement of the Woodville mansion house is accurate, then the structure was very different from that which exists today. Carl A. McGrew's elevation of the building, drawn for publication in Charles M. Stotz's (1936) The Early Architecture of Western Pennsylvania contains a note that the original structure may have had a separate kitchen which subsequently was joined to the main structure by extending the southernmost gable end of the latter (Figure

brother-in-law, were dispatched from Fort Pitt to assist the stand at Bower Hill. In the next 24 hours, however, the size of the attacking force, which regrouped at Couch's Fort a short distance from Bower Hill, grew to about 500. They advanced again on the house around 5:00 P.M. on Thursday, July 17th. By this time, Neville had slipped away from the estate leaving the soldiers behind. They exchanged fire with the insurgents for about an hour but were compelled to surrender. Mrs. Neville and her servants were permitted to leave under a flag of truce (Felton 1932:49). The mansion house, barn, stable and outbuildings were burned together with Neville's papers, the house furnishings, crops and livestock.

Presley Neville, Marshal David Lennox and another man, possibly John Ormsby (who held the original land patent for most of what today is the Southside area of Pittsburgh), rode out from Pittsburgh toward Bower Hill on the second day of the attack but were detained by the insurgents until the plantation had been burned (Hogg 1935:29).

On the following day, July 18th, John Neville and David Lennox left the Pittsburgh area for eastern Pennsylvania. Neville probably either returned in the fall with the Federal troops dispatched to quell the rebellion or he joined them on the march at Bedford, Pennsylvania. From notices appearing in the Pittsburgh Gazette, it is apparent that he had returned to Pittsburgh before November.

The survival of the Woodville estate during this troubled time may be directly attributable to Presley's absence from it. We have noted that after 1792, his primary residence was in Pittsburgh. If he and his family had been at the Woodville estate in the troubled summer of 1794, it is probable, or at least very likely, that it would have shared Bower Hill's fate. Major Kirkpatrick's connection with the Neville family and his attempt to raise the siege at Bower Hill on July 17th cost him his barn, which the insurrectionists also burned. The dangers posed by the rebellion also prompted Isaac Craig, Presley Neville's brother-in-law, to move with his family from their farm that adjoined Woodville to the comparative safety of Fort Pitt. Presley is said to have readied his Pittsburgh house to withstand an attack because until the arrival of the Federal army in the fall of the year there was no sufficient local military force to resist the insurrectionists, whose strength by August 1st (when they gathered at Braddock's Field) had increased to several thousand men.

Local reactions to the sacking of Bower Hill were mixed, but the disfavor in which the Nevilles and other area Federalists were generally held did not abate quickly. On August 4th, Presley Neville and John Gibson were among those to be banished the distance of a 10-day ride from Pittsburgh (Hogg 1935:33). Presley may have joined Isaac Craig at Fort Pitt at this time (Hogg 1935:34) since his town house on Water Street was said to have then been vacant or occupied only by servants. Sometime thereafter he apparently traveled east to join his father and to vote in a special session of the state legislature on an act to suppress the insurrection (Hogg 1935:37). Nancy Neville and her children, however, remained in Pittsburgh. Writing to his father-in-law, Presley assured General Morgan on September 12, 1794 that "Nancy and the children are safe in Pittsburgh,

Christopher Cowan and his wife, who was a niece of W. Alfred Oldham Neville (Mrs. John Neville). This returned the estate after a fashion to the Neville-Kirkpatrick line. Woodville Farm thereafter remained in the Cowan-Wrenshall-Fauset line as depicted in Figure 4 until it was sold to the Pittsburgh History & Landmarks Foundation, the present owners, in 1974.

Christopher Cowan was the son of James Cowan. He was born in 1780 in Inniskillen, Townland of Shellany, County of Fermanaugh, Ireland (Bigham 1911:31 with corrections provided by Jeanne Wrenshall Jackson).

TABLE 4

Summary of Cowan and Wrenshall Family Account Books for the Operation of the Woodville Farm Examined to Date[a]

Description	Years Covered	Number of Pages
Christopher Cowan Account Book	1817-1822	183
Christopher Cowan Account Book	1822-1825	122
Christopher Cowan Account Book	1825-1826	84
Christopher Cowan Account Book	1830-1832	173
John Fletcher Wrenshall Account Book	1835-1868[b]	187
John Fletcher Wrenshall Memorandum Book	1838	52
John Fletcher Wrenshall Account Book	1869-1872	53
William Ebbs Wrenshall Account Book	1881-1911	73
William Ebbs Wrenshall Account Book	1885-1888	26
William Ebbs Wrenshall Day Book	1896-ca. 1900	37

[a]Originals all in possession of William Ebbs Wrenshall, III. Other primary historical materials are known to exist; they are in widely separated private collections and have not yet been examined systematically.

[b]John Fletcher Wrenshall died in 1862. Presumably, the period from 1862-1868 in this book was continued by his son and heir to the Woodville Farm, William Ebbs Wrenshall.

Cowan was a merchant and early industrialist in Pittsburgh dealing in dry goods, tobacco, bacon and other supplies; however, he is most remembered for his early ventures into the iron industry. In Pittsburgh he

established what later became the Stackpole and Whiting mill on Penn Street and Cecil Alley (Bigham 1971:32; the location of the steam mill is listed in the 1813 city directory as Penn Street between St. Clair and Pitt, that is, on Penn Avenue between Sixth Street and Stanwix using modern street names). In 1810 he is said to have been the second largest dealer in Pittsburgh iron (Bigham 1911:31), handling 350 tons during that year. It is generally believed that Cowan set up the first rolling mill, slitting mill and tilt hammer in Pittsburgh in 1812 (Buck and Buck 1939:305). He is listed under this enterprise in the first directory for Pittsburgh (Directory for Pittsburgh and Its Vicinity 1813). In 1814, Cowan advertised in the Pittsburgh Mercury for 20 to 50 wagons to haul iron from furnaces near Bellefonte, Pennsylvania, to his Pittsburgh mill, which was then called the Pittsburgh Rolling Mill.

The Pittsburgh Rolling Mill turned out many of the finished iron products essential to the populace of an expanding western frontier. Although we take many of these goods (such as nails) for granted, they were then in short supply. In February 1785, for example, Colonel Josiah Harmar wrote to President Dickson of the Supreme Executive Council of Pennsylvania to report that, prior to the arrival of his troops at Fort McIntosh near the juncture of the Beaver and Ohio rivers, pioneers traveling down the Ohio on flatboats had plundered the post of nails, hinges and every other useful article (see Carlisle 1979:50, note 34). It was to satisfy this demand for durable goods from which the homes, schools, churches, and towns of a yielding western wilderness might be built that Cowan and fellow industrialists of the early 19th century established rolling, slitting, and other iron mills. Nails, hammers, chisels, augers, vices, hoes, frying pans, knives, tongs, shovels, spades, scythes, axes and other indispensable tools of frontier life took shape in their factories (Bigham 1911:32). Christopher Cowan was eminently successful at his enterprises; in 1813 he was a member of the board of directors of the Bank of Pittsburgh and had a cash balance in his account of $40,000, a considerable sum for the time.

Cowan's introduction to the Woodville estate probably came about as a result of his marriage to "Eliza" Kirkpatrick. Five years or so before they moved there, the couple had been married in the estate's mansion house (September 29, 1810) just as Eliza's parents, Abraham Kirkpatrick and Mary Anne Oldham, had been a generation earlier on November 23, 1786 (see above).

Although we do not yet know the exact date that Cowan purchased the Woodville Farm, this probably occurred between 1814 and 1815. The first two of their seven children were born in Pittsburgh, but the birth of their third child, John Conway Cowan, took place at Woodville in 1815 (Figure 5). Thus, it is probable that Cowan purchased the estate from Stephen Barlow or from the bank Barlow represented not long after Barlow had himself purchased it from Presley Neville (i.e., 1814).

In 1815, Pittsburgh was a rapidly expanding center of population and industry. This might have been a factor in Cowan's decision to move to the country, but we cannot yet be sure of it. At Woodville Farm, Christopher engaged in gentleman farming. His account books show, however, that the farm (said then to consist of about 1,000 acres) was

expected to be self-supporting; the debit and credit accounts are meticulously worked out to fractions of a cent and include transactions of cash, goods and services. There are therefore six varieties of transactions that are recorded. These include cash paid by Cowan to others, cash paid by others to Cowan; goods given to Cowan to cover a debt, goods received from others in debt to him; services performed by Cowan (or, typically, by an estate employee) for others in payment of a debt and, finally, services rendered to Cowan by his debtors.

Although cash was an important part of western Pennsylvania business transactions at this early time, barter and debt service were also vital ingredients in the economic mix. Cash valuations for goods and services were useful for bookkeeping purposes, but debts and credits were frequently balanced without a direct exchange of funds. Cash debts could be discharged by simple repayment in kind or by presenting goods or service of equal value. The Cowan account books also record mixed third-party debt payment schemes which intermix cash, goods and services (e.g., A owes B some cash and B is in debt to C for so many bricks or other commodities; A then discharges his debt to B and B's debt to C by working directly for C).

The Cowan account books are also valuable for information on buildings, repairs, and the remodeling of existing structures at Woodville Farm. For example, maintenance and repair expenses for the "mansion house" are itemized from April 1, 1825 through December, 1826 on a single page in the first account book. Although written in a difficult hand, this account shows that Cowan purchased 2,500 oak boards from Thomas Cassily on April 1, 1825 for $25.00 and that Cassily was paid $1.12 1/2 for the handling and piling of the boards. On May 20, 1825 Cassily supplied a quantity of shingles for $33.75 (possibly 30 lots of 100 at $1.12 1/2 per hundred). Other expenses specifically attributed to the mansion house in 1825 include $10 for ash boards (June 10), $55 for cut stone (June 12), $50 for cellar digging (July 1), $32.63 1/2 for "square iron for grating" (July 6), $118 for lime (December 20), and $11.00 for 1000 feet of oak boards (December 15).

Early in 1826, nails and white lead were purchased, and on May 20, 1826 Cowan bought a supply of "Geneva glass" for $55. September 20, 1826 saw the purchase of a marble mantle for the house. The largest single purchase recorded in the "mansion house" account during this two-year period came on December 20, 1826 when $700 was paid to R. Gray for bricks (probably "175 hundred" or 17,500 bricks at $.04 each). What use these bricks were intended for at the frame-construction mansion house is far from clear, but they may have been used in rebuilding (or building?) the end chimneys and fireplaces. (See previous conjectures on the expansion of the north and south ends of the house.) This seems at least plausible as the next two entries after the line for bricks are for the purchase of 10 grates. Perhaps Cowan was then converting the house's fireplaces from wood-fired to coal-fired, a change that may have included rebuilding the chimneys. (John Neville's claim for damages at Bower Hill, however, does list one Franklin stove that may have been coal-fired; coal, of course, is a plentiful fuel in the area and may have been used from the farm's earliest days. If the brick end chimneys were being built in 1826 and not rebuilt, this year may mark the architectural alteration of the house to

something approaching its present appearance.)

The years 1825-1826 thus mark the first documented reconstruction or remodeling of the mansion house at the Woodville Farm. This is not to say, however, that Cowan's account books do not discuss earlier upkeep regimens. A memorandum for July (?) 1819 in the first account book records that Charles Forman had agreed with Cowan to "... paint the new House on hill ...", though to what structure this refers is not clear. Forman was also to paint "...the Store House" with two coats of paint but "...the Kitchen of the House on Hill only one coat & the Weatherboarding of the Store room only one coat..." For his labors, Forman was to receive 20 bushels of wheat in August and September. Unfortunately, this entry is not specific enough for us to conclude that these buildings were the mansion house at Woodville Farm and two other estate buildings, a kitchen and a storehouse. However, if the log kitchen of the estate was then separate from the house (as hypothesized above and by others, e.g., Stotz 1936) but weatherboarded, the description might well apply to the Woodville mansion. If it does, this is the first documentation uncovered thus far that discusses maintenance of the estate. As for the storehouse, a structure called by that name is known to have been standing just west of the mansion house by at least 1863. This survived until 1949 when it was replaced by the present caretaker's home (see below and Figure 9). These observations strengthen the conclusion that Cowan's "house on Hill" was in fact the mansion house and that three structures on the Woodville estate were painted by Charles Forman in 1819.

Expenses unequivocally attributed to the Woodville "mansion house" do not resume until the fourth Cowan account book with entries that extend from the closing days of 1826 to February, 1830. Among the largest bills of this period are ones from Alexander & Beatty, stonecutters (314.75); Thaw & Co., plastering ($400); a $2,500 bill from John Tompson in 1829; a $500 bill from mason Francis Carr; a $200 bill from Harmen and Forman for cellar stone, and a $229.55 bill from Andrew Boggs for painting. The account for Tompson does not indicate what goods or services were provided, but Tompson did operate a mill of some sort. Wood Run, a small stream that flows just north of the Woodville mansion (see Figure 1), is also called Thompson's Run, and the road that follows the course of the stream in known as Thompson's Run Road. Tompson's mill therefore was probably west of the Woodville estate.

One additional reference from the fourth Cowan account book is of particular interest for thus far it is the earliest information that a grist mill and a shingling mill also stood on the Woodville estate. This, of course, is important evidence for substantiating the archaeological interpretation that the long linear depression from which the Neville House midden was excavated in 1979 was the remnant of a millrace (see Figure 10). The pertinent entries in Christopher Cowan's accounts are for April 17 and June 1, 1831 and July 15, 1832. On April 17, 1831 Henry Couch, millwright, worked for one day in putting in false bottoms in Cowan's shingling mill. On June 1st, he discharged three-quarters of a day's work in dressing the millstones and "...wedging up the mill." In July of the next year, Couch again dressed the millstones and helped James Young in some other work. These account book entries do not describe the location of the Cowan mill (probably one structure serving several milling

functions) on the Woodville property but they do assist the process of archaeological interpretation in two major ways. First, they offer incontrovertible and unambiguous proof that a mill or mills were part of the make-up of the Woodville estate by at least the early 1830s. They also demonstrate that the mill or mills were then operational and therefore that the millrace was probably undergoing periodic repair and cleaning. This, of course, suggests that the secondary function of the millrace, that is, a locus for the accumulation of domestic trash and refuse, must post-date this time. This conclusion seems to be fully justified by the artifactual remains recovered in the 1979 midden excavation. As discussed in greater detail below, historical data from the Wrenshall family's occupancy of the Woodville estate suggest that the mill may have remained active until perhaps just prior to the Civil War.

THE WRENSHALLS

Christopher Cowan died at his Woodville home on March 12, 1835 at the age of 55. The final 13 years of his life he was a widower since "Eliza" had died at Woodville at the early age of 34 (July 19, 1822). Both Cowans were originally buried at Trinity Cathedral cemetery in Pittsburgh, but their remains were later (1903) removed to Allegheny Cemetery which opened in 1844.

After Christopher Cowan's death, the Woodville estate, which had been in Cowan ownership for approximately 20 years, became the property of his daughter, Mary Anne, and her husband, John Fletcher Wrenshall (Figure 6). They had married at Woodville on September 19, 1832. John Fletcher Wrenshall was the executor of his father's-in-law estate. Woodville thereafter remained in the Wrenshall family (here including the years in which it was occupied by Mary Bennington Wrenshall Fauset and her husband, Joseph Fauset) for the next 139 years.

John Wrenshall, the father of John Fletcher Wrenshall, was born in Preston, England, on December 27, 1761 to Thomas and Margaret Wrenshall. He married his wife, Mary Bennington (d. Pittsburgh July 1, 1812), in England on October 6, 1783. They lived in England until sailing for Philadelphia from Liverpool on July 20, 1794. Between 1783 and their departure for the New World, they had seven children (including Ellen Bray Wrenshall, whose daughter, Julia Dent became the wife of Ulysses S. Grant, President of the United States between 1869 and 1877. Had he lived to see it, John Fletcher Wrenshall would therefore have been an uncle of the First Lady of the United States.)

In America, the Wrenshalls had four other children, including John Fletcher and three girls, Fanny Fieldhouse, Emily and Sarah. John Wrenshall was a prosperous hardware merchant (perhaps a connection to Christopher Cowan?) and is also remembered as the founder of the Methodist church in western Pennsylvania. At his death in Pittsburgh on September 25, 1821 John Wrenshall was interred at the Trinity Cathedral cemetery, but his remains were later moved to Melrose cemetery in Bridgeville, Pennsylvania, a short distance from the Woodville estate.

Children of John Fletcher Wrenshall and Mary Anne Cowan born between 1833 and 1848 are identified in Figure 7. According to family genealogical records, the first four children (John Cowan, Elizabeth M.,

Charles Christopher and Edward or "Ned") were born in Pittsburgh. Mary A. Wrenshall, known to the family as "Mollie," was the first Wrenshall child born at the Woodville estate. Since the Wrenshalls had been in possession of the estate since Christopher Cowan's death in 1835, this is difficult to explain. The question of where the Wrenshalls lived in Pittsburgh before they moved to the Woodville estate has not been adequately researched, but according to an entry in a memorandum book for 1838 Mary Anne did own a house on the corner of Short and Water streets in Pittsburgh that was then valued at $10,000. The three children who followed "Mollie" also were born at Woodville.

The John Fletcher Wrenshall account records pay a great deal of attention to agreements renting out portions of the farmland and buildings to sharecroppers. The details of the rental agreements are carefully spelled out, and the arrangements occasionally reference specific landscape elements of the farm. For example, on September 19, 1843 Wrenshall entered into an agreement with a Mr. Cubbage:

> to complete and set out in a workmanlike manner the five Gates for which the Posts now stand in Barn Yard, the Gate on turnpike to be finish[d] Same as gate opposite Hog (Hay?) house and the four Gates in Barn Yard to be finish[d] in Same Stile as the Gate in my lane, for which he is to receive the sum of $12.00 in produce at Pittsburgh rates--he is also to paint with 2 coats Each Gate--I am to furnish the materials.

Like his father-in-law, John Fletcher Wrenshall was a man with many economic interests that ranged far beyond the fields of Woodville Farm. He was, for example, the owner of a one-third interest in the important Hope Cotton mill which stood on the north shore of the Allegheny River opposite Pittsburgh. Wrenshall apparently operated the Woodville farm by working through a series of tenant farmers headed by a "superintendant." In February or March 1842, Samuel Sample filled this role. Sample was also a farmer, gardener, and general laborer about the estate but was entrusted with general supervision of the stock, the farming interests, and the laborers. In return, he received a house, an adjoining lot behind the house, a garden plot, and all necessary potatoes for the use of his family (but not his stock!) as well as $0.50 per day "...for Each and Every working day full and well made..." (emphases are Wrenshall's).

The Wrenshall account and memorandum books make occasional references to an estate structure called Wrenshall's Mill. Typically, these references to the mill arise in the course of an agreement between Wrenshall and a tenant farmer in which the farmer was required to take his harvest to the mill. Wrenshall and the farmer normally split the harvest equally between them. Although the estate records are, once again, disappointingly unspecific about the location or other details of the "Wrenshall Mill," it seems reasonable to think it was the same structure which Henry Couch worked on for Christopher Cowan a generation earlier (see above). Importantly, the Wrenshall accounts reveal that the mill was still in operation in the 1840s.

By May 1852, however, Edward "Ned" Wrenshall wrote to his brother

Charles Christopher that "Your waterwheel is in the race just where you left it." The statement is unexplained and is not expanded upon elsewhere in the letter. It implies, however, that the mill was in disrepair by this time. The reference to a water wheel indicates that the mill was water-powered rather than steam-powered.

Other information about the Wrenshall mill may be embedded in the many letters exchanged among the Wrenshall brothers and sisters, letters to and from their parents, and most especially to and from their "Uncle Dick," Richard Cowan. In an undated (though probably ca. 1866; Jeanne Wrenshall Jackson, pers. comm. 1982) letter from Cowan to his nephew and namesake, Richard Cowan Wrenshall, then living at Woodville, Cowan asked, "How does it look along the race bank now? Are the sycamores beginning to drop a big brown leaf now and then--and a piece of bark?" From such bits and pieces, a general picture emerges of what the old race of the Wrenshall mill must have looked like, but where was it?

Another undated letter, possibly ca. 1868 (Jeanne Wrenshall Jackson, pers. comm. 1982) to Richard Cowan Wrenshall from his eldest brother, John Cowan Wrenshall (see Figure 7) contains a section that adds substantially to attempts to reconstruct the location and appearance of the Wrenshall mill:

> Many years ago when Pa (i.e., John Fletcher Wrenshall) caught the fishing fever and read Izaak (sic) Walton's "Contemplative Man's recreation"--he used to fish either at the old Dam at upper end of our orchard, where water fell over wall. There was no ditch there and dam above filled in every heavy rain and old race ran full-the water also poured over a log which capped the wall in side of wing wall in corner near where the row of sycamores end--here I had my first lessons in fishing and catching snakes--Uncle Dick (i.e., Richard Cowan) and Pa dividing their time impartially between fishing and shooting with rifle at a mark pinned to a board which was generally set up against dam wall--or shooting with bows--from end to end of that little, grassy meadow, Uncle Dick generally at dam end and Pa at end where race bank was highest, shooting some arrows back and forth, trying to see who could drive the other back--the arrow having always to be shot from where it was taken up. When Pa advanced far enough in art of fishing, he ventured down to creek and fished directly in front of where the old mill stood--as it was directly opposite the lower end of Gamble's cornfield. Not a very good place it is true but it suited him as it was not far from home--and he could be called when dinner was ready (emphases added to highlight references to the mill dam and race).

This very important letter gives us the best idea yet of the location and appearance of the Wrenshall mill, the mill dam, and the millrace relative to the mansion house and to the Gamble estate (Figure 8). This was northwest of the Woodville Farm toward what today is Woodville State Hospital. Just as important is the revelation that the dam was beyond the Woodville Farm orchard which grew just behind or west of the structure known in the mid-19th century as the "old storehouse" (Figure 9). As previously noted, this structure survived into the 20th

century; it was dismantled ca. 1949 by Wilbert Smiley, a neighbor of Joseph and Mary Fauset's who often did odd jobs such as carpentry and painting around the Woodville estate. Shortly before his death, Mr. Smiley told this author that when he built the present caretaker's house on the estate he took pains to model it after the original. Richard Cowan's watercolor of the storehouse (Figure 9), painted in 1863 is testimony to Mr. Smiley's skill. In Figure 9, the orchard is visible to the left of the structure; the mansion house is just to the right or actually in front of the storehouse beyond the right margin of the painting. The present caretaker's house was built on the cellar foundation of the storehouse, the latticed entrance to which was centered in the side of the structure that faced the mansion house (see Figure 9). The letter's description that the mill dam was beyond the orchard suggests that Wood Run (Thompson's Run) was probably impounded west of the mansion house back up the valley through which Thompson's Run Road now passes. The water would then be diverted into the millrace extending generally west to east passing behind the north corner of the storehouse just below the top of the bluff overlooking the valley of Wood Run (Figure 10). This reconstruction, based in part upon extant documentation, is confirmed by the 1979 archaeological excavation of the "Neville house" midden. It is important to stress in this context that the historical documents are not by themselves sufficient for an accurate reconstruction of the location or appearance of the millrace, though obviously they are indispensable for discovering the affective contexts of that feature as the Wrenshalls conceived of them. Moreover, despite the considerable (and unusual) detail of the Wrenshall letters, very few if any of the objective characteristics of the race such as its width and depth, details of periodic clean-out episodes, and race maintenance practices can be had from the documents alone. This kind of knowledge requires archaeological identification and definition. Thus, the 1979 excavation of the "Neville House" midden both complements and is complemented by the historical record. This is the sort of data synthesis for which historic sites archaeology strives and which helps to distinguish it from both history and archaeology as a unique approach to understanding the past.

In our attempts to reconstruct something of the changing appearance and make-up of the Woodville Farm as it was experienced throughout the 19th and into the 20th centuries by the Cowan and Wrenshall families, the historical and archaeological data are supplemented by more graphic "artifacts." The first of these are the several watercolors of various estate and regional scenes painted by Richard Cowan (Figures 11-14). The second are a series of excellent interior and exterior photographs taken by his nephew, Richard Cowan Wrenshall, ca. 1882 (Figures 15-21). These paintings and photographs are invaluable aids in reconstructing the 19th century ambiance of the estate grounds. Cowan's painting of the hipped-roof hay and stock barn (Figure 12) is the only known representation of this structure. Although the exact location of the building with respect to the mansion house is not apparent from the painting, the barn may have stood southwest of the house on or near the site of the present garage. This painting also clearly shows a fenceline and gates that delineated the barnyard from the rest of the property. A short road leading to the barnyard gate may have connected (at the bottom of the painting) with the Pittsburgh-Washington, Pennsylvania, turnpike.

What almost certainly is the turnpike as it appeared in 1866 is shown in Figure 13, a peaceful and idyllic representation broken only by the imposition of the telegraph lines paralleling the fences that lined the house-side of the dirt road. (The turnpike remained unpaved for years; a railroad spur was built parallel to it and on the mansion house side of the road in the later 19th century. The road was still unpaved, however, when Wilbert Smiley moved next door to the mansion house in 1917; Wilbert Smiley 1979, pers. comm.)

Photographs of the exterior of the building taken in the 1880s show that remarkably little has changed to the present day. A picket fence bordering the railroad spur and turnpike at the front of the house is among the most notable architectural elements now absent (Figures 17-19, 21) as is the large barn shown standing to the west of the house ca. 1885 (Figure 17). This barn, in distinction to that shown in Richard Cowan's painting of a few decades earlier, had a gable roof and a cupola.

One additional landscape feature at the front of the house that is now missing but which was unintentionally documented in one of Richard Cowan Wrenshall's photographs (Figure 21), is a narrow walkway parallel to the foot of the front porch. This feature was defined during archaeological work at the estate in the spring of 1977 (Richardson and Carlisle 1978:10, Figure 6) and was found to have been paved with cinders and ash. There are references in the Wrenshall letters of the 1860s that the family used ashes from the estate's fireplaces for this purpose, but they also obtained cinders from Lea's mill, a steam-powered grist mill that stood a short distance northeast of the estate.

In contrast to the exterior photographs of the Woodville Farm property which show few changes in the mansion house down to the present day, Richard Cowan Wrenshall's interior photographs record that the late 19th century decoration of the house was heavily Victorian (Figure 15). The interior and exterior appearances of the mansion house at this time therefore reflect a duality in the conception of what was then appropriate and acceptable in domestic architecture and interior decoration. With a few exceptions (such as the Gothic dormer windows), the exterior of the house retained a distinctly 18th century Virginian style and appearance that was in marked contrast to the then fashionable and up-to-date Victorian interior appearance. This same mental ambivalence between what our houses portray to others and what they convey to ourselves is, of course, not unknown even today. Witness, for example, the many suburban "colonial" style tract homes with a markedly traditional exterior face but whose interior furnishings and decorations are completely modern. One may well wonder if this interior/exterior difference does not arise from some underlying, long-term behavioral duality that separates the face we present to the world and that self-image which the interiors of our homes reflect to ourselves.

One additional aspect of the historical study of the Woodville Farm is of special importance for the interpretation of archaeological materials recovered from the 1979 excavation of the millrace midden and will serve to bring this discussion to a close. This is the small but interesting collection of prehistoric artifacts removed from the fill of

the midden and, at various times, from other locations on the farm property. John Connelly, former caretaker of the estate, reported as early as 1977 that a quantity of mussel shell, presumably from a prehistoric midden, had been turned up when a gas line was laid parallel to the south wall of the log construction kitchen of the mansion house. Archaeological excavation parallel to the west wall of the house in 1978 (Carlisle, Johnson and Richardson 1978), however, failed to produce any further indications of a prehistoric occupation on that particular part of the property; however, a few small triangular projectile points of the Late Woodland period were recovered near the house when the current slag driveway was repaved in 1979. The Wisconsinan terrace on which the house sits was undoubtedly as favorable a location for human habitation in prehistoric times as it was when John Neville sited the mansion house on it in the 18th century. The property is well-drained, bordered by Wood Run on the north, and overlooks Chartiers Creek. Fish and game would have been as accessible prehistorically as they are known to have been in the historic time period. Recent archaeological work in the Chesapeake has indicated that initial European settlements frequently were sited at or near abandoned Indian camps or agricultural fields, and we may presume that the same favorable geographical, vegetational, and hydrologic factors that affected the choice of location for prehistoric settlements were operant when the Nevilles first ventured into the Chartiers Creek Valley. Linguistic evidence for this may also be preserved in the name of the land tract south of the Woodville Farm, called "Old Fort", surveyed for Henry Wright in 1769 and subsequently patented to Christopher Cowan in 1828 (see Figure 1), a move that joined the Woodville and Old Fort tracts. Remnant topographical features of prehistoric occupations were often interpreted by early Anglo settlers to be the remains of aboriginal fortifications (e.g., Redstone Old Fort and Fort Hill). The "Old Fort" tract may well be the location of the Late Woodland Drew site which is the type site of the Drew phase of the Monongahela culture. The Drew site was excavated by the (then) Section of Man, Carnegie Museum of Natural History in 1967 during preparations for the building of Interstate 79 that passes west of the Woodville estate.

Thus, factors of location, residual linguistic evidence, and previous archaeological efforts as well as observations and reports of the siting of prehistoric artifacts combined to suggest in 1979 that any additional archaeological work on the Woodville property would likely produce at least a few such artifacts. The ensuing 1979 midden excavation, however, produced artifacts that clearly could not be associated with any locally known aboriginal culture. Moreover, these artifacts were included with historic period artifacts and fill within the midden and did not appear to have depositional precedence as one might expect. On morphological and contextual grounds alone, some of these artifacts were also certainly far older than the millrace could possibly be. During the excavation of the midden, a working assumption developed that some of these prehistoric artifacts may have been redeposited into the millrace (once the linear depression had been archaeologically defined to be a race) along with fill taken from elsewhere on the property. That might explain how some of the prehistoric artifacts got into the midden and why they were mixed with historic period materials, but it could not account for the unusual, indeed unprecedented nature of some of them.

Resolution of this dilemma, we believe, has been found via the historical research conducted after the midden excavation. It is evident from even a cursory examination of the Wrenshall correspondence of the mid-1850s and later that the family members shared an abiding, often Romantic view of the Woodville estate. It was certainly never far from their thoughts although business often carried them far from home to Baltimore, the Midwest, Tennessee, Kentucky and Georgia. These letters are filled with references to the kinds of trees, vegetation, birds and animals found on the farm. Another and unique expression of this naturalism and affinity with their physical world was a profound and, in the history of the development of archaeology, early fascination with past cultures. Recalling an earlier experience near Woodville, John Cowan Wrenshall wrote from Baltimore, Maryland, to his younger brothers, Richard Cowan Wrenshall and William Ebbs Wrenshall in March 1866:

> I remember very well Examining the Mounds near Jones Saw Mill, but do not know which place you refer to, we dug a mound near the center of an old orchard above Tom Jones house--and also one or two in the hill near the upper end of the "long deep hole" as we used to call that long deep part of the creek that ran by McKown's field--at the upper end was the deepest place and across the creek was a ridge field above a thicket, Uncle Dick (i.e., Richard Cowan) and I spent a day or two in this locality and found many traces of Mounds and dug one up.

The construction of military fortifications and earthworks during the Civil War also played an important role in developing the Wrenshall family's nascent interest in Indian cultures since artifacts and especially graves and mounds were often encountered. John Cowan Wrenshall continued in the same letter:

> When constructing a line of works around Macon Ga about this time last year (i.e., March 1865) we dug into some Indian graves and I obtained many beautiful specimens of beads and Some fine(?) bones and teeth; I have an idea that around Mammoth Cave Ky would be a very good place to hunt up Indian relics. If all goes well we will someday have a tramp in the country and find what we can.

John Cowan Wrenshall was far more than an antiquarian, however. One can see in his writings the beginnings of a methodical approach to the study of Indian cultures that for its time was as sophisticated (if not moreso) than that being employed by professionals in that newly emerging science, archaeology. He was perhaps the first to suggest the preparation of maps showing the distribution of ethnographic Indian tribes and the use of those maps when searching for archaeological sites. Later in his 1866 letter, he wrote:

> When I have time I intend preparing a map of Indian localities, in place of ordering(?) the continent into states divide by localities occupied by the different tribes of Native Indians--it would be very convenient to carry and refer to when out on mound hunts.

Ethnographic distribution maps and the direct historic approach (Steward 1942) are working concepts of a systematic study of the past that are common to present-day archaeology, but the roots of these ideas can be traced to men like John Cowan Wrenshall.

Other historical information that appears in the account books of William Ebbs Wrenshall reveals that his brother, John, was by no means the only family member with an interest in Indian artifacts. In an undated draft of a letter (probably ca. 1885-1888) to one of his brothers he wrote:

> I received your Kind donation to my relic collection. They were all very desirable specimens from the fact that they were all not only perfect, but two of them were specimens that I have never been able to get in this part of the Country. I have reference to the Bird-shaped ceremonial stone. Their use has been discussed more than that of any other form of stone in (illegible) an ornament made by the Indians. The other specimen I have reference to is the large chipped flint implement. this--implement--is of undetermined use. some writers place them with the agricultural implements for digging in the ground. The one you sent has a very high glaze which is very desirable to a collector as it is unmistakable proof of much use--The spearpoints and arrowheads were very fine specimens. The leaf-shaped spearpoint or knife is the finest of its kind I have ever seen. The bird points were little gems.

In this account, and in other records Wrenshall maintained about his growing artifact collection, is very probably the answer to the archaeological dilemma posed by the 1979 midden excavation. It appears that part of the midden fill contained broken or cast-off pieces from the collection of one of the earliest documented artifact collectors in western Pennsylvania. The historical documents also clarify that artifacts were being sent back to the Woodville estate by the Wrenshall brothers from an area extending over much of the eastern and particularly southeastern United States. This probably explains the midden fill discovery of some artifactual specimens that are unknown for the western Pennsylvania area. The Wrenshall artifact collection, however, also contained prehistoric artifacts collected from the Woodville estate and from the Gamble Farm (see above and Figure 8). Importantly, William Ebbs Wrenshall's documentation of his discoveries in his account books are accompanied by what appears to be an early numerical accession system. The collection remained intact into the 20th century, and current Wrenshall family members recalled it as children visting the estate (William Ebbs Wrenshall, III 1982, pers. comm.). At the sale of the estate after Mary Fauset's death in 1973 some of the collection went to William Ebbs Wrenshall, III and has been photographed by this author. Other portions are apparently now in New Mexico.

As repeatedly emphasized throughout this discussion, much historical research remains to be done on the Woodville Farm. This is particularly true for the earliest years of its existence where the lack of primary data is the main problem. Much research also remains to be done for the entire 19th century history of this remarkable property among

the historical data that are abundant but as yet incompletely catalogued and assessed. This discussion has attempted to bring order to some of the things that we know about Woodville Farm and to highlight for the first time a few aspects of the richness of life here as it was experienced during the many years the Cowans and Wrenshalls owned it--particularly as these apply to the archaeological interpretation of the midden excavation. In that sense this history serves as prologue to the much longer road that lies ahead.



Figure 1. Plat map for Collier Township, Allegheny County, Pennsylvania, on file with the Bureau of Land Records, Department of Community Affairs, Harrisburg, Pennsylvania, showing the plat of the Woodville Farm property relative to neighboring land parcels after John Neville had acquired property from Peter Painter in 1788 that extended Woodville's border to Robinson's Run.



Figure 19. Myra McCleery Wrenshall, wife of Richard Cowan Wrenshall sitting on the lawn at Woodville Farm ca. 1886. (Xerographic reproduction of a photograph by Richard Cowan Wrenshall, courtesy of Jeanne Wrenshall Jackson).



Figure 18. Brothers William Ebbs Wrenshall (left) and Richard Cowan Wrenshall (right) relaxing in the front yard of the Woodville mansion house ca. 1885. William Ebbs Wrenshall succeeded his father, John Fletcher Wrenshall as operator of the farm estate after the former's death in 1862. The lively, often minutely detailed letters that passed among the Wrenshall family provide a rich documentary source for studying this era in western Pennsylvania history. (Xerographic reproduction of a photograph, courtesy of Jeanne Wrenshall Jackson).



Figure 17. A beautiful winter scene of the mansion house and grounds at the Woodville Farm ca. 1885, probably by Richard Cowan Wrenshall. The view is generally south toward Bridgeville, Pennsylvania. Note at left the picket fence that paralleled the Pittsburgh-Washington, Pennsylvania, Turnpike (present U.S. Route 50) and, at extreme right over the porch roof, a cupola-topped barn which is no longer extant (Xerographic reproduction of a photograph, courtesy of Jeanne Wrenshall Jackson).



Figure 16. Xerographic reproduction of a ca. 1884 photograph by Richard Cowan Wrenshall, the daughter of Christopher Cowan (owner of Woodville Farm ca. 1815-1835) and wife of John Fletcher Wrenshall. The photograph was taken on the front porch of the mansion house which is virtually unchanged in appearance today. Mrs. Wrenshall continued to live at the estate and died there in 1896 at the age of 78. The pet parrott at right is "Colonel Wrenshall," reputed to have succumbed at age 20 to an overdose of sugar cane. (Courtesy of Jeanne Wrenshall Jackson).



Figure 15. Interior of the mansion house at Woodville Farm ca. 1882 showing a heavy Victorian decorative influence. This is probably the room to the right off the center hallway. Note the painting of John Fletcher Wrenshall over the bookcase. This is the same ca. 1845 portrait that appears in Figure 6. The photograph was taken by Richard Cowan Wrenshall (Courtesy of Jeanne Wrenshall Jackson).



Figure 13. Scene near Woodville Farm, probably along the Pittsburgh-Washington, Pennsylvania Turnpike (present U.S. Route 50) that passes in front of the Woodville mansion house. Xerographic reproduction of a photograph of a watercolor by Richard Cowan dated October 8, 1866. (Courtesy Jeanne Wrenshall Jackson).



Figure 14. Cave near rocks on Chartiers Creek. Xerographic reproduction of a photograph of a watercolor by Richard Cowan dated October 10, 1869. The two figures are (left to right) the artist and Richard Cowan Wrenshall. (Courtesy Jeanne Wrenshall Jackson).



Figure 11. Sunset at Woodville Farm. Xerographic reproduction of a photograph of a watercolor by Richard Cowan dated November 18, 1869. (Courtesy Jeanne Wrenshall Jackson). Exact location of this scene on the estate is not known.



Figure 12. Old hay and stock barn at Woodville Farm. Xerographic reproduction of a photograph of a watercolor by Richard Cowan dated 1863. (Courtesy of Jeanne Wrenshall Jackson). The barn no longer exists but may have stood approximately where the garage is now located. If so, the mansion house is to the right of this picture.



Figure 14. Photograph of the "Neville House" midden when first identified during archaeological research on the Woodville Farm in 1977. Excavation and historical documentation have helped to confirm the interpretation that the midden accumulated in an abandoned millrace, probably for the "Wrenshall mill." A mill is first mentioned in the account books of Christopher Cowan, and "Wrenshall's mill" is referenced in the memorandum book of John Fletcher Wrenshall during the 1840s. The mill and millrace probably fell out of use in the late 1840s or 1850s. A section of the race near the mansion house subsequently became a convenient refuse dump. There are indications however, that the mill dam remained intact and continued to impound water for some years after the mill itself had ceased operation.



Figure 9. Xerographic copy of a photograph of a watercolor of the "old storehouse" on the Woodville estate painted in 1863 by Richard Cowan. The building had a cellar beneath it, the latticed entrance to which can be seen. A subsequent frame structure very similar to the original was built on the cellar foundation in 1949 and today serves as the caretaker's dwelling. Note the chicken coops and the sharpening wheel at left (Courtsey of Jeanne Wrenshall Jackson).



Figure 8. Xerographic reproduction of a photograph of the Gamble Farm ca. 1884 looking from Woodville Farm. The photograph was taken by Richard Cowan Wrenshall. The Wrenshall mill was said to have stood opposite the lower end of the Gamble cornfield but was probably gone by ca. 1868 (Courtesy of Jeanne Wrenshall Jackson).

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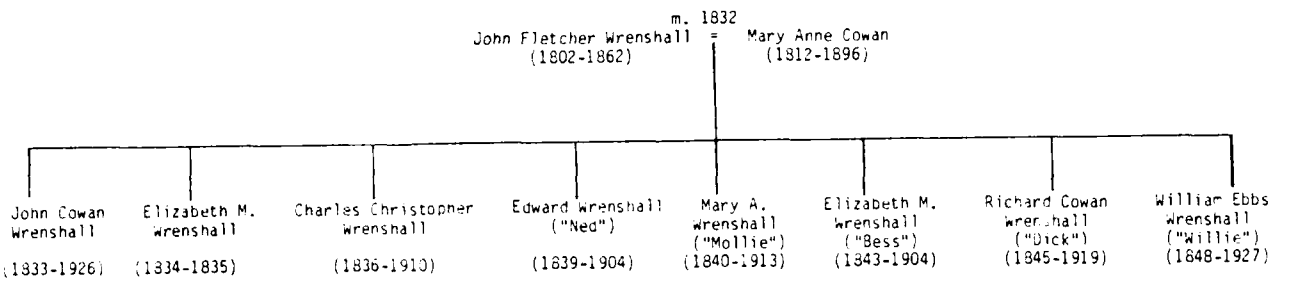


Figure 7. Select Wrenshall family genealogy explaining the ownership and occupancy of the Woodville estate from ca. 1835 into the 20th century. Affines are not shown. John Fletcher Wrenshall came into the estate through his marriage to Christopher Cowan's daughter, Mary Anne, in 1832 and after the death of Christopher Cowan in 1835 (Allegheny County, Pennsylvania, Register of Wills Book 4:204; Allegheny County, Pennsylvania, Records of Orphan's Court, December 1, 1836). All of John Fletcher and Mary Anne Wrenshall's children prior to 1840 were born in Pittsburgh. Mary A. "Mollie" Wrenshall was the first child born at the Woodville Farm. All of their subsequent children were also born at the estate. Note that "Bess" Wrenshall was named after a sister who died in infancy; the name no doubt was adopted from Mary Anne Cowan Wrenshall's mother, Elizabeth M. Kirkpatrick. The Wrenshall children kept up a lively correspondence with each other and with their uncle (mother's brother), Richard Cowan. The bonds appear to have been particulary strong between Richard Cowan and his namesake, Richard Cowan Wrenshall. As noted in the text, Richard Cowan was a naturalist and watercolorist; his nephew, "Dick" took up photography and was responsible for recording many scenes of Woodville in the late 19th century (Figures 15-21). The estate passed next to William Ebbs Wrenshall who married Saidee Steele in New York on May 31, 1892. They returned to Pennsylvania, however, and continued to live at Woodville Farm. The property then passed to their daughter, Mary Bennington Wrenshall who married Joseph Fauset. Mary Fauset continued to reside in the house in which she and her father had been born until her death in 1973.



Figure 6. Portrait (ca. 1845) of John Fletcher Wrenshall (1802-1862), husband of Christopher Cowan's daughter, Mary Anne. The Wrenshall family ownership of the Woodville estate began in 1835 and continued thereafter for 139 consecutive years. Original oil painting in the possession of William Ebbs Wrenshall, III).

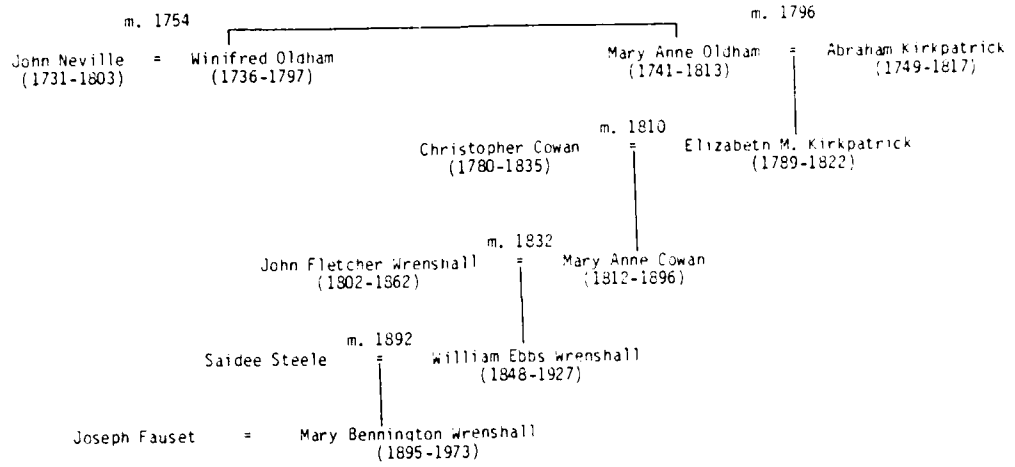


Figure 4. Select genealogy of the Neville, Cowan and Wrenshall families showing the affinal relationships among them. The figure also helps to clarify the chain of ownership for the Woodville Farm. After Presley Neville sold the estate to Stephen Barlow, a director of the local branch of the Bank of the United States, in 1814 the next Neville relatives to live on the estate were Winifred Neville's niece, Elizabeth M. Kirkpatrick, and her husband, Christopher Cowan. The property then stayed in the possession of the Cowan and Wrenshall families, passing to each successive generation as shown here until it was sold to the Pittsburgh History & Landmarks Foundation in 1974 by the heirs of Mary Bennington Wrenshall Fauset.

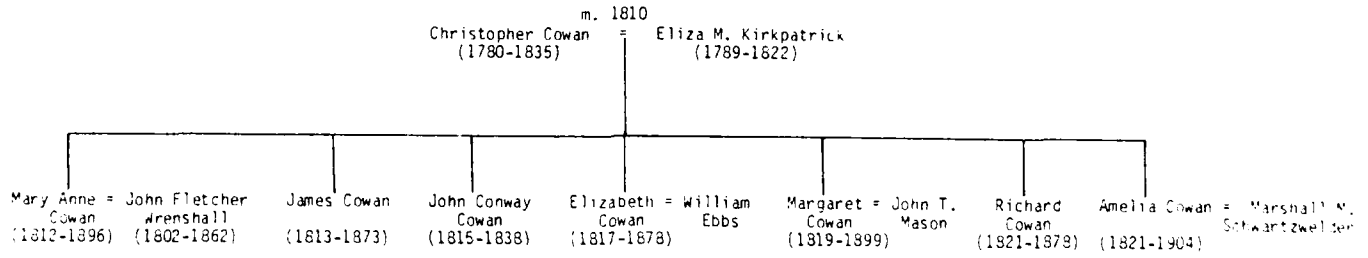


Figure 5. Children of Christopher Cowan and his wife, Elizabeth M. Kirkpatrick. Genealogical information from the Wrenshall family indicates that John Conway Cowan (b. 1815) was the first Cowan child born at Woodville. This pre-dates by two years the first of Cowan's Woodville Farm account books. Both Mary Anne Cowan and James Cowan were born in the city of Pittsburgh. All of the children after John Conway Cowan were born at Woodville Farm. Richard Cowan's letters to his nephew, Richard Cowan Wrenshall (see Figure 7), provide much of the available information on the appearance, make-up, and operation of the farm in the 1860s and 1870s. Richard Cowan was also an able watercolorist who painted several scenes of the Woodville Farm grounds and the surrounding Chartiers Creek Valley (see Figures 11-14).

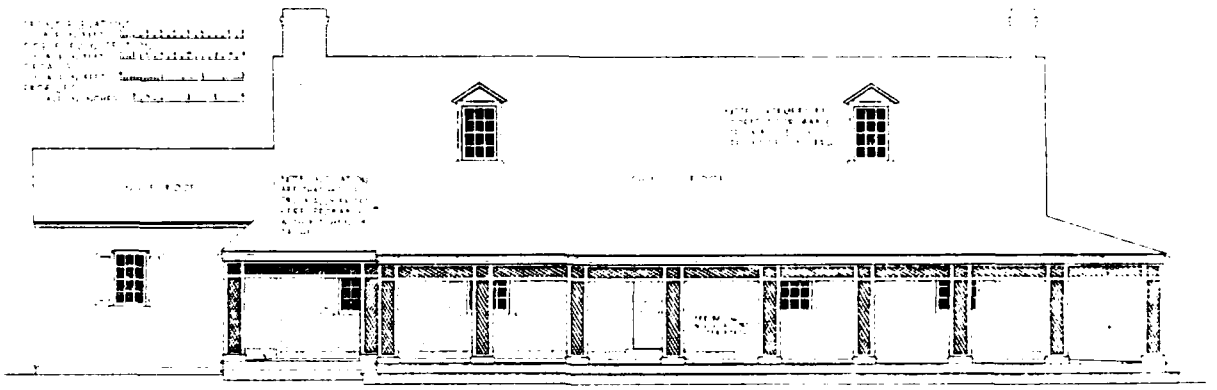


Figure 2. Front (east) elevation of the mansion house at Woodville Farm prepared by Carl A. McGrew for Charles M. Stotz's (1936) The Early Architecture of Western Pennsylvania. The weatherboard-covered log "addition" at left is almost certainly the oldest part of the house.



Figure 3. Silhouette of General John Neville (b. July 26, 1731; d. July 29, 1803). Courtesy of Jeanne Wrenshall Jackson.

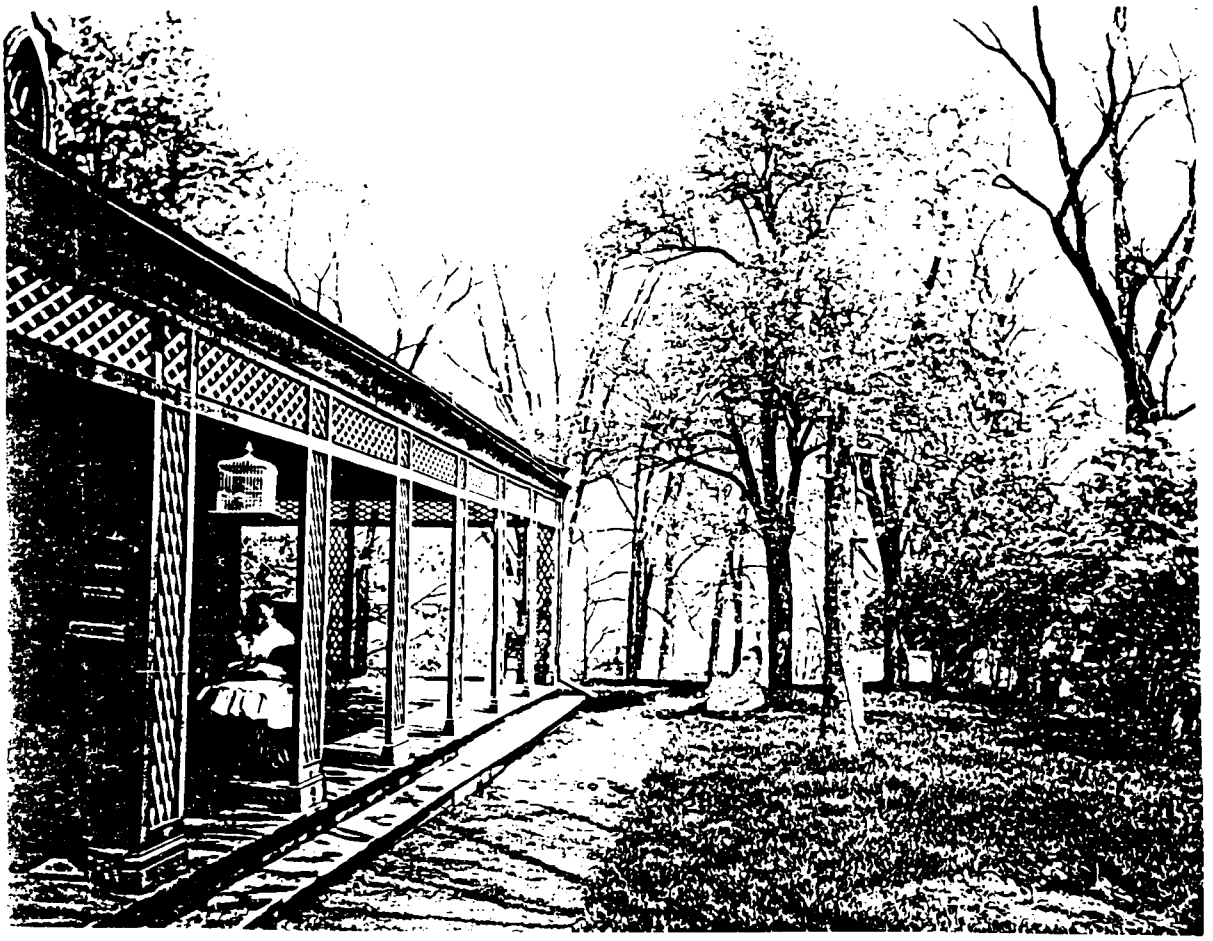


Figure 20. Front porch and lawn of the Woodville Farm ca. 1887. Although the present porch has been partially rebuilt at least once (1979), its present appearance remains unchanged over that in this photograph. Note the walkway that parallels the porch. Remnants of this were identified in the area beyond the end of the porch near the downspout during archaeological excavations conducted in 1977 (Richardson and Carlisle 1977:10, Figure 6). At left on the porch are Mary Anne Cowan Wrenshall and "Colonel Wrenshall." At right in the yard is Myra McCleery Wrenshall, wife of the photographer, Richard Cowan Wrenshall. (Xerographic reproduction of a photograph, courtesy of Jeanne Wrenshall Jackson).

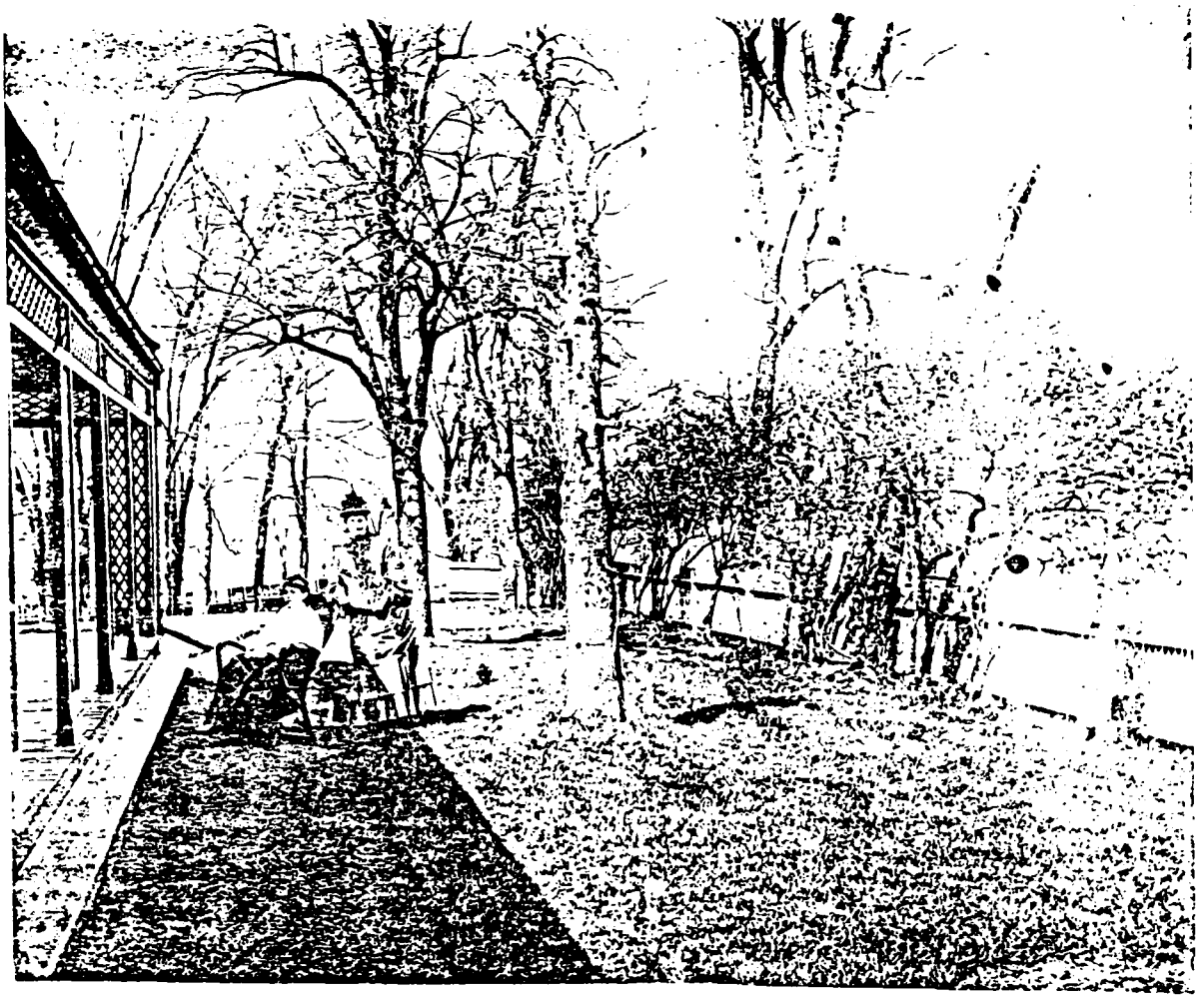


Figure 21. Another view of the front yard and porch area of the mansion house at Woodville Farm taken ca. 1888-1889 by Richard Cowan Wrenshall. Seated at left is his wife, Myra McCleery Wrenshall and at right is one of his sisters, Elizabeth M. "Bessie" or "Bep" Wrenshall Barnett, the wife of Abraham Barnett whom she married in 1878. Note again the picket fence at right and the walkway at the foot of the porch. (Xerographic reproduction of a photograph, courtesy of Jeanne Wrenshall Jackson).

GENERAL SETTING

LOCATION AND GENERAL GEOLOGY

by

William C. Johnson,

James B. Richardson, III

and

Ronald C. Carlisle

Neville House is situated on a gently sloping terrace southwest of the confluence of Chartiers Creek with an unnamed, east-flowing tributary stream. Chartiers Creek empties into the Ohio River 6 3/10 miles north northeast of the Neville House, ca. 2 3/10 river miles below the "Forks of the Ohio", the confluence of the Allegheny and Monongahela rivers at the "Point" in Pittsburgh. The Neville House is located 6 1/10 miles southwest of the "Point" in Pittsburgh and 1 6/10 miles north of the the juncture of Washington Avenue and Bower Hill Road in the center of Bridgeville, (Richardson and Carlisle 1978:1; Carlisle, Johnson and Richardson 1978:1).

The Neville House represents the sole above ground structure associated with the original Neville estate. However, a tract just northwest of the building across the afore-mentioned unnamed stream, serves as the location of a hospital which has taken the name of "Woodville" from the Neville property. In addition, Woodville Station, a small community northeast of the valley of Chartiers Creek at the mouth of Scrubgrass Run, preserves the memory of the former Neville family holdings.

Specifically, the structure is located on a remnant late Pleistocene terrace (Shaw and Munn 1911) ca. 44 feet above the valley floor of Chartiers Creek, between 830 and 832 feet above mean sea level (msl) (U.S. Army Engineer District, Pittsburgh, Corps of Engineers 1971). The exact location of the Neville House is 40° 22' 47.4" N, 80° 06' 46.5" W (U.S. G.S. Pittsburgh West 7.5' Quadrangle; see Figure 1).

The Neville House midden, the site of the 1979 Carnegie Museum excavation, is situated in a linear depression ca. 90 feet north of the structure. The depression runs parallel to the south slope of the unnamed tributary valley (hereafter tributary) of Chartiers Creek. At the time of the 1977 Phase 1 and 2 excavations conducted by the (then)

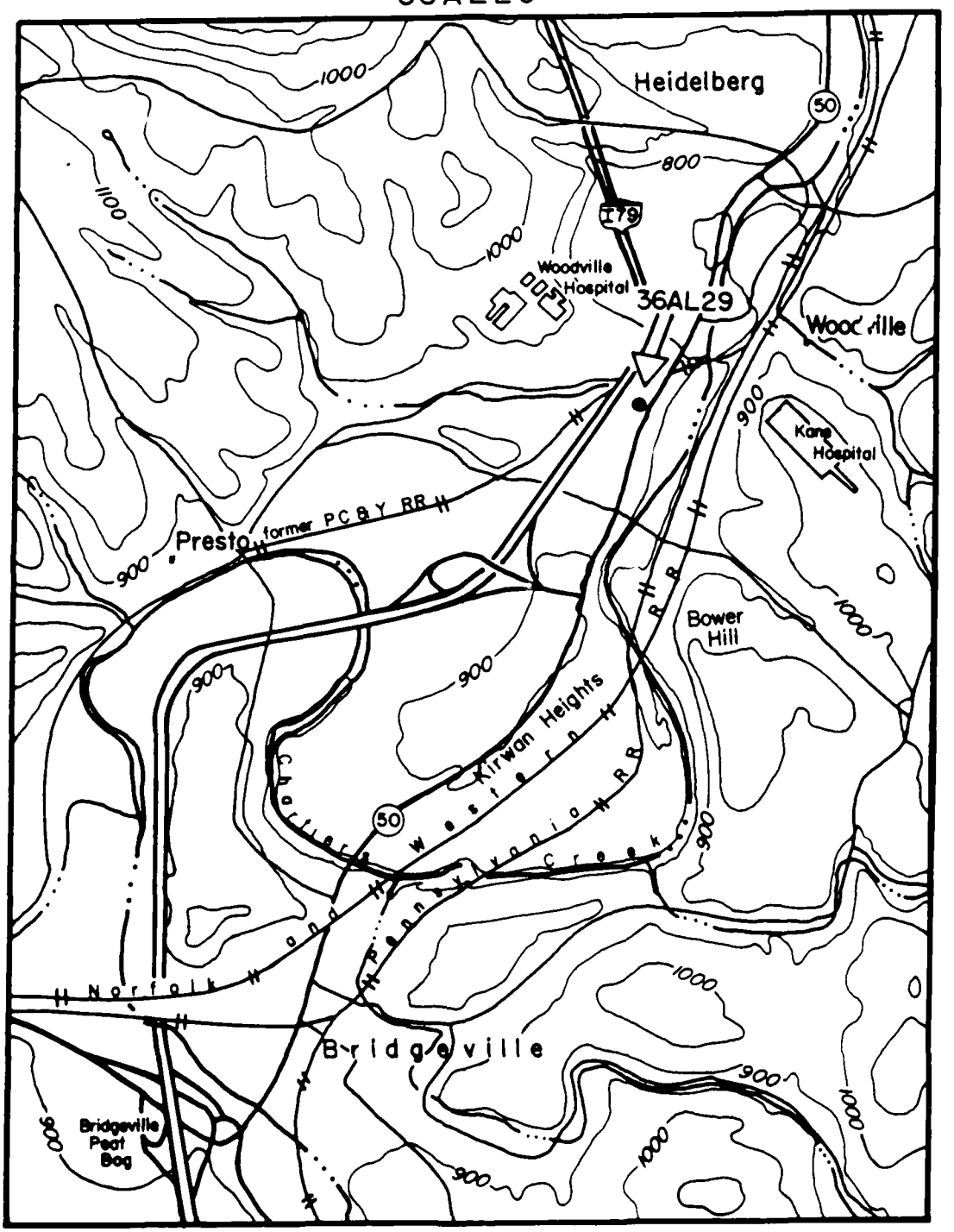
Archaeological Research Program of the University of Pittsburgh, it could be traced from a point where it was truncated by fill supporting Pennsylvania Route 50, due west over the valley floor, and along the northern slope of the Pleistocene terrace for approximately 290 feet. The floor of the depression was ca. 10 feet wide, and 13 feet below the level of Neville House (817 feet msl). It was also ca. five feet above an abandoned and overgrown railroad siding located along the center and southern margin of the tributary valley floor. The fill for this siding was presumed to lie three to four feet above the actual valley floor (Richardson and Carlisle 1978:9) although the precise valley floor elevation here is difficult to ascertain. The plan, profile, and section blueprint map for the project area (U.S. Army Engineer District, Pittsburgh, Corps of Engineers 1971) indicates that in the lower reaches of its valley the tributary flowed along a narrow channel cut four feet into substrata alluvium or bedrock. The stream was apparantly diverted to this artifical course during the construction of the bed for the railroad spur and siding sometime prior to 1901. The valley floor during the 18th and 19th century is presumed to have been 808 to 810 feet (msl.).

The railroad siding was apparently associated with a spur of the Pittsburg, Chartiers, and Youghiogheny Railroad. The spur began at Hickman and ran down Thoms Run, an east flowing tributary which joins Chartiers Creek at Rosevale (now Presto), ca. 3 8/10 "river miles" upstream from the Neville House but only 1 4/10 linear miles to the southwest. It ran along the west bank of Chartiers Creek, and then swung northeast across its flood plain. The line then crossed a low divide, elevation 830 feet (msl), between the main valley of Chartiers Creek and the tributary. The spur proceeded down the valley of the tributary, crossed Chartiers Creek, and joined the Pennsylvania Railroad line (then the Pittsburg (sic) Division of the Pittsburg (sic), Cincinnati, Chicago and St. Louis Railroad) at Woodville Station (U.S.G.S. Carnegie 15' Quadrangle 1904). This direct route avoided the circuitous meander of Chartiers Creek around the late Pleistocene terrace on which the present community of Kirwan Heights and the Neville House are located. The low divide crossed by the spur separated this terrace (830 to 940 feet msl), capped with alluvial deposits of probable Early to Middle Wisconsinan origin, from an isolated older and higher terrace (ca. 900 to 920 feet msl) immediately to the west. This latter terrace is capped by Carmichael formation alluvium of presumed Illinoisan ascription (Shaw and Munn 1911). The James G. Fulton Flood Control Project overflow channel appears to follow the same general route as did the railroad spur: breaching the divide, isolating the lower Pleistocene terrace, and continuing down the valley of the tributary where it rejoins Chartiers Creek north of the Neville House. The old Pittsburg, Chartiers and Youghiogheny right-of-ways are still evident on both the U.S.G.S. West Pittsburgh 7.5' and Bridgeville 7.5' Quadrangle maps and the U.S. Army Engineer District, Pittsburgh, Corps of Engineers (1971) project maps.

In 1977, during the Phase 1 and 2 reconnaissance and testing for the overflow channel, the area along the south slope and floor of the tributary was heavily overgrown in scrub and weeds. As the significance of the linear depression and its relationship to the

Map 1

James G. Fulton
Flood Protection Project
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tributary were not realized, its extant boundaries were not mapped, nor was its precise elevation above the 18th century tributary flood plain noted. The section of the linear depression between the midden or dump proper and Pa. Route 50 was removed for the construction of a bridge by-pass. However, the lower or eastern end of the linear depression is manifest on the U.S. Army Engineer District, Pittsburgh, Corps of Engineers (1971) plan view map of the project.

The northern, or downslope, side of the depression was edged by a low linear rise, ca. one foot above the depression floor. As far as it was traced in 1977, this low rise paralleled the trough up the valley wall. It was surmised then that the linear depression represented a deserted road bed of late 18th - early 19th century ascription (Richardson and Carlisle 1978:11).

Depredations by what now are viewed as bottle and curio hunters had pitted the surface of the depression in an area northwest of the Neville House. Pedestrian reconnaissance of the depression during the 1977 Phase 1 and 2 excavations revealed the presence of significant amounts of 19th and early 20th century ceramics and glass littering the treasure hunters' spoil piles. Limited subsurface testing revealed the presence of a midden or dump which ranged from one to two and a half feet in depth. It was localized in the linear depression and was assigned the designation of Feature 22 in the 1977 excavation report (Richardson and Carlisle 1978:11-12). A detailed elevation map of the Neville House environs, and the relationship of the structure to the remnants of the linear trough with the midden (in 1979), is displayed in Map 1. It should be noted that the +1.0 foot contour in Map 1 corresponds almost precisely to the 830 foot (msl) contour displayed on the U.S. Army Engineer District, Pittsburgh, Corps of Engineers (1971) plan map of the project area.

Major excavation for the overflow channel itself largely destroyed the linear depression west of the midden proper. However, a portion of the trough bottom was preserved ca. 100 feet to the west in the walls of a trench excavated in the summer of 1979 for a natural gas pipeline. This cut transversely across the overflow channel excavation and the low terrace slope west of the Neville House.

During the 1979 excavation four deep trenches, five feet in width, were excavated transversly across the depression in the midden area. These trenches were oriented to bisect the trough axis, in order to determine the nature and origin of the depression along with its relationship to the overlying midden. In three of the four north-south trenches, excavation was continued until bed rock was encountered (Maps 2 and 3). Suprisingly, this substratum was found between 4'2" and 6'3" below the midden floor in the center of the depression. Beneath 2" to 2'6" of midden deposits were a series of recent, sequent, and interdigitating alluvial and colluvial deposits as much as 4'8" thick. The alluvial deposits in the center of the linear trough interfingered with a series of apparent constructional fill episodes deposited along the northern or down hill margin. These interrelated natural and cultural fill episodes were essentially enclosed in the broad U-shaped linear depression cut into the north slope of the Pleistocene terrace.

This channel was designated Feature 1 in the 1979 excavation (See Map 1 and 2). In the area of the midden this trench (Feature 1) terminated where a continuous bed of weathered limestone cobbles was encountered. One hundred feet "upstream" along the terrace slope the strata exposed in the aforementioned natural gas pipeline cut indicated that the excavation of the linear trench (Feature 1) terminated in stratigraphically higher lithiologic units. The back dirt or constructional fill from the excavation of Feature 1 was deposited in continuous successive layers along the northern or down-slope margin of the trough, effectively building up the northern wall of the depression and emphasizing the U-shaped profile of the trench (Maps 1 and 2).

Inspection of the alluvial sediments in the linear trench exposed by the four transect excavations, particularly those deposits which accumulated early in the history of the trench, revealed the presence of a series of sequent lenses of alternating light and dark, clayey and silty laminae. These laminae were particularly well-developed in the westernmost of the bisecting trenches (Map 3). Alluvial deposits evincing laminae such as these suggest deposition in a slack water environment. These sequent and overlapping laminae, and other alluvial and colluvial deposits elsewhere along the trench bottom (Feature 1), exhibited evidence of several shallow, apparently artifical cuts with smooth, abrupt underlying boundaries. These mechanical down cutting episodes truncated not only the alluvial sediments at the bottom of the trench, but also the colluvial sediments attributable to mass wasting of the bed rock strata along the southern or uphill trench slope. The outlines of several of these excavations were terminated by later and overlapping cutting episodes in the channel center at the trough bottom (Maps 1 and 2). The sequent, overlapping, shallow excavations and the nature of the alluvial sediments accumulating as fill in at least some of these troughs indicate the presence of a series of purposeful dredging episodes.

Sediments from the constructional fill deposits along the down slope margin of Feature 1 also appear to have slumped back into the trench and interdigitated with the alluvial sediments in the channel center. The colluvial fill which accumulated along the upslope margin of Feature 1 was clearly distinguishable from the alluvial sediments it interfingered with, as the colluvium was composed largely of coarse fragments of bedrock derived from the substrata by mass wasting. Conversely, the interface between slumping constructional or culturally derived fill along the northern margin of the ditch and the alluvium in the trench center was often indistinguishable. When these interfaces were discernable they normally exhibited gradual to diffuse boundaries with the exception of the earliest constructional fill deposits at the bottom of the trench. This characteristic of the interdigitating deposits was particularly notable in the higher and later constructional fill along the thickening northern margin of the ditch. Here both the texture and color of the constructional fill deposits were almost indistinguishable from the associated alluvial sediments in the channel. The similarities evinced by the sediments in these two depositional categories strongly suggest that the later constructional fill deposits represent spoil piles derived from the aforementioned dredging episodes in the trench channel. The southern margins of the

constructional fill deposits then gradually eroded and contributed sediments, orginally dredged from the trench alluvium, back into the channel. The thickness of the higher constructional fill deposits along the northern margin of the ditch, and their general similarity to the alluvial channel deposits, suggest that this cycle was repeated several times. However, presence of later dredging episodes in the higher alluvial deposits in the trough were not discernable.

The rather uniform configuration of the Feature 1 trench in both extent and profile, the associated constructional fill, the sequent environments in which the alluvial sediments accumulated in the channel, and the constant maintenance episodes forcefully demonstrates that the shallow linear depression paralleling the southern wall of the tributary valley denoted an abandoned millrace rather than a former road bed. With the exception of its greater width, the aboveground characteristics of the "Woodville" depression are similar to millraces associated with two early 19th century iron furnaces located in the northern Ligonier Valley of eastern Westmoreland County,Pennsylvania, with which one of the authors (Johnson) is familiar (see also Sharp and Thomas 1966:78, 79, 84). This posited origin for the trench is apparently confirmed by a reference in the late 1850's; a letter in the Wrenshall papers speaks of a millrace at "Woodville", presumably adjacent to the Neville House (see History Section).

The substrata along the northern edge of the Pleistocene terrace exposed in the 1979 mitigation excavation are designated collectively Stratum 1, while an old plow zone exposed along the upper slope of the terrace is assigned the designation of Stratum 2. The interdigitating alluvial and colluvial fills which compose the essentially natural fill of Feature 1, the millrace, are designated Stratum 3. They are distinguished internally and stratigraphically by a series of sequential alphabetic subscript designations.

After a period of regular maintenance, exemplified by the dredging episodes (Features 8, 9, 11, 12, 13, 14a, 14b and 15) and associated spoil piles (Features 16 and 17), the mill race appears to have fallen into disuse. The channel rapidly filled in with alluvial sediments (Stratum 3j) washing in from mass wasting (Strata 1 and 2) along the south slope of the millrace and from the constructional fill of the dredging episodes which was deposited along the northern margin of the race. Sometime later, destructional fill derived largely from natural sediments (Strata 2 and 4) on the slope above the millrace was intentionally shoveled into the depression. These fill deposits included a low density of historic (and even occasionally prehistoric) artifacts, derived from cultural activity in the vicinity of Neville House and its out buildings. Several discrete lenses relating to this episode of deliberate backfilling are designated Features 18, 19a and 20.

Later still a more restricted area of the millrace, designated Feature 22 in Richardson and Carlisle (1978:11-12), began to receive regular deposits of cultural fill which included food debris, broken housewares, metal, and even detritus indicative of constructional activity. This latter category of fill, including mortar, bricks and

brick fragments, lathing, ash, and cinders, suggests derivation from the remodeling or destruction of buildings on the terrace above the millrace. These destructional fill deposits were collectively designated Feature 21 and constitute the midden proper.

The surface of the midden, Features 20 and 21, and that of the underlying and buried Stratum 3 alluvial sediments in the millrace were pocked with various recent disturbances. These are presumed, by their general association with fresh back dirt piles, to be ascribable to looting activity of bottle collectors. However, it is not impossible that some of these pits were excavated by residents of the "Woodville" property during the 19th and 20th centuries in order to bury garbage. It should be noted that although lenses or "loads" of burned soil and ash were encountered in Feature 21, the midden proper, there was no evidence for the general incineration of garbage. Lastly, the midden (and millrace depression) was capped by a limestone gravel access road (Feature 30). The fill for this road was excavated from the old railroad siding or yard on the valley floor below the millrace. It contained a small quantity of recent industrial debris including asphalt blocks of varying sizes. The road was constructed by the Pittsburgh History and Landmarks Foundation to provide direct access from the railroad siding to the Neville House, in anticipation of the destruction of the old access driveway during the excavation for the aforementioned Pa. Route 50 by-pass in 1977 (See Map 2).

GEOLOGY OF THE SITE

The Neville House property is located in the maturely dissected unglaciated portion of the Appalachian Plateaus province (Fenneman 1938). The rock units of this portion of the province are of Upper Pennsylvanian and Permian age: sequentially, the Conemaugh, the Monongahela, and the Washington formations. In the immediate vicinity of "Woodville", the valley floors and lower slopes are generally of Conemaugh age, while the upper slopes and hill tops are attributable to the Monongahela formation. Permian Washington formation rocks cap the highest hills in the vicinity. Their areal extent increases south of Bridgeville (Shaw and Munn 1911). The Pittsburgh coal effectively marks the bottom of the Monongahela group (Shaw and Munn 1911:4; Johnson 1929:42) and, across the valley from Neville House at Woodville Station, lies unconformably on top of alternating thin lithologies of limestone, shale, and sandstone of Conemaugh age (Shaw and Munn 1911:4, Figure 4). Between one and eight limestone beds with generally irregular local distribution have been observed within 70 feet of the bottom of the Pittsburgh coal. They are collectively referred to as the "Pittsburgh" limestone (Johnson 1929:43).

The high terrace on which the Neville house sits is located east and south of the Ninevah syncline. This trends in a somewhat serpentine course NNE across the Carnegie 15' Quadrangle. One of several depressions or shallow structural basins along the axis of the syncline is centered at Woodville just north of Woodville Station. A similar basin is located south of Neville House at Rosevale (Shaw and

Munn 1911:6).

At the community of Woodville the base of the Pittsburgh coal, and the bottom of the Monongahela formation, is only 800 feet (msl). Immediately to the south, in Woodville Station, the base of the Pittsburgh coal is 810 feet (msl), and across the Chartiers Creek Valley in the vicinity of the Neville House it is 830 feet (msl) (Shaw and Munn 1911; Charles C. Nixon 1984: personal communication). The bedrock into which the "Woodville" structure was cut is of Monongahela ascription; though the base of the Pittsburgh coal should occur directly under the Neville House it was eroded away in the terminal Pleistocene (Charles C. Nixon 1984: personal communication). Therefore, the millrace was cut into underlying lithologies of Conemaugh age. The floor of limestone nodules, which determines the base of the mill race, is the weathered edge of one of the component "Pittsburgh" limestone beds. Back from the terrace edge the limestone would present a continuous unweathered aspect, (Charles C. Nixon 1984: personal communication). This interpretation is synonomous with the aforementioned data presented in Shaw and Munn's (1911) Structural and Economic Geology, Carnegie 15' Quadrangle map. However, this is contradictory to the situation just west of the present caretaker's house at "Woodville", where the Pittsburgh coal had not eroded and was mined in open surface pits (Charles C. Nixon 1984; personal communication). Johnson (1929:43) notes that as many as eight different beds of limestone have been observed within 70 feet of the base of the Pittsburgh coal. In some localities only one or two limestones occur in that interval, and the beds are generally so thin and diversified that it is not possible to illustrate the character of this part of the Conemaugh group. The bedrock strata exposed by three of the four midden trenches were not sufficiently extensive to permit correlation of the lithologic units with any of the stratigraphic columns from the adjacent Pittsburgh 15' Quadrangle (Johnson 1929). The units in these abreviated exposures present a laminated package of interfingering clays and shales between one member of the "Pittsburgh" limestone and an overlying thin sandstone unit. These lithologies suggest a mosaic of localized depositional environments. Even the precise sequence of varigated clays and shales across the three exposures is not manifest. However, the individual strata, defined by color, texture, and superposition, are assigned stratigraphically sequential alphabetic designations within Stratum 1 for future reference.

The Neville House terrace is capped above 830 feet (msl) by deposits of sand, silt, clay, and rounded pebbles of local derivation (Shaw and Munn 1911; Areal Geology Carnegie 15 Quadrangle map). These deposits are of Pleistocene age, and stand in contrast to the more deeply weathered Carmichaels formation gravels present on the terraces above 910 feet (msl). These gravels are generally attributable to the ponding of north flowing tributaries of the Ohio River during the Illinoian glacial period (Shaw and Munn 1911).

Across Chartiers Creek, SW of Bridgeville, is the former site of the Bridgeville peat bed, probably formed in an old oxbow of Chartiers Creek or Millers Run. Approximately 3'6" thick, preliminary macro and

micro-floral specimens derived from peat samples suggest the presence of a dominately coniferous forest and generally boreal conditions on the slopes above the accumulating bog sediments (Schopf and Cross 1947:425, 428). The peat lies conformably between two unstratified clay deposits notably lacking interal strata or laminae and fossil mollusca. These characteristics suggest a depositional environment leading to a rapid accumulation of sediments during a postulated several hundred year interval of stable water levels. This created a shallow ponded environment suitable for the formation of peats (Scopf and Cross 1947:429, 430). Deposition of valley train gravels across the Chartiers Creek mouth would have promoted rapid aggredation of alluvium, represented by the lower unstratified clay deposits, followed by stagnation or ponding to produce the overlying peat bed. The top of the Bridgeville peat is 820 feet (msl), lower in elevation than the earlier Pleistocene alluvial terrace deposits mapped by Shaw and Munn (1911) and closer in elevation to the gravels of late Wisconsinan ascription near the mouth of Chartiers Creek. These facts suggested a Late Wisconsinan age for the deposit (Schopf and Cross 1947:430, 431). The tight cluster exhibited by three of five radiometric dates from various peat samples [>16,000 B.P.(C-438); 23,000+800 B.P. (W-66); 23,170+270 B.P. (SI-4237C); 23,340+600 B.P. (SI-4237B); and 31,390+86 B.P. (SI-4237A) (Arnold and Libby 1951: 115, Suess 1954: 469, Volman 1981: 27)] confirms the posited age of the Bridgeville peat bed during an early Late Wisconsinan or Woodfordian stadial position (Dreimanis 1969: 176,173). The peat bed is located a scant two miles south of Neville House. Although it was buried by a rapid accumulation of unstratified clay deposits, attributable to a resurgence of valley train building (Schopf and Cross 1947:430), the terrace alluvial deposits at the "Woodville" property are higher and therefore older. As they are in turn lower and not as deeply weathered as the nearby Carmichael formation alluvium, an Early or Mid-Wisconsinan attribution for the Neville House terrace deposits would seem reasonable.

Shaw and Munn (1911) exclude the area around the Neville House, the northern perimeter of the terrace, from their mapped "Lower Terrace gravel" deposits. However, the *Soil Survey of Allegheny County, Pennsylvania* (1981) designates the northern end of the terrace, as far as the edge of the tributary valley slope, as Rainsboro silt loam, 3 to 8 percent slope. The Rainsboro series of soils form in acid alluvium on old terraces that are as much as 300 feet above associated flood plains (Soil Survey of Allegheny County, Pennsylvania 1981:28). Rainsboro series soils include those formed on Carmichaels formation alluvium as well as those formed on lower and younger Pleistocene terrace alluvial deposits. Valley slopes adjacent to the mapped Rainsboro silt loam soils at the northern end of the "Woodville" property terrace are Culleoka silt loam, 3 to 8 percent slope. These form in material that has weathered from shale, fine grained sandstone, and limestone bed rock in long areas on ridge tops, or in long narrow contour areas on hill sides (Soil Survey of Allegheny County, Pennsylvania 1981:13).

Clearly the C Horizon clay loam soil formed on the top of Stratum 1e, the highest substratum exposed in the midden excavations, is attributable to the Culleoka series. However, excavation was not

carried far enough up the terrace slope to determine the precise derivation of the soil horizon designated Stratum 2. An abrupt, undulating boundary between Stratum 1e and the overlying Stratum 2 soil horizon was exposed in the N10 wall at the southern (uphill) end of the W150 transect trench. This suggested the presence of an old plowzone. However, it is possible that Stratum 2 represents Rainsboro silt loam of ultimate Pleistocene alluvial derivation which has moved down slope over C horizon soils. Subjective color and texture descriptions recorded for Stratum 2 at the time of the excavation are not precise enough to determine the origin of the soil horizon. If, as postulated, Stratum 2 was an old plowzone, its limited exposure along the steep terrace slope would make identification even more speculative.

EXCAVATION PROCEDURES

By Mary Elizabeth Rovegno

and

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After the removal of the dense undergrowth near the midden, an intensive above-ground surface reconnaissance was undertaken. This revealed the extant portion of the depression and associated midden. A preliminary excavation strategy then was developed based on the topography, condition, and artifactual distribution of the surface. The next step was to establish a grid system. The compass orientation of the five foot orthogonal grid from the 1977 and 1978 excavations (University of Pittsburgh Archaeological Research Program) was positioned 31° east of north, oriented along the veranda and long axis of the structure. Not only did this permit the test units to be placed as close to the veranda as feasible, but it also aligned the grid with the Neville House and any associated structures (outbuildings, and even fence rows, on late 18th century Virginian plantations were often oriented along the same axis as the main structure). This arrangement of the test units also allowed maximum subsurface exposure along the front of the Neville House, an area scheduled for removal during the construction of the Pa. Route 50 bridge by-pass (Richardson and Carlisle 1978:78). In the 1978 excavation, this grid system was maintained for the sake of consistency. The W57.5 N - S base line for the 1978 excavation paralleled the low ridge to the NW (back) of the Neville House.

During inspection of the millrace depression and midden surface in August 1979, it was determined that a new excavation grid was needed. It would be oriented to the long axis of both the millrace and the recent access road, allowing the excavation units to be positioned perpendicular to the linear topography of the depression. Initial strategy included excavation to bedrock of at least one of the units in order to confirm the nature and origin of the presumed millrace. Use of the access road as the locus of the new N - S base line provided a stable transit station, and the gravel bed of the road was a convenient location for a semi-permanent datum. It also provided a stable path from the terrace slope above the depression, across the open excavation units, and to the northern or down-slope edge.

Station 3A, located precisely 8 feet 9 inches from the NW (back) wall of the Neville House, was employed as the datum for the new grid system. A base line beginning there and oriented 352°35' east of compass north was established. A temporary datum, Station 6, was established 100 feet north of and 10.2 feet below Station 3A, as close as possible to the trench center. Designated N10 W115 on the assumption that it was 10 feet north and 115 feet west of the original 1977 NOEO datum Station 1, it was later realized that it was nearly due north of the Station. However, it was decided to not renumber the grid coordinates as all field designations to that moment including artifact

bags, notes, photograph identifications, etc., were based on this arbitrary assignment. Changing coordinates in mid-excavation could provide for later confusion during the analysis of the field data. Station 7 was designated S5W115, and Station 3A by extension would become S90W115.

Using Stations 6 and 7, one N - S and two E - W base lines were established. Employing the W115 and S5 lines, a transit was used to set up an orthogonal grid system of five foot units on the midden deposits. The millrace depression and midden presented an uneven surface with up to 6 1/2 feet of relief, and thus were mapped with a transit in tenths of feet. The midden surface was loose and unstable; therefore, all grid coordinates were established with a transit directly from the base line rather than by triangulation. In accordance with convention and past practice, units were designated sequentially north and west according to each southeastern corner vis-a-vis Station 3A, the new permanent datum on top of the terrace. Elevations of all grid coordinates were also recorded (see Map 2).

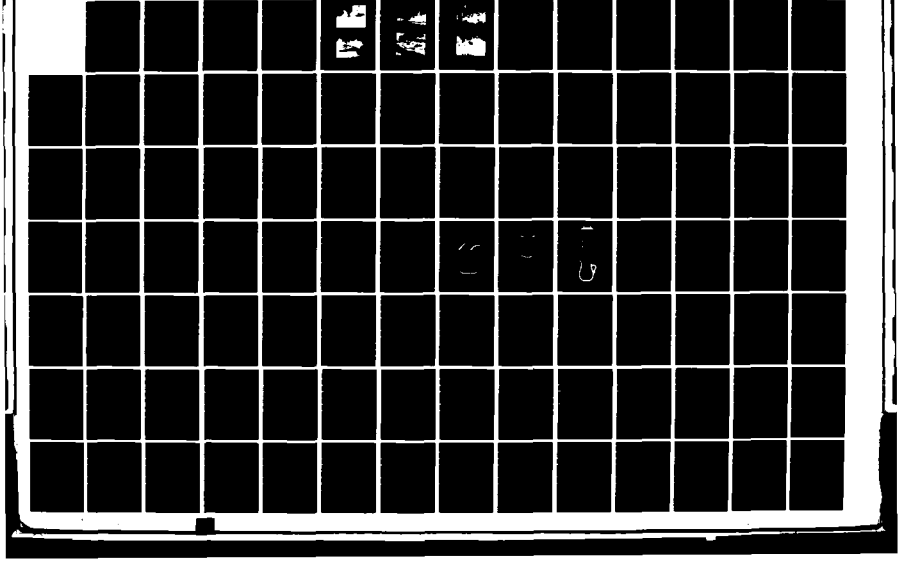
After defoliation and the establishment of the grid a surface reconnaissance was conducted. Concentrations and approximate provenience of the ceramics and glassware littering the surface were noted, along with areas of extensive looting. The depth of some of the holes and the size and fill of their spoil piles suggested that these probably intruded into underlying natural strata. The surface artifacts were collected from each square and bagged accordingly. It was observed that these exhibited a chronological cline from west to east, suggesting a shift in the locus of dumping. Additionally, the area west of the W145 grid line appeared to lie beyond the margins of the dump proper.

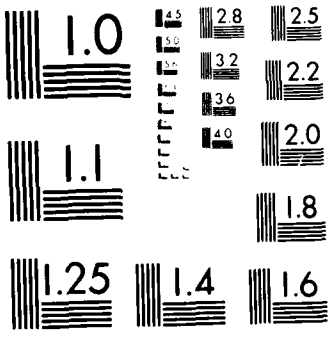
Excavation was initiated along the W150 grid line by a south to north trench which began upslope in presumed undisturbed natural strata and bisected the linear trough. A series of five foot squares was excavated north along the W150 line for 28 feet to underlying bed rock (See Map 4). Excavation beyond the N38 grid line was not feasible due to the steep slope along the valley and the edge of the overflow channel. The 28 foot long trench presented two continuous, undisturbed profiles (W150.5 and W154.5) upon which most of the interpretations of the millrace and its relationships to the fill deposits were based.

A second south to north trench was begun along the W135 grid line. Similtaneously the extant portion of the millrace bottom and its alluvial/colluvial sediments was discovered in the walls of a pipeline excavation 107 feet north of Station 6. Although the upper Stratum 3 alluvium, colluvium, and associated constructional fill deposits had been removed during the overflow channel excavation, the intact east and west-facing exposures of the pipeline trench were faced. Bedrock and channel deposits were labeled and photographed according to the classification system employed in the W150 trench. This fortuitous preservation of the deformed natural strata into which the millrace had been excavated led to easier interpretation of the strata and fill features exposed further "downstream" under the midden.

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MICROCOPY RESOLUTION TEST CHART
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A third south to north trench was initiated along the W115 base line, again commencing at N0 on the top of the steep millrace cut. After excavation of three units, it was moved five feet to the west and resumed along the W120 grid line. This avoided the potential danger of collapse of the thick access road over-burden (Feature 30) into the narrow excavation (See Map 3). A fourth trench began along the W95 grid line. Here, only two units were excavated to bedrock, as the exposed profile walls essentially duplicated the sequence exposed in the W150 and W115/120 trenches. With the complete excavation of the N0W95 and N5W95 units, data was sufficient to demonstrate that the linear trench depression marked the presence of a former millrace which had gradually silted in and fallen into disuse over an unknown period of time. Although interrelationships between the origin and subsequent channel maintenance episodes, as well as the constructional fill deposits, were not as clear as would be desirable, the combined factors of time, resources, and deteriorating weather dictated that remaining resources be spent excavating the midden proper. Therefore, the W95 Trench was not expanded northward nor was the W135 Trench excavated to bedrock in the center of the millrace channel. All units within the midden perimeter were excavated through Features 18 and 20, that is to the top of either Stratum 1 bedrock, Stratum 3 alluvial/colluvial fill, or Feature 17.

All horizontal coordinates were established relative to the established grid system. Vertical provenience measurements were taken from ground level. The high density of the historic artifacts in the midden proper (Feature 21) made the recording of individual proveniences burdensome. Further, it became increasingly evident that looting activities were far more extensive than anticipated. The fill deposits were heavily disturbed, making individual provenience data essentially irrelevant. Thereafter, artifacts from the destructional fill deposits were only assigned provenience information according to the five foot square, the cultural feature, and the arbitrary four inch level within each feature from which they were recovered. Initially, all fill was removed using hand tools, in most cases no larger than a trowel. All fill from all excavation units was dry sieved through 1/4 inch screens. These procedures were modified when it became evident that the scarcity of artifacts from the constructional fill deposits made further excavation with trowels and screening tedious and uneconomical. Aside from fragments of bituminous coal and, less frequently, minute fragments of brick, these deposits were devoid of artifacts. Scheduling constraints and the excavation priority for the midden proper dictated a more rapid removal of the south and north transect trenches below the midden deposits. Mattocks and shovels were used to reduce these deposits to bedrock. None of these natural and constructional fill deposits were further sieved, but they were visually inspected for artifacts. Trowels were only employed in facing walls and in the removal of certain constructional fill deposits which promised to yield evidence for the construction date of the millrace. All Stratum 2 and 4 fill continued to be sieved, as did all destructional fill features directly associated with the midden. The exception to this was the fill from Feature 30, the modern access road dredged from the railroad siding bed on the valley floor. This included limestone gravel, cinders, clinkers, blocks of asphalt, rail

spikes and other recent industrial debris. It was removed with picks and shovels where feasible, and was not screened or further processed. Feature and stratum fill was wet sieved where its physical nature and moisture content made this technique more efficient. Nozzles with adjustable apperatures provided sufficient water pressure to both wash away soil matrix and to initially clean the artifacts of adhering sediments. This aided field identification and simplified laboratory cleaning prior to processing.

Intitially, excavation was conducted in natural stratigraphic levels, and by microstrata or arbritrary four inch increments within strata and cultural features. Later, as noted above, the constructional fill features along the northern margin of the millrace and the Stratum 3 alluvial/colluvial deposits in the channel were removed with mattock and shovel in gross units. Stratum 3, a presumed relict plow zone, and the overlying Stratum 4, a recent humus zone, were each removed as a unit as they could be expected to exhibit no significant internal stratigraphy. Natural strata, microstrata and cultural features were defined on the basis of texture, color, apparant composition and degree of compaction. The destructional fill levels and associated features continued to be removed in arbitrary four inch increments. Constant volume soil (CVS) samples were collected from all major natural and cultural deposits exposed in the W95, W115, W135 and W150 trenches. The N - S and E - W profile walls in each unit were mapped and photographed in 35mm black and white and color format to preserve a permanent record of the midden and millrace.

Following customary practice all natural strata, microstrata, and cultural features exposed in the midden excavation were assigned sequent numeric field designations or "F" numbers. This system permitted the distinction and correlation of deposits across the site, without their final definition in the field as either cultural features or natural strata. This was benefical in this particular excavation, as the nature of both the deposits underlying the midden and those of the linear depression were not immediately manifest. The preliminary distinction between some of the constructional fills, the alluvial/colluvial deposits, and the deformed bedrock strata was extremely difficult. In the W150 trench, constructional fill had been excavated from the bottom of the millrace trench, and then deposited a few feet to the north on top of deformed facies of the same strata. The dip of these deformed beds was duplicated by the consolidated shale debris in the overlying constructional fill. Sediments dredged from Stratum 3 alluvium in the silted-in millrace channel were deposited along the northern margin of the race, and subsequently eroded back into the channel. This cyclical phenomenon appeared in the profile walls as continuous linear beds of compact fine grained sediments of almost uniform color and texture. They essentially conformed to the underlying contours of the earlier millrace channel sediments and flanking constructional fill deposits. Frankly, it was not until the excavation had proceeded for several weeks, and three trenches had been excavated to bedrock, that the nature and function of the depression became evident. More importantly, it was this long before the cyclical interrelationships of the maintenance, constructional fill, and slumping features were identified.

Metal-rimmed baggage tags, used to identify deposits (See Figures 5 and 6), were numbered according to the field numbers employed. The correlations between these field numbers and natural strata, microstrata, and cultural features are listed in the STRATIGRAPHY and SUMMARY OF CULTURAL FEATURES sections below. They are illustrated in Maps 3, 4 and 5.



Figure 1. Clearing 36AL29 and establishing the grid. Woodville is in the background, J.G. Fulton Flood Control Project cut in the foreground, looking southeast.



Figure 2. Clearing 36AL29 and establishing the grid. The major midden concentration is in the area of the crew. Caretakers house in the background, J.G. Fulton Flood Control Project cut in foreground, looking southwest.

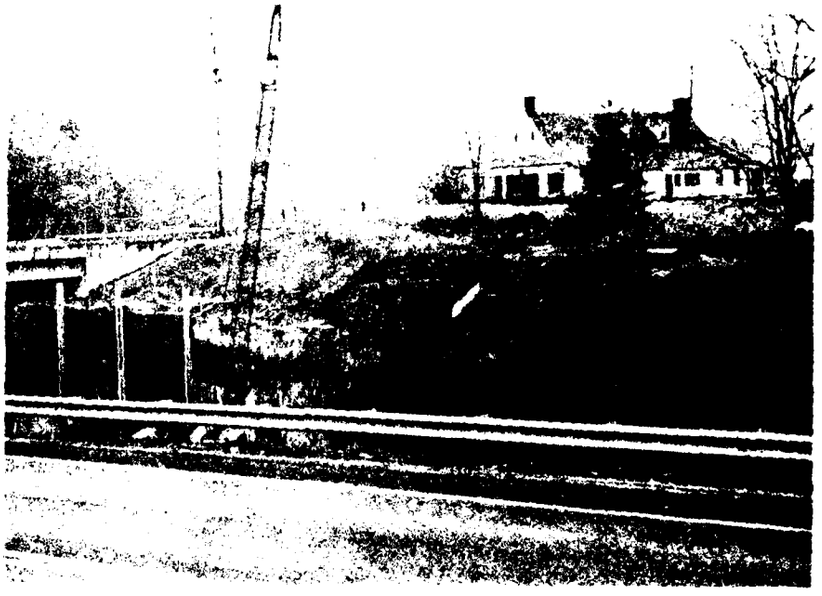


Figure 3. Woodville, J.G. Fulton Flood Control Project cut and completed excavations, looking southeast.



Figure 4. Excavation of the main midden within the former millrace channel. Supports for I 79 bridge in upper left. Looking west.



Figure 5. Square W135-130, N15 profile of the midden excavation.



Figure 6. Square W105-110, N10 profile of midden excavation.

STATIGRAPHY

by

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and

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The excavations at the Neville House midden (36AL29) distinguished four natural depositional units or strata. The lowest of these four strata, Stratum 1, is continuous over the excavated portion of the site. It is composed of a mosaic of lithologies whose precise relationship to each other are not completely understood due to their limited exposure. As the base of the Pittsburgh coal outcrops at 830 feet (msl) on the top of the terrace, ca. 10 feet above the top of the millrace trench, the Stratum 1 lithologies are clearly part of the Conemaugh formation. The bed of weathered limestone cobbles encountered in the lowest of these micro-strata (Stratum 1a) is attributable to one of several "Pittsburgh" limestone beds characteristically occuring in the upper 70 feet of the Conemaugh formation (Johnson 1929:43; Charles Nixon: personal commmunication 1984). The various lithologies composing Stratum 1 are assigned sequent alphabetic subscripts from lowest (Stratum 1a) to highest (Stratum 1e) and are described later for future reference.

Stratum 2 and 3 are discontinuous in their distribution over the site. Stratum 2 occurs only along the southern (uphill) margin of the excavation where it is truncated by the millrace trench (Feature 1). Although Stratum 2 is presumed to represent an old plow zone, it is not certain whether the soil matrix is Rainsboro silt loam or Culleoka silt loam (See General Setting, Location, and Geology section). Its color more closely approximates that evinced by the Ap Horizon from the representative profile of Rainsboro silt loam than that of the Ap Horizon of the Culleoka silt loam. However, it is not certain whether the soil of the old plow zone was derived from the Culleoka series or from the Rainsboro series which had moved down the valley as soil creep. Clearly plowing has throughly mixed the evidence.

Stratum 3 exhibits a continuous linear distribution along the axis of Feature 1, the original millrace excavation. It represents the interdigitating alluvial and colluvial fill deposits which accumulated in the millrace channel. This stratum was encountered in all excavation units incorporating the Feature 1 trench. The sub-units of Stratum 3 are also assigned sequent alphabetic subscripts from lowest (Stratum 3a) to presumed uppermost (Stratum 3k).

The uppermost stratum (Stratum 4) consists of humus and constitutes the site's A soil horizon. It is presumed to be continuous over the excavated portions of the site, although where it overlies

Feature 21, the midden/dump proper, distinct differentiation was difficult due to gross mixing.

These four strata are described below and are labled in ascending order from oldest (deepest) to youngest. A composite west to east profile map of the Neville House midden and underlying stratigraphy, essentially along the center of the millrace channel, is presented in Map 5. Four profile maps which depict stratigraphy in the excavated north-south transects across the axis of the millrace channel at the W99.5, W115.5/W120, W139.5 and W150.5 grid lines are presented in Maps 3 and 4.

STRATUM 1a (Field Designation F65) (Lowermost)

Extent: Stratum 1a is the basal lithologic unit exposed on the site. Horizontally it extends across the site and is exposed in units excavated to the bottom of the millrace channel. The maximum exavated depth of Stratum 1a is two feet two inches in the W120 trench at ca. N120. Stratum 1a generally underlies Stratum 1b except where thin lenses of Stratum 1b and 1c interdigitate with it in the W120 profile at ca. N15 (Map 3) and in the N15.5 profile at ca. W145 (Map 5), respectively, and where Stratum 1c deposits overlie and form a wedge into Stratum 1a deposits in the N9.5 profile between W95.5 and W99.5 (Map 5).

Gross Composition: A variegated but predominately dull red, dense, waxy clay matrix containing a continuous horizontal bed of weathered limestone cobbles.

Description: Stratum 1a is a predominately dull red, dense, waxy clay horizon, although it may evidence a brown or dark yellowish brown facies. It exhibits a blocky fracture pattern. The stratum encompasses a continuous, horizontal bed of weathered limestone nodules between 2 and 24 inches below either the Stratum 1a/1b interface or the constructional fill disconformity associated with the excavation of the millrace. Feature 1, within the 60 linear feet exposed by the excavation trenches, terminates on the limestone nodule bed forming an effective floor. Stratum 1a through Stratum 1d appear to represent localized micro-changes in the general Conemaugh age environment.

Cultural Associations: None.

STRATUM 1b (Field Designation F44)

Extent: Stratum 1b extends horizontally across the excavated units to the floor of the millrace channel (Feature 1). It generally overlies and/or interdigitates with Stratum 1a, and underlies Stratum 1c. In the N15.5 profile at ca, W145 it is replaced by Stratum 1c (Map 5). In the N99.5 profile two lenses of apparent Stratum 1b clay separate Stratum 1c and 1d, and interfinger with Stratum 1d.

Gross Composition: A black, dense, carbonaceous clay.

Description: Stratum 1b is a black (10YR 2.5/1), carbonaceous clay

horizon which exhibits an almost oily texture. It has a general thickness of two to three inches, except in the W115.5 profile at ca. N7 where it reaches 18 inches. Here its northern extent is terminated by the millrace excavation (Feature 1), thus the precise relationship with underlying Stratum 1a is indeterminable. The excavation of the floor of the N5W115 unit terminated where an obliquely oriented bed of limestone cobbles was encountered (See Map 3). Stratum 1b apparently incorporates these nodules, suggesting that they are not the same weathered cobble bed contained in the previous stratum. Stratum 1a was exposed ca. 24 inches lower in the same excavation unit, but two and a half feet to the west. The exact vertical relationship of the basal sub-units of Stratum 1 exposed in these two profiles (W115.5 and W118 respectively) was not determined as this was beyond the scope of the project. The oblique dip of the bed of limestone nodules exposed in the N5W115 unit suggests that this area of the terrace edge may have slumped and that the two cobble beds could be part of the same micro-stratum.

Cultural Associations: None

STRATUM 1c (Field Designation: F51)

Extent: Stratum 1c extends horizontally across the site where units were excavated to the floor of the millrace channel. Where it is exposed, Stratum 1c generally lies above Stratum 1b and under Stratum 1d except in the N15.5 profile at ca. W144 to W145. Here it directly overlies Stratum 1a as well as interfingering with a thin lens of the same micro-stratum (Map 5). In the N9.5 profile (W95.5 to W99.5) Stratum 1c directly overlies Stratum 1a and forms a deep wedge into the underlying Stratum 1a deposits.

Gross Composition: Stratum 1c is a yellowish brown, dense, waxy clay.

Description: A yellowish brown (10YR 5/8) dense, waxy, clay horizon. It generally ranges from three to four inches in thickness except in the N9.5 profile where it reaches - by interpolation - a minimum thickness of ca. 14 inches in a wedge formed in sub-unit Stratum 1a (See Map 5).

Cultural Associations: None

Stratum - 1d (Field Designation F43)

Extent: Horizontally Stratum 1d extends across the site along the north slope of the terrace. Where exposed it generally lies above Stratum 1c and always underlies Stratum 1e. In the W99.5 profile at ca. N4 Stratum 1d overlies the Stratum 1c horizon while a thin lens of apparent Stratum 1d material interdigitates with the Stratum 1c micro-stratum (Map 3).

Gross Composition: A greenish gray, moderately dense shaley clay.

Description: Stratum 1d is a greenish gray to light greenish gray, moderately dense, shaley clay. When Stratum 1d deposits are exposed in a profile wall which cuts vertically across its bedding plane, the

micro-stratum exhibites a bedded, flakey aspect. Where it is exposed on a surface which runs along its bedding plain obliquely Stratum 1d evidences a waxy aspect. The interpolated thickness evinced by Stratum 1d in its exposure along the southern edge of the millrace channel (Feature 1) ranges between 12 and 22 inches.

Cultural Associations: None

STRATUM $1d_1$ (Field Designation F46, F75[1]).

Extent: Stratum $1d_1$ was detected only in the western-most transect trench (W150 trench) on the site. It represents a highly contorted facies of Stratum 1d along the northern-most edge of the terrace, and probably persisted along the entire terrace edge before being truncated or removed by the excavation of Feature 1, the millrace trench. In the natural gas pipeline cut, located ca. 100 feet west of the midden excavation, Stratum 1d is represented only by its Stratum $1d_1$ facies.

Gross Composition: A gray to light gray, contorted, bedded, flakey shale.

Description: Stratum $1d_1$ is a gray to light gray, bedded flakey shale. The bedded shale exhibits a highly contorted aspect when exposed in a vertical cut perpendicular to the terrace edge. Stratum $1d_1$ is interpreted to be a facies of Stratum 1d where it has slumped along the northern-most edge of the terrace. The projected former extent east along the hill has largely been obliterated except where it is exposed in the W150 trench. Circa 100 feet west of the midden excavation, a more extensive horizontal and vertical exposure was exhibited in the walls of a two foot-wide pipeline trench. At this point, the excavation of the millrace trench (Feature 1) terminated in the upper part of Stratum $1d_1$.

Cultural Associations: None

STRATUM 1e (Field Designation: F11, F42)

Extent: Stratum 1e is the highest sub-unit in Stratum 1 bedrock which was exposed at the midden site. The uppermost portion of Stratum 1e constitutes the C Horizon and bed rock along the upper slope of the terrace edge. Horizontally Stratum 1e extends across the site along the southern (uppermost) edge of the terrace. Where exposed it overlies Stratum 1d and underlies Stratum 2.

Gross Composition: A very pale brown to yellow shale which grades into a shaley clay loam at its upper margins. Stratum 1e may encapsulate a thin fine grained sandstone horizon at the approximate middle of its vertical exposure.

Description: Stratum 1e is a very pale brown to yellow, shale to shaley clay horizon. It appears to be associated with a thin bed of fine grained sandstone which occurs approximately mid-way in its excavated exposure, notably in the west profile at ca. N11 (Map 4). However, the sandstone never occurs in a continuous, uninterrupted

context. Even along the W139.5 profile it occurs in discontinuous slabs, disturbed perhaps by the slumping of the deposits along the outer margin of the terrace edge. Elsewhere this horizon is represented by smaller, isolated fragments of sandstone in the Stratum 1e deposits. The large redeposited sandstone slabs in the constructional fill features along the northern (downhill) margin of the millrace (which in turn are associated with the channel excavation and its periodic maintenance) are probably float blocks derived from this horizon. These large slabs may have slumped downhill and then been excavated and redeposited with the Feature 4 and 10 constructional fill. Notably in the W120 and W150.5 profiles several of these massive sandstone slabs appear to cap the Feature 10 and Feature 4 fill deposits, suggesting their employment in stabilizing their surfaces to inhibit erosion. Stratum 1e contains some organics, rodent burrows and root molds along its upper and outermost exposed margins.

Cultural Associations: None

STRATUM 2 (Field Designation F6)

Extent: Horizontally Stratum 2 extends across the site along the southern (uppermost) edge of the terrace. Its northern margin was truncated by the excavation of Feature 1. In undisturbed situations Stratum 2 overlies Stratum 1e and underlies Stratum 4.

Gross Composition: A dark yellowish brown silt loam.

Description: Stratum 2 is a dark yellowish brown silt loam horizon with oxide staining running vertically throughout. Where it is exposed, it exhibits a moderately clear interface with underlying Stratum 1e. Notably in the N0 profile (W130 to W140) and the N10 profile (W150 to W155) the Stratum 1e/2 interface exhibits a broadly undulating profile suggesting the presence of plow furrow scars running approximately north-south, perpendicular to the N0 and N10 profile walls. Stratum 2 is interpreted to represent an old plow zone. This interpretation is reinforced by the light but persistent occurrence of historic and prehistoric artifactual debris throughout the exposed extent. The northern (downhill) interfaces of Stratum 2 with alluvial deposits and destructional fill features are indistinct, suggesting continuous slumping or mass wasting of the down-hill margins of Stratum 2 into the channel of Feature 1. The maximum excavated thickness of Stratum 2 south of and beyond the Feature 1 excavation in the W140 profile is ca. 15 inches.

Cultural Associations: Stratum 2 contains a relatively high volume of pulverized fragments of bituminous coal and brick, as well as a lower volume of historic stoneware, ceramics, glassware, metal and leather. Stratum 2 also containes occasional prehistoric artifactual material. Although the bituminous coal may be an artifact of cultural activity further up the terrace slope, it may also represent weathered fragments of Pittsburgh coal which outcrops at the top of the terrace to the south. The coal fragments may have been picked by the plow and transported downhill to the lower terrace slope.

STRATUM 3a (Field Desgination F108)

Extent: Horizontally Stratum 3a is encountered only in the W150 trench. It is the basal alluvial fill deposit in this section of the millrace excavation (Feature 1). Stratum 3a lies disconformably above Stratum 1 (sub-units a, b, c and d_1) and underlies Stratum 3b along its southern margin. Stratum 3a is truncated by Feature 8, a later dredging episode, along its northern margin (Map 4).

Gross Composition: A thin lens of moderately compact, sandy clay containing water worn pebbles.

Description: Stratum 3a is thin lens of moderately compact, sandy clay at the bottom of the millrace channel. The Stratum 3a sandy clay matrix is notable for the anomolous high volume of rounded, weathered pebbles it contains. It is possible that these pebbles eroded from localized lenses of gravel and pebbles along the upper slope of the terrace. These lenses occasionally characterize Early to Mid-Wisconsinan "Lower Terrace Gravel" deposits capping the low terraces in the Carnegie and Bridgeville 15' quadrangles (Shaw and Munn 1911: 6). Stratum 3a is the lowest alluvial fill in the millrace trench and exhibits a maximum thickness of three inches.

Cultural Associations: None.

STRATUM 3b (Field Designation F69)

Extent: Stratum 3b is encountered horizontally along the entire uthern (uphill) slope of Feature 1, the millrace channel. It disconformably overlies Stratum 1 deposits along the south side and bottom of the channel, and in the W150 transect trench it also overlies Stratum 1a. Generally Stratum 3b underlies higher alluvial and colluvial sub-units of Stratum 3.

Gross Composition: A slumped, yellowish brown to gray, loosely consolidated clayey shale deposit.

Description: Stratum 3b is a yellowish brown to gray loosely consolidated and unsorted clayey shale colluvial deposit. The Stratum 3b colluvium along the southern (upslope) margin of the millrace (Feature 1) is derived from the mass wasting of sub-units of Stratum 1 exposed in the trench wall, notably Stratum 1d and 1e, along with a lesser amount of slumped Stratum 2 deposits.

Cultural Associations: None.

STRATUM 3c (Field Designation: "laminae" in lower F41)

Extent: Horizontally Stratum 3c is encountered only in the W150 transect trench. It is the lowest alluvial fill deposit in Feature 8, the first and lowest of three dredging episodes defined in the alluvial/colluvial fill of the millrace channel in the W150 trench.

Gross Composition: A series of faint, alternating, thin laminae of

Features 11 and 12, the lowest dredging episodes identified in the W150 and W95 transect trenches, respectively, cut into Stratum 3b colluvial deposits. Therefore, it is unlikely that they would be deposited over constructional fill apparantly derived from more recent maintenance activity higher in the channel alluvium.

In the W120 transect trench the interface between Features 10 and 16 is demarcated by several large sandstone slabs, presumably derived from the thin sandstone horizon in Stratum 1e. Their location on the surface of Feature 10 suggests placement to stabilize both flanks of the constructional fill along the northern wall of Feature 1.

FEATURE 11 (Field Designation: None) Dredging Excavation

Description: Feature 11 is the first and stratigraphically lowest of five dredging episodes identified in the Stratum 3 alluvial/colluvial deposits in the channel of the millrace (Feature 1) in the W95 transect trench. Feature 11 is a shallow dish-shaped excavation of medium breadth.

Measurements: Maximum length: unknown.
Maximum width: 2 feet 10 inches.
Maximum depth: 6 inches.

N/S Profile: Map 3

Cultural Associations: None.

Provenience:	Square	Stratum
	N5 W95	3

Comments: The Feature 11 dredging excavation cut into Stratum 3 alluvial/colluvial deposits in the millrace channel (Feature 1) in the W95 transect trench. These deposits included Stratum 3b, the alluvial slump along the south slope of the millrace, and Feature 5, a slumped localized pocket of distinct sediments presumably associated with the Feature 4 constructional fill removed during the excavation of Feature 1 and deposited along the north side of the millrace. The Feature 11 trough was filled with undifferentiated Stratum 3e alluvium.

FEATURE 12 (Field Designation: None) Dredging Excavation

Description: Feature 12 is the second of five dredging episodes identified in the Stratum 3 alluvial/colluvial deposits in the channel of the millrace (Feature 1) in the W95 transect trench. Feature 12 represents the southern remnant of a shallow, dish-shaped excavation. The northern portion of the excavation cut was not identifiable in the uniform Stratum 3e alluvial fill of the millrace channel.

Measurements: Maximum length: unknown.
Maximum width: 9 inches.
Maximum depth: 4 inches.

N/S Profile: Map 3

deposits below the midden are exposed in the W135 trench, the presence of Feature 10 there cannot be confirmed. Feature 10 is conformably overlain by Feature 16, a more recent constructional fill deposit dredged from the millrace channel.

Superposition of Feature 10 stratigraphically above Feature 4, above the sandstone slab pavement capping or stablizing Feature 4 in the W150 trench, suggests that a period of time elapsed between the deposition of Feature 10 and the underlying constructional fill. Feature 10 would then represent a spoil pile from one or more of the earlier dredging episodes in the Stratum 3 alluvial deposits in the millrace channel. However, the pervasive occurance of brick fragments in the Feature 10 matrix suggests instead that its sediments were derived from slumped Stratum 2 deposits removed from the terrace slope during the excavation of Feature 1.

Measurements: Maximum (exposed) length: 4 feet 6 inches.
Maximum width: 11 feet 2 inches.
Maximum thickness: 1 foot 9 inches.

N/S Profile: Maps 3 and 4

Cultural Associations: Small brick fragments and one prehistoric pitted nutting milling stone.

Provenience:	Square	Stratum
	N15 W120 N25 W150 N20 W120 N30 W150 N20 W150	1(?)

Comments: Feature 10 in the W150 transect trench could be associated with one or more of the dredging episodes in the millrace channel (Features 8, 9 and 13), based upon the general similarity in color exhibited by the constructional fill deposits and the Strata 3a, 3c and 3d alluvium. Because of analogous sediment color and texture and stratigraphic position, Feature 10 in the W120 trench is assumed to be the correlate of Feature 10 in the W150 trench although no specific dredging episode was identified in the adjacent W115.5 and W120 profiles. However, the color exhibited by Feature 10 also approximates that of Stratum 2. The texture exhibited by the sediments of both deposits is not dissimilar and is slightly less gritty than those of Strata 3c and 3d. The presence of the brick fragments in both Stratum 2 and Feature 10 and their absence in the Stratum 3 channel deposits, suggest that the Feature 10 constructional fill most probably originated as slumped Stratum 2 sediments which were removed from the terrace slope during the excavation of the trench for the millrace. The recovery in the Feature 10 fill of the N30 W150 unit of a pitted nutting or milling stone (ascribable to any of several prehistoric components associated with aboriginal economic activity on top of the terrace) also suggests derivation of Feature 10 from Stratum 2, the old plow zone. Feature 10 is conformably overlain by Feature 16, another constructional fill clearly derived from the Stratum 3b colluvium which was apparantly rapidly accumulating through the mass wasting of Strata 1d and 1e sediments along the south side of Feature 1. Feature 3 and

Description: Feature 8 is the first of three dredging episodes identified in the accumulating Stratum 3 alluvial/colluvial deposits in the millrace channel (Feature 1) in the W150 transect trench. Feature 8 is a brood, shallow dish-shaped excavation.

Measurements: Maximum (exposed) length: 4 feet.
Maximum width: 3 feet 3 inches.
Maximum depth: 10 inches.

N/S Profile: Map 4

Provenience:	Square	Stratum
	N15 W120	3
	N20 W120	

Comments: The Feature 8 dredging excavation cut into Stratum 3a alluvial and Stratum 3b colluvial deposits, ca. four inches above the original floor of the Feature 1 trough. The Feature 8 trough was subsequently filled with Stratum 3c laminated alluvium.

FEATURE 9 (Field Designation: None) Dredging Excavation

Description: Feature 9 is the second of three dredging episodes identified in the accumulating Stratum 3 alluvial deposits in the W150 section of the millrace channel (Feature 1). Feature 9 is a shallow dish-shaped excavation of apparent medium breadth whose southern-most margin has been terminated by a subsequent maintenance excavation.

Measurements: Maximum (exposed) length: 4 feet.
Maximum width: 2 feet 6 inches.
Maximum depth: 7 inches.

N/S Profile: Map 4

Cultural Associations: None.

Provenience:	Square	Stratum
	N15 W150	3
	N20 W150	

Comments: The Feature 9 dredging excavation cut into Stratum 3c alluvial deposits. The southern margins of Feature 9 is truncated by Feature 13, the third dredging episode identified in the W150 transect trench in the Stratum 3 fill of Feature 1. The Feature 9 trough was subsequently filled with Stratum 3d laminated alluvium.

FEATURE 10 (Field Designation: F105) Constructional Fill

Description: Feature 10 is a constructional fill episode deposited conformably above Feature 4 along the north wall of the millrace (Feature 1). Feature 4 is a reddish brown to brown clay containing a low but persistent number of small brick fragments interspaced throughout its matrix. Feature 10 is exposed horizontally in the W120 and W150 transect trenches. Because of the limited extent to which the

generally equivalent stratigraphic positions field designations F48 and F76 were lumped into Feature 5. Although the distinctive color of Feature 6 suggests redeposited Stratum 1a material, its texture is more reminiscent of the Stratum 3a seposit. It is possible that the Feature 6 fill was derived from an early dredging of Stratum 3a or related deposits from elsewhere along the floor of Feature 1. However, F48's and F76's specific derivation is largely moot as both deposits are functionally the same, lenses of slumped constructional fill along the northern margin of Feature 1.

FEATURE 6 (Field Designation: F77) Constructional Fill

Description: Feature 6 is a slumped, localized "load" or lens of constructional fill along the channel side of the northern wall of the millrace (Feature 1). Feature 6 is a yellowish brown clay. Based on distinctive sediment color and texture, the Feature 6 fill appears to have been derived from predominately Stratum 1c material.

Measurements: Maximum length: 2 feet 5 inches.
Maximum width: unknown.
Maximum thickness: 7 inches.

E/W Profile: Map 5

Cultural Associations: None.

Provenience:	Square	Stratum
	N10 W115	1

Comments: None.

FEATURE 7 (Field Designation: F75) Constructional Fill

Description: Feature 7a is slumped, localized brown sandy clay "load" or deposit of constructional fill along the channel side of the northern wall of the millrace (Feature 1).

Measurements: Maximum length: 1 foot 11 inches.
Maximum width: 1 foot.
Maximum thickness: 6 inches.

N/S Profile: Map 3

E/W Profile: Map 5

Cultural Associations: None.

Provenience:	Square	Stratum
	N10 W115	1

Comments: The derivation of the Feature 7 sediments is unknown.

FEATURE 8 (Field Designation: None) Dredging Excavation.

Measurements: Maximum (exposed) length: 65 feet.
Maximum width: 24 feet.
Maximum thickness: 2 feet.

N/S Profile: Maps 3 and 4

E/W Profile: Map 5

Cultural Associations: None.

Provenience: Square				Stratum
N5	W95	N15	W135	1
N15	W115	N20	W150	
N10	W120	N25	W150	
N20	W120			

Comments: This feature is composed of Stratum 1d, $1d_1$, and 1e bedrock material removed from the edge of the terrace slope during the excavation of Feature 1, the millrace trench. Feature 4 contains numerous sandstone slabs, probably originating as float blocks from the slumped sandstone horizon in Stratum 1e. In the W150 trench the sandstone slabs appear to have been intentionally positioned on the surface of the northern or downhill slope of the Feature 4 sediments to retard erosion and slumping. In the W95 and W115 transect trenches (W115.5 profile, N10 to N14.5; N95.5 profile, W95.5 to W99.5; and N145.5 profile, W115.5 to W120 (See Maps 3 and 5), the southern edge or slope of the Feature 4 deposits exhibits several slumping episodes which could be considered colluvial fill derived from cultural deposits and a contributor to the Stratum 3 sediments of Feature 1.

FEATURE 5 (Field Designation: F48 and F76) Constructional Fill

Description: Feature 5 represents one or more slumped, localized "loads" or deposits of constructional fill along the channel side of the northern wall of the millrace (Feature 1). Feature 5 is a reddish brown, slightly sandy clay deposit. Based on distictive color and to a lesser extent texture, Feature 5 sediments appear to have been derived from redeposited predominately Stratum 1a material.

Measurements: Maximum (exposed) length: 4 feet.
Maximum (exposed) width: 1 foot 9 inches.
Maximum thickness: 8 inches.

N/S Profile: Map 3

E/W Profile: Map 5

Cultural Associations: None.

Provenience: Square				Stratum
N5	W95			1
N10	W115			

Comments: Because of similarities of sediment color and texture and

midden site, suggest that Feature 2 was intentionally deposited around the exposed limestone cobbles in Stratum 1a to level the floor of Feature 1 and perhaps buttress the adjacent norther wall here apparently composed of redeposited cultural fill (See Map 3). The deepest part of the Feature 1 floor, and the only area where the excavation penetrated the limestone cobble bed, was in the vicinity of the Feature 2 deposit.

FEATURE 3 (Field Designation: F107[2]) Constructional Fill

Description: Feature 3 lies disconformably above Stratum $1d_1$. It appears to be the lowest of the constructional fill deposits excavated from the millrace (Feature 1) and deposited along its northern (downhill) margin. The large volume of fragmented shale and sandstone in its matrix and the color exhibited by its sediments suggest that Feature 3 was derived primarily from Strata 1d and 1e. The orientation of the fragmented pieces of shale in the individual "loads" that contributed to the Feature 3 fill initially seemed to mirror the contorted beds of the underlying slumped Stratum $1d_1$ horizon, making the distinction between the two deposits difficult.

Measurements: Maximum (exposed) length: 4 feet.
Maximum width: 3 feet 2 inches.
Maximum thickness: 1 foot 2 inches.

N/S Profile: Map 4

Cultural Associations: None.

Provenience:	Square	Stratum
	N20 W150	1

Comments: Given that Feature 3 directly overlies Stratum $1d_1$, and that extreme difficulty was experienced distinguishing between these two deposits, it is not impossible that this "feature" may represent yet another sub-stratum within the bedrock sequence, perhaps a slumped facies of Stratum 1e. A insufficient exposure of this deposit made certainty impossible.

FEATURE 4 (Field Designation: F46 and F74) Constructional Fill

Description: Feature 4 is the second lowest of the constructional fill features excavated from the millrace (Feature 1) and deposited along its northern (downslope) margin. Feature 4 represents the major fill removed from the millrace trench. The Feature 4 clay matrix contains a high volume of fragmentary pieces of shale and sandstone suggesting derivation from Stratum 1e and particularly Stratum 1d and its slumped facies, Stratum $1d_1$. Orientation of the individual fragments of shale and sandstone are random. Occasionally rock detritus in individual "loads" exhibit a generally uniform horizontal orientation. The color evinced by Feature 4 generally mirrors that exhibited by Strata $1d_1$ and 1e although there are internal differences, again reflecting the origin of individual "loads".

intermittently for 290 feet from the edge of Pa. Route 50 west to the natural gas pipeline trench excavated in the summer of 1979. The excavation of Feature 1 truncated Strata 1 and 2 deposits along the southern slope or wall. Constructional fill excavated from the trench was deposited along the downhill margin of Feature 1, effectively building up the northern wall of the broadly U-shaped trough.

Measurements: Maximum (exposed) length: ca. 127 feet.
Maximum width: 17 feet.
Maximum depth: 7 feet 9 inches.

N/S Profile: Maps 3 and 4

Cultural Associations: None.

Provenience:	Square			Stratum
	N0 W95	N10 W115	N15 W145	1
	N5 W95	N15 W120	N10 W150	
	N0 W115	N10 W135	N15 W150	
	N5 W115	N15 W140	N20 W150	

Comments: Based upon its general configuration, the laminated alluvial deposits (Strata 3c, 3d, 3f, 3g and 3i), the evidence for repeated dredging/maintenance episodes (Features 8, 9, 11, 13, 14a, 14b and 15) in its natural fill and the specific reference to the race in the Wrenshall papers (See History Section), this feature is interpreted to be the excavation for a millrace.

FEATURE 2 (Field Designation: F78) Constructional Fill

Description: Feature 2 is a localized, loosely consolidated rubble fill composed of sandstone, shale, waterworn pebbles, and brick fragments at the bottom of Feature 1. The Feature 2 fill was deposited both over and between the weathered limestone cobbles in Stratum 1a, which were exposed in the area of the N10W115 unit during the excavation of Feature 1.

Measurements: Maximum (exposed) length: 3 feet 4 inches.
Maximum (exposed) width: 1 foot 4 inches.
Minimum depth: 8 inches.

N/S Profile: Map 3

E/W Profile: Map 5

Cultural Associations: One complete brick and several fragments.

Provenience:	Square	Stratum
	N10 W115	1

Comments: This feature represents a localized pocket of loosely consolidated fill at the bottom of the Feature 1 excavation. Localization of the deposit and the relatively large volume of cultural refuse in the matrix, unique among the constructional fills from the

SUMMARY OF CULTURAL FEATURES

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During the 1979 excavations at the Neville House midden, 29 cultural features and one "non-cultural" feature were distinguished. The actual number of individual features identfied was slightly higher; however, several localized disturbances and deposits within Feature 21, the midden proper, were given "generic" designations by the functional category in which they were classified. Particularly, the numerous bottle collectors' overlapping potholes and associated spoil piles were often impossible to distinguish one from another (or even from the loosely consolidated fill of the Feature 21 matrix). To attempt to isolate and distinguish each of these disturbances, which literally pocked the midden, would have been impossible and irrelevant. Where distinguishable they were collapsed into two feature categories: potholes and their fill, and pothole spoil piles. A final non-cultural "generic" feature designation was ascribed to all recent rodent burrows which honey-combed the midden particularly in the area of the W95 transect trench.

There are three major categories of cultural features, and three minor residual classes. The three major categories include 1) excavation features associated with the construction of the millrace (Feature 1) and the various dredging episodes, 2) constructional fill features or spoil piles again associated with the same excavation and maintenance activities, and 3) destructional fill deposits intentionally dumped or shoveled back into the silted-in millrace channel. The latter category includes the two major artifact-bearing zones that make up the midden (Features 18 and 20 and Feature 21, respectively), localized deposits within the major cultural depositonal episodes differentiated by color, texture or artifact content), and the recent limestone gravel access road dredged from the adjacent railroad yard. The residual feature types include the "generic" treasure hunters' potholes and back dirt piles, the recent sewer pipe trench excavation, and the active rodent burrow complexes noted above. A brief synopsis of the cultural features (and rodent disturbances) encountered at the Neville House midden is presented below in approximate stratigraphic sequence from earliest and lowest to latest. Representative profile maps of the features are presented in Maps 3, 4, and 5.

FEATURE 1 (Field Designation: None) Millrace

Description: Feature 1 is a linear trough excavated into the north slope of the terrace. The trench floor is estimated as eight to ten feet above the valley floor of the unnamed Chartiers Creek tributary, which forms the northern boundary of the "Woodville" terrace. Feature 1 parallels the valley edge, and before the removal of the terrace slope for the construction of the overflow channel, could be traced

from, Feature 21, the midden proper. In undisturbed situations Stratum 4 conformably overlies (from south to north): Stratum 2 (the old tilth zone), Features 20 and 21 (the two successive destructional fill/midden deposits), and Features 16 and 17 (the upper constructional fill deposits associated with the dredging episodes in the millrace channel).

Gross Composition: A loosely consolidated, dark grayish brown silt loam with a high organic content.

Description: Stratum 4 is a loosely consolidated, dark grayish brown (10YR 4/2) silt loam exhibiting a high organic content. It is the recent humus horizon which caps not only the old plow zone (Stratum 2) but also the midden (Feature 20 and 21) and the highest of the constructional fill deposits (Features 16 and 17) associated with maintenance of the millrace channel. Stratum 4 is often indistinguishable from the midden proper (Feature 21), as it is incorporated in it through repeated dumping of rubbish into the derpression and through more recent looting episodes.

Cultural Associations: Stratum 4 contains a moderate volume of historic artifacts and occasional prehistoric chipped stone tools and lithic debitage.

alluvial fill is derived from up channel deposits to the west of the midden excavation, the preponderance of the sediments seem to have orignated along the immediate slopes flanking Feature 1. Here Stratum 3j interfingers and/or grades into the Stratum 3k colluvial fill along the southern (uphill) slope of the millrace trench, while grading directly along its northern margin into the slumping edge of the Feature 17 constructional fill sediments (derived from the final dredging episodes in the millrace channel). Where the Stratum 3j/Feature 17 interface was exposed in the W120, W135 and W150 transect trenches, no perceptible boundary between them could be discerned. Only the slightest of color differences could be detected between the center of Feature 17 and the middle of the Stratum 3j deposit in the center of the channel. The sediments in the former deposit exhibited a slightly grittier texture. The Stratum 3j deposits appear to represent a rapid depositional episode associated possibly with torrential rain and extensive erosion of the flanking sides of Feature 1. Stratum 3j and the associated Stratum 3k colluvium along the south slope of Feature 1 represent the final non-cultural fill in the millrace. Subsequent deposits represent destructional fill deliberately thrown into the silted-in depression, i.e., the midden proper.

Cultural Associations: Occasional small fragments of bituminous coal.

Stratum 3k (Field Designation: F68)

Extent: Stratum 3k is the highest colluvial deposit in the millrace channel (Feature 1). Horizontally Stratum 3k was encountered in the W115, W135 and W150 transect trenches where it occurs along the upper margins of the slumping southern trough slope. It interdigitates with, or fades into, Stratum 3j along its northern (downhill) margin and gradually fades into Stratum 2 along its upslope edges. Stratum 3k is absent in the W95 transect trench.

Gross Composition: A moderately compact, strong brown clay loam.

Description: Stratum 3k is a moderaely compact, strong brown (7.5YR 5/6) clay loam containing a small number of historic artifacts. It seems to be derived from the mass wasting of Stratum 2 and, to a much lesser extent, Stratum 1e. In some contexts it was particularly difficult to make a clear distinction between Stratum 2 and Stratum 3k, as the latter's distinctive color among the colluvial deposits of the southern millrace slope reflects its derivation from predominately Stratum 2 sediments.

Cultural Associations: Stratum 3k contains a small number of historic ceramic and glass artifacts along with fragments of bituminous coal and bricks.

Stratum 4 (Field Designation: F3) (Uppermost)

Extent: Stratum 4 is the modern humus zone and is the highest natural level represented in the midden excavation. Horizontally Stratum 4 is encountered in all excavation units, although towards the center of the millrace depression it is mixed with, and is normally indistinguishable

and W150 grid lines of the present excavation.

Cultural Associations: Angular fragments of bituminous coal ranging in size from sand to pebbles.

STRATUM 3i (Field Designation: Laminae in lowest F40)

Extent: Stratum 3i is a localized deposit of thinly laminated sediments at the bottom of the Stratum 3j alluvium. Horizontally it is encountered only in the W150 transect trench. Stratum 3i lies disconformably above Strata 3c, 3d and 3e and represents alluvium deposited in Feature 13, the third and stratigraphically highest dredging episode identified in this section of the millrace (Feature 1). Stratum 3i presents a diffuse interface with, and gradually fades into, overlying Stratum 3j.

Gross Composition: Deposits of very faint, thin, alternating, grayish brown to olive gray sandy clay and clay laminae.

Description: Stratum 3i is a barely discernable series of thin, alternating, grayish brown to olive gray, slightly sandy clay and clay laminae. The alternating laminae were detectable primarily by differences in texture sheen. Stratum 3i is interpreted as a localized alluvial deposit of a slack water environment in the relatively narrow channel of Feature 13, the final dredging episode identified in this section of the Stratum 3 millrace fill.

Cultural Associations: None.

STRATUM 3j (Field Designation: F40)

Extent: Stratum 3j is the second and stratigraphically higher of the two major alluvial fills in the millrace channel (Feature 1). Stratum 3j is also the highest alluvial fill in the Feature 1 trough. Horizontally it extends along the axis of the millrace from the natural gas pipeline excavation, ca. 107 feet west of the W115 excavation base line, east to the W80 grid line. Stratum 3j was completely exposed in cross-section in all four transect trenches (See Maps 4 and 5). It conformably overlies Stratum 3e and is in turn conformably overlain by the Feature 18/20 destructional fill deposit. As it represents the stratigraphically highest non-cultural Stratum 3 sub-unit in the center of the millrace channel under the midden, excavation in all units not included in the four transect trenches ceased when the Stratum 3j deposit was encountered.

Gross Composition: A dense, olive gray clay with a low density of small fragments of bituminous coal interspersed throughout its vertical and horizontal extent.

Description: Stratum 3j is a dense, olive gray (5Y4/2) clay with a blocky fracture pattern and an almost wasy texture. It contains fragments of bituminous coal in sand to occasional pebble sizes. Stratum 3j represents the final non-cultural, alluvial fill in the channel of the millrace (Feature 1). Although some of the Stratum 3j

Gross Composition: A series of alternating, very pale brown and brown clay laminae.

Description: Stratum 3g is a series of alternating thin and thick clay laminae in the approximate middle of the Stratum 3e alluvium in the W115.5 and W120 profile walls. The series is dominated by a thick brown (10YR4/3) clay lamina with a maximum thickness of ca. two and one half inches. As in the case of 3f, this is lamina is conformably overlain by a faint, thin, very pale brown clay laminae ca. 3/8 of an inch thick. The lower, thicker lens is in turn conformably underlain by 10 alternating thin very pale brown and slightly thicker brown clay lamina. The thicker brown laminae are ca. 3/8 of an inch thick while the mean thickness of the thinner members is ca. 1/32 of an inch thick. Stratum 3g was deposited in the center of the active millrace channel, and the thick brown lamina seems to be directly associated along its outer margins with the slumping Stratum 3b colluvium along the southern (uphill) side and Feature 4 constructional fill sediments (deposited during the initial excavation of the trench) along its northern edge. Underlying this series of 12 alternating laminae is the trace of a series of very faint and discontinuous alternating thick (ca. 2 inches) and thin (ca. 1/4 inch) laminae. These were discontinuous in extent and very difficult to trace and, therefore, were not designated as a separate sub-unit within Stratum 3. However, collectively Strata 3f, 3g, and the intervening Stratum 3e deposits with the trace of faint alternating light and dark laminae may equate with Strata 3c or, particularly, 3d in the W150 transect trench.

Cultural Associations: None.

STRATUM 3h (Field Designation: F73)

Extent: Stratum 3h is a discontinuous alluvial lens deposited along the interface between Strata 3e and 3j along the bottom (northern) edges of the active channel in the Stratum 3 alluvial fill. Horizontally it is encountered in the W115 and W135 transect trenches and in the east-west trench along the channel west of the W144 grid line.

Gross Composition: A discontinuous lens of dark gray clay containing a large volumne of bituminous coal fragments and smaller particles.

Description: Stratum 3h is a discontinuous, dark gray clay lens which occurs at the interface between Stratum 3e and superimposed Stratum 3j along the bottom and northern sides of the active channel in the alluvial fill. It contains fragments of bituminous caol ranging in size from sand to pebbles. Stratum 3h reaches a maximum thickness of ca. five inches in the W139.5 profile (Map 4). Although it includes material of ultimate cultural derivation, its horizontal extent along ca. 27.5 linear feet and configuration in cross-section in the profile walls suggest one or two alluvial deposits which accumulated during a short period of rapid terrace slope erosion above the southern (uphill) edge of the millrace. This erosion may have been accompanied by torrential flooding which could have washed in smaller debris associated with a coal pile located above the millrace between the W140

overlying Stratum 3j deposits, but with a similar blocky fracture pattern. In some profile walls the precise color differentiation between Stratum 3e and 3j varies depending on the direction the exposed sub-strata were cut with a trowel, either up or down. Stratum 3e was often was discernable from overlying Stratum 3j by textural differences alone, exhibiting a slightly grittier texture. Stratum 3e is the lower of two major alluvial deposits filling the millrace depression (Feature 1). Stratum 3c and 3d are equatable with the lower portions of Stratum 3e exposed in the W95 and W115 transect trenches, and are distinguishable only by virtue of their deposition in a slack water environment. Occasional faint, isolated laminae were detected in the Stratum 3e deposits in the W115.5 profile, ca. N11.5 to W14.5, where the 3e sub-unit alluvium is bracketed by two each of thin light and thick dark laminae (Stratam 3f and 3g). The majority of the sediments comprising the alluvial fill in the trough of Feature 1 are considered to have derived from eroding flanks of the millrace: either Stratum 1 and Stratum 2 deposits exposed to the south, or the eroding and slumping constructional fill featues to the north. This possibility is congruent with the predominately reddish brown color both of this substrata and of the Stratum 2 and Feature 10 sediments it is posited to derive from.

Cultural Associations: None.

STRATUM 3f (Field Designation: F70)

Extent: Stratum 3f is an isolated set of two laminae identified in the lower portion of the Stratum 3e alluvium. Horizontally Stratum 3f is encountered only in the W115 transect trench.

Gross Composition: An isolated thick brown clay lamina conformably overlain by a faint, thin, very pale brown clay lamina.

Description: Stratum 3f is an isolated set of laminae in the Stratum 3e alluvium in the W115.5 and W120 profile walls. The lower and thicker lamina is brown (10YR4/3) clay and is conformably overlain by a very faint, thin, very pale brown clay lamina. The lower lamina reaches a maximum thickness of two and one half inches, while the upper and thinner member is ca. three-eights of an inch thick. Stratum 3f was deposited in the center of the active millrace channel, and seems to be directly associated along its outer margins with the slumping Stratum 3b colluvial deposits along the southern (uphill) edge and the Feature 4 constructional fill sediments (deposited during the initial excavation of the trench) along the northern edge.

Cultural Associations: None.

STRATUM 3g (Field Designation: F70)

Extent: Stratum 3g is a series of alternating laminae located approximately mid way in Stratum 3e alluvium. Horizontally Stratum 3g is encountered only in the W115 transect trench.

reddish brown sandy clay and reddish gray clay.

Description: Stratum 3c is a lens of alluvium exhibiting a series of faint, compact, alternating, reddish brown sandy clay and reddish gray clay laminae. It is interpreted as an alluvial fill accumulating in the trough formed by Feature 8, the lowest dredging episode identified in the alluvial/colluvial fill in Feature 1. The Stratum 3c laminae appear to have been deposited in a slack water environment.

Cultural Associations: None.

STRATUM 3d (Field Designation: F107[1])

Extent: Horizontally Stratum 3d is encountered only in the W150 trench, where it occurs along the axis of the millrace channel. It lies disconformably above Stratum 3c and represents an alluvial fill accumulated in Feature 9, the second of three dredging episodes in the Feature 1 alluvium/colluvium.

Gross Description: A series of alternating grayish brown and reddish brown sandy clay laminae.

Description: Stratum 3d is a lens of alluvium exhibiting a series of compact, thin, alternating, grayish brown and reddish brown sandy clay laminae. They are relatively more distinct and less clayey than those evidenced in Stratum 3c, and similarly exhibit a more intense chroma in the reddish brown range. The distinct rusty color evinced by the Stratum 3d laminae suggest derivation from the reddish brown constructional fill deposits (Feature 10) situated along the northern margin of Feature 1. These deposits represents redeposited, slumped Stratum 2 plow zone sediments removed during the original millrace excavation.

Cultural Associations: None.

STRATUM 3e (Field Designation: upper F41)

Extent: Horizontally Stratum 3e is encountered throughout the millrace channel (Feature 1). Generally it represents the lower of two major alluvial fills in Feature 1. In the W150 transect trench it conformably overlies Stratum 3b and 3c. It exhibits a diffuse interface with the latter substrata, essentially where the fine laminae which distinguish Stratum 3c are no longer discernable. Elsewhere in the W99.5 and W115.5 profiles Stratum 3e lies disconformably above Stratum 1 deposits at the bottom of the Feature 1 channel and the slumping edges of various constructional fill deposits along its northern margin. Stratum 3e is conformably overlain by Stratum 3j throughout its exposed extent.

Gross Composition: A compact, reddish brown, slightly sandy clay alluvial deposit.

Description: Stratum 3e is a compact reddish brown (5YR4/4) to brown (7.5YR4/4) sandy clay alluvium. It is siltier and less dense than the

Cultural Associations: None.

Provenience:	Square	Stratum
	N5 W95	3

Comments: The Feature 12 dredging excavation cut into Stratum 3b colluvial sediments along its southern margin. The northern side of the excavation was not detectable in the uniform Stratum 3e alluvial fill of the channel. Alternatively Feature 12 may be older than the Feature 11 excavation which may have truncated the earlier feature's (Feature 12's) northern margin.

FEATURE 13 (Field Designation: None) Dredging Excavation

Description: Feature 13 is the third and stratigraphically highest dredging excavation identified in the Stratum 3 alluvial/colluvial deposits in the millrace channel (Feature 1) in the W150 transect trench. Feature 13 is a relatively narrow and moderately deep bowl-shaped excavation.

Measurements: Maximum exposed length: 4 feet.
Maximum width: 2 feet.
Maximum depth: 8 inches.

N/S Profile: Map 4

Cultural Associations: None.

Provenience:	Square	Stratum
	N15 W150	3

Comments: The Feature 13 dredging excavation cut into Stratum 3c, 3d and 3e allivial sediments. The Feature 13 trough was filled with Stratum 3i alluvium, essentially Stratum 3j sediments exhibiting extremely faint, compact, alternating silty and clayey laminae which suggest deposition in a slack water environment.

FEATURES 14a and 14b (Field Designations: None) Dredging Excavations

Description: Features 14a and 14b are the third and fourth dredging episodes identified in the Stratum 3 alluvial/colluvial deposits in the millrace channel (Feature 1) in the W95 transect trench. As there was no evidence in the Stratum 3 alluvium as to which of these two features preceeded the other, if they were not part of the same maintenance episode, both are assigned the same feature designation. Both Feature 14a and 14b represent remnant portions of shallow, dish-shaped excavations. The major southern portions of both excavation cuts were not identifiable in the uniform Stratum 3j alluvial channel fill.

Measurements: Maximum exposed length: (14a) Unknown.
(14b) 7 inches.
Maximum width: (14a) 8 inches.
(14b) 7 inches.

Maximum depth: (14a) 3 inches.
(14b) 4 inches.

N/S Profile: Map 3 (Features 14a and 14b)

E/W Profile: Map 4 (Feature 14b)

Cultural Association: None.

Provenience:	Square	Stratum
	N5 W95	3

Comments: Both Feature 14a and 14b dredging excavations cut into Stratum 3e alluvial deposits. Both troughs were subsequently filled with undifferentiated Stratum 3j alluvium. Feature 14b, more clearly defined in the N95 profile (95.5 to W99.5) maybe part of the same dredging episode represented by Feature 14a. Alternatively, Feature 14a may truncate an earlier (Feature 14b) maintenance episode. Feature 14a appears to be terminated by Feature 15, the final dredging episode in the W95 trench.

FEATURE 15 (Field Designation: None) Dredging Excavation

Description: Feature 15 is the last of the five dredging excavations identified in the Stratum 3 alluvial/colluvial deposits in the millrace channel in the W95 transect trench. Feature 15 represents the northern portion of a dish-shaped excavation. The southern margin of Feature 15 was not identifiable in the uniform Stratum 3j alluvial fill of the millrace channel.

Measurements: Maximum length: Unknown
Maximum width: 2 feet, 11 inches
Maximum depth: 3 inches

N/S Profile: Map 3

Cultural Associations: None

Provenience:	Square	Stratum
	N5W95	3

Comments: The Feature 15 dredging excavation cuts into Stratum 3e alluvium. The Feature 15 trough was subsequently filled with undifferentiated Stratum 3j alluvium. Unlike the outer edges of Features 9 and 13 in the W150 trench the lateral margins of Features 14a, 146 and 15 are only detectable where they cut into Stratum 3e deposits. The southern margins of all three dredging cuts were undetectable in the uniform Stratum 3j alluvial fill of the active millrace channel. The excavation of Feature 15 may preceed those of Features 14a and 14b or may be part of the same dredging episode. However, as the lateral margins of all three excavations are not identifiable in the Stratum 3j alluvium, the precise sequence of dredging cuts cannot be determined.

FEATURE 16 (Field Designation: F104) Constructional Fill

Description: Feature 16 is a constructional fill deposited conformably over Feature 10, an earlier constructional fill, and it forms, in part, the accretional northern wall of the millrace (Feature 1). Feature 16 is a yellowish brown to brown, moderately compacted clay deposit containing a large volume of shale fragments with lesser amounts of weathered pebbles, sandstone and organic matter. The Feature 16 material is derived from one or more of the earlier dredging episodes defined in the lower Stratum 3 alluvial/colluvial sediments in Feature 1 in the W95 and W150 transect trenches. (See Maps 3 and 4). Clearly Stratum 3b colluvium contributes the predominate diagnostic sediments to the Feature 16 constructional fill. Feature 16 is overlain by Feature 17, the final constructional fill deposit associated with the excavation and maintenance of Feature 1. Lenses of Feature 16 material interdigitate with those of overlying Feature 17 in the W120 trench suggesting that the sediments contributing to both of the constructional fill deposits were derived from more than one dredging episode.

Measurements: Maximum (exposed) length: 34 feet 6 inches.
Maximum width: 11 feet.
Maximum thickness: 1 foot 6 inches.

N/S Profile: Maps 3 and 4

Cultural Associations: None.

Provenience:

Square		Stratum
N15W120	N20W150	3
N20W120	N25W150	
N20W135	N30W150	

Comments: Feature 16 is presumably associated with one or more of the earlier dredging episodes in Feature 1 including Features 11 and 12 in the W95 trench and Feature 8 in the W150 trench. Other undetected or unexposed maintenance events in the intervening 50 feet of channel deposits probably contributed fill to this deposit. The distinctive Feature 16 sediments were clearly derived from the slumped Stratum 3b colluvial deposit along the southern edge of the Feature 1 excavation. Only the lower and earlier dredging episodes in the W95 and W150 cut into these deposits. In the latter trench Feature 8 also truncated portions of Stratum 3a with its unusual waterworn pebble inclusions. However, the pebbles, may have been derived from slumping Stratum 2 sediments. Later and higher detectable maintenance activity apparently was confined to the removal of exclusively alluvial sediments in the center of the rapidly accumulating Feature 1 fill. The sediments contributing to the Feature 16 constructional fill may have been deposited in several episodes on the growing spoil pile defining the northern edge of Feature 1. In the W120 transect trench a thick lens of Feature 16 material interfingers with Feature 17 deposits along the northern or down hill slope of the spoil pile (Map 3). The Feature 16 sediments and bedrock inclusions here clearly exhibit alternating artificial bedding suggesting derivation from multiple dredging

episodes.

FEATURE 17 (Field Designation: F103) Constructional Fill.

Description: Feature 17 is the highest and last identified constructional fill deposit associated with the excavation and maintenance of Feature 1. Feature 17 overlies Feature 16 and effectively caps the accumulating constructional fill deposits defining the northern wall of the millrace (Feature 1). Feature 17 is exposed horizontally in the W120, 135 and 150 transecting trenches, and in the former it interdigitates with underlying Feature 16 deposits (See Map 3). Feature 17 is a yellowish brown (10 YR 5/4) to dark yellowish brown (10 YR 4/4) compact clay fill. Along its southern laterial edge Feature 17 sediments gradually grade into Stratum 3j deposits. Although the two fills exhibit different colors toward the centers of their individual deposits, (the top of the spoil pile and the bottom of the active millrace race channel, respectively), no color or texture differences could be detected across their diffuse interface which is only arbitrarily indicated in Maps 3 and 4. Feature 17 sediments are derived from one or more of several higher and later dredging episodes identified in the Stratum 3 alluvial sediments in the W95 and W150 transect trenches. After deposition the Feature 17 clay deposits apparently rapidly eroded back into the millrace channel and directly contributed much of the sediments in Stratum 3j alluvium, the final natural filling event recorded in Feature 1.

Measurements: Maximum (exposed) length: 34 feet 6 inches.
Maximum width: 8 feet.
Maximum thickness: 1 foot 4 inches.

N/S Profile: Maps 3 and 4

Cultural Associations: None.

Provenience: Square		Stratum
N15W120	N20W135	3
N20W120	N20W150	
N25W135	N25W150	

Comments: Feature 17 is associated with one or more of the terminal dredging episodes identified in the rapidly accumulating Stratum 3 alluvium in the center of the millrace channel. Similarities in Feature 17's color and texture to those exhibited by both the Stratum 3e and 3j sediments suggest that Feature 17 was largely derived from dredging episodes in the Stratum 3e alluvium and its equivalents, Strata 3c and 3d in the W150 trench. These maintenance excavations include Features 14a, 14b and 15 in the W95 trench and Features 9 and 13 in the W150 trench. The interface between Feature 17 and Stratum 3j in all three transect trenches which intercepted the two deposits could not be defined. Along its southern lateral edge, (the interior slope of the north wall of the millrace) the Feature 17 sediments increasingly evinced the color and texture of the Stratum 3j deposit with which it interfaced. This suggests that much of the final alluvium in the millrace trough was derived from eroding and slumping Feature 17

material.

FEATURE 18 (Field Designation: F101) Destructional Fill.

Description: Feature 18 is stratigraphically the lowest and earliest destructional or cultural fill deposit identified in the depression of the former millrace channel. Feature 18 is a loosely compacted brown to grayish brown, sandy clay containing moderate amounts of bituminous coal and waterworn pebbles and a smaller volume of 19th century cultural debris. Feature 18 lies directly over Stratum 3j and 3k deposits west of the W146 grid line and is in turn conformably overlain by Feature 19a and 20 destructional fill deposits. The interface between F18 and superimposed Feature 20 could not be destinguished in the W150.5 profile wall, north of the N20 grid line. Feature 18 deposits increase in thickness relative to those of overlying Feature 20 east of the W149.5 grid line. However, both destructional fill deposits are truncated east of the W146 grid line by Feature 21, the dump or midden proper, or, more probably, by a bottle collector's pothole ("generic" Feature 25) incorporating Feature 21 fill. As a result of the termination of the eastern portion of both destructional fills in this portion of the millrace depression, the precise relationship betwen the two deposits (Features 18 and 20) is obscured. It is not entirely certain whether Feature 18 represents an earlier destructional fill episode distinct from that associated with the deposition of Features 19a and 20 (in the W150.5 profile) or whether Feature 18 merely represents a localized "load" or pocket of distinct sediments within the general Feature 20 destructional fill. The presence of a thin lens of Feature 19a material in the Feature 18 fill in the N15.5 profile wall (See Map 5) indicates that both deposits are probably merely localized "loads" of distinctive fill shoveled down into the depression over the former millrace during the Feature 20 backfilling episode. The color and texture of the Feature 18 matrix and the coal, water-worn pebbles and historic artifacts contained within it suggest derivation from extant Stratum 2 plow zone deposits on the terrace slope above the former millrace.

Measurements:

Maximum (exposed) length:	8 feet 7 inches.
Maximum width:	7 feet 3 inches.
Maximum thickness:	1 foot 2 inches.

N/S Profile: Map 4

E/W Profile: Map 5

Cultural Associations: Fragments of bituminous coal and a small number of 19th century stoneware, ceramic and glass artifacts.

Provenience:

Square		Stratum
N15W145	N15W150	3
N10W150	N20W150	

Comments: As the interface between Feature 18 and Feature 20 in the W150.5 profile could not be distinguished, Feature 18 might be best considered to be a localized "load" or series of "loads" within the

Feature 20 back filling event. This interpretation is congruent with the fact that a lens of intervening Feature 19a, which largely separates Features 18 and 20 higher in the W150.5 profile, continues downslope to the north and interfingers with Feature 20 deposits. This fact suggests that Feature 18 is part of the same filling event as Feature 20 (as are the various lenses designated Feature 19a) but derived from a different locus along the upper terrace slope. As both Features 18 and 20 destructional fill deposits are truncated east of the W146 grid line, it is not certain whether the destruction fill underlying Feature 21, the dump proper, across most of the rest of the midden site is in reality Feature 20. However, if all three early destructional fill deposits, Features 18, 19a and 20, are part of the same filling episode, the designation of the destructional fill under Feature 21 throughout the rest of the millrace depression as Feature 18 or 20 is moot. The presence in the Feature 18 matrix of the anomolous waterworn pebbles is probably attributable to the presence of isolated lenses of gravel in the Pleistocene sediments deposited on the top of the terrace. As it has been demonstrated with the distribution of artifacts in a plow zone, the gravel pockets in the Pleistocene alluvium would have been displaced vertically by plowing but would have remained horizontally in the general area of the original deposit. Similarly the coal fragments in the Feature 18 matrix may have been picked up from an eroded in situ bed of Pittsburgh coal which outcrops at the top of the terrace under the overlying thin Late Pleistocene alluvial deposits.

FEATURE 19a (Field Designation: F13) Destructional Fill

Description: Feature 19a is a "generic" designation used to distinguish localized "loads" or lenses of redeposited Stratum Ie subsoil sediments in the midden deposit. The Feature 19a deposits collectively are lenses or pockets of redeposited Stratum Ie subsoil associated with the earliset of three destructional or cultural filling episodes identified in the depression of the former millrace west of the W145 grid line. The Feature 19a deposits are loosely compacted, continuous sheets of brownish yellow clay. In the W150.5 profile, Feature 19a fill occurs as a lens along the southern edge of channel depression, essentially separating underlying Feature 18 from overlying Feature 20 (Map 4). In the N15.5 profile a thin deposit of Feature 19a sediments occurs in the Feature 18 destructional fill and, like Feature 18, is truncated by a probable pot hunter's excavation which encorporates Feature 21 fill.

Measurements: Maximum length: 5 feet.
Maximum width: 1 foot 2 inches.
Maximum thickness: 6 inches.

N/S Profile: Map 4

E/W Profile: Map 5

Cultural Associations: None directly, although historic artifacts associated with the Feature 20 destructional fill were occasionally imbedded in the upper surface of Feature 19a deposits.

Provenience:	Square	Stratum
	N15 W145	3
	N15 W150	

Comments: Several "loads" or localized pockets of redeposited Stratum 1e material were detected in the destructional fill shoveled into the millrace depression. These deposits of disturbed Stratum 1e subsoil were collectively labeled Feature 19 with a subscript "a" to distinguish them from a lens of similar origin capping Stratum 2 sediments in the southernmost upslope excavation units in the W130 and W135 trenches. Apparantly when soil from the terrace slope above the millrace was intentionally shoveled into the depression during the Feature 20 filling episode, "loads" of Stratum 1e clay subsoil were also included in the deposit.

FEATURE 19b (Field Designation: F13) Destructional Fill

Description: Feature 19b is a localized deposit of destructional fill derived from Stratum 1e, the subsoil along the southern uphill margin of the midden excavation. Feature 19b is a compact deposit of dense, brownish yellow clay. Feature 19b caps Stratum 2 and is immediately overlain by Stratum 4 humus in the W139.5 profile (N0 to N3) (See Map 4). It was defined in the same stratigraphic position in the N0 profile (W130 to W139.5) and the W130 profile (N0 to N5).

Measurements:		
	Maximum (exposed) length:	9 feet 5 inches.
	Maximum (exposed) width:	2 feet 11 inches.
	Maximum thickness:	6 inches.

N/S Profile: Map 4

Cultural Associations: None.

Provenience:	Square	Stratum
	N0 W130	2
	N0 W135	

Comments: Although both Feature 19a and 19b were seemingly derived from Stratum 1e, Feature 19b is distinguished here from the former deposits based on the fact that it is not clearly associated with the earliest major destructional filling event (Features 18 and 20) in the depression of the former millrace which also included lenses of redeposited Stratum 1e sediments designated Feature 19a. Feature 19b was deposited sometime after the formation of Stratum 2 but before the accumulation of Stratum 4, although it may have been excavated at the time of the Feature 18/20 destructional filling episode.

FEATURE 20 (Field Designation:F14, F17, F31 and F35 Destructional Fill

Description: Feature 20 is the apparant major component of the earliest of three primary destructional or cultural fills deposited in the depression of the former millrace. Feature 20 is composed of a variety of loosely compacted clay loams and shaley clay soils

interspaced with weathered gravel and pebbles. Its sediments range in color from grayish brown to olive and in texture from sandy clay loam to relatively pure clay. The distinctive color, texture, and water-worn gravel inclusions suggest that Feature 20 was also derived from Stratum 2 deposits above and beyond the uphill margin of the millrace channel excavation. The presence of moderate numbers of prehistoric artifacts in the Feature 20 fill also suggests derivation of the constituent sediments primarily from the Stratum 2 plow zone deposits.

Feature 20 overlies Feature 18 west of the W147 grid line. West of W147 localized "loads" or lenses of Feature 19a material are contained within Feature 20 as well as being situated between Feature 20 and underlying Feature 18. Where the stratigraphic sequence has not been disturbed by more recent depredations of bottle collectors or perhaps earlier late 19th century garbage burying episodes, Feature 20 appears to be conformably overlain by Feature 21, the midden proper.

Measurements: Maximum (exposed) length: 74 feet 6 inches.
Maximum (projected) width: 17 feet.
Maximum thickness: 1 foot 11 inches.

N/S Profile: Maps 3 and 4

E/W Profile: Map 5

Cultural Associations: Moderate amounts of historic ceramic, metal, organic and particularly glass artifacts and bricks and brick fragments along with a proportionately moderate volume of prehistoric ground stone and chipped stone tools and lithic debitage.

Provenience:

Square			Stratum
N5 W80	N5W115	N10 W135	3
N5 W85	N10 W115	N20 W135	
N5 W90	N0W120	N25 W135	
N5 W95	N5W120	N15 W145	
N5 W100	N10 W120	N10 W150	
N5 W105	N15 W120	N15 W150	
N0 W110	N5W125	N20 W150	
N5 W110	N10 W130	N25 W150	
N0 W115			

Comments: The variations in color and texture exhibited by the constituent sediments composing the Feature 20 destructional fill undoubtedly reflect soil types and natural and cultural fill at the various loci along the top of the former millrace from where primarily Stratum 2 plow zone sediments were shoveled into the linear depression. The heterogeneity displayed by the Feature 20 fill also may be a function of the relative amounts of Stratum Ie sediments mixed with the dominate Stratum 2 material in the localized "loads".

Feature 20 was occasionally difficult to detect and separate from overlying Feature 21, the midden proper. This was due to the general similarities in color, the loosely compacted nature of the fill, and the massive mixing of the sediments (attributable to rodent and bottle

collectors' disturbances). With the exception of that portion of the destructional fill exposed in the N15.5 profile (W143 to W147) (Map 5) Feature 20 seems to be conformably overlain by Feature 21 throughout the midden excavation where the stratigraphic sequence has not been obliterated by treasure hunters' "potholes". In the N15.5 profile at the ca. W146 grid line Feature 21 appears to truncate Features 18, 19a and 20. It is not certain whether Feature 21 actually terminates the earlier and stratigraphically lower destructional fill deposits east of the W146 grid line, or is truncated by a later (late 19th century) excavation opened to bury garbage in the accumulating Feature 21 fill or due to a more recent bottle collector's "pothole". The interface between Features 20 and 21 east of the W120 grid line where there seems to be little post-depositional disturbance is relatively smooth when constrasted to the undulating to irregular boundary between the two destructional fills west of the W120 gridline (See Maps 4 and 5). The clear, even interface in the former area suggests that the Feature 21 fill probably gradually accumulated conformably over the earlier Feature 20 deposit.

FEATURE 21 (Field Designation: F16) Destructional Fill

Description: Feature 21 is the second of three and the major destructional or cultural fill deposited in the depression of the former millrace. Feature 21 is the midden proper and represents the primary deposit both historic and prehistoric artifacts in the excavation. Feature 21 is a loosely consolidated, very dark grayish brown to very dark gray sandy loam. Where the integrity of the stratigraphic sequence has not been disturbed, Feature 21 seems to conformably overlie Feature 20, the earliest of the major destructional fill deposits. The precise relationship of Feature 20 and 21 west of the W120 grid line is unclear. In the W139.5 profile (at ca. N21) and in the N15.5 profile (at ca. W146) (Maps 4 and 5) Feature 21 appears to truncate the underlying Feature 20 deposits. This interruption of what appears to be the natural stratigraphic sequence east of the W120 grid line may represent excavation into underlying Feature 18/20 deposits for the purpose of burying garbage, or the borrowings of recent bottle collectors. Feature 21 is generally assumed to be overlain by Stratum 4, the recent humus horizon where Stratum 4 sediments can be distinguished from or have not been mixed with Feature 21 fill. Locally between the W100 and W120 grid lines Feature 21 underlies Feature 30, the recent access road fill. Feature 30 represents the last of the major destructional fill deposits in the depression. Feature 21 contains a number of localized "loads" or lenses including Features 23, 24, 25, 26 and 27 which represent distinct filling episodes in the accumulating midden deposits. Again the presence of relative large numbers of prehistoric artifacts in the Feature 21 fill suggests that quantities of Stratum 2 sediments continued to be added to the general midden deposits. Although the fact that William Wrenshall was an avid collector of prehistoric indian artifacts is securely documented (see HISTORY Section), the presence of a proportionately large volume of chipped stone detritus in the Feature 21 fill suggests derivation of these and the balance of the other prehistoric artifacts from the Stratum 2 plow zone sediments.

Measurements: Maximum (exposed) length: 67 feet.
Maximum width: 13 feet 9 inches.
Maximum thickness: 4 feet.

N/S Profile: Maps 3 and 4

E/W Profile: Map 5

Cultural Associations: Large volume of historic stoneware, ceramics, glassware, metal, leather, textiles, bricks and brick fragments, wood, mortar, ash, cinders, and butchered refuse bone and a proportionately large number of prehistoric ceramics, ground stone and chipped stone tools and lithic debitage.

Provenience:

Square			Stratum
N5W80	N10 W115	N15 W130	3
N0W85	N0W120	N20 W130	
N5W85	N5W120	N0W135	
N0W90	N10 W120	N5W135	
N5W90	N15 W120	N10 W135	
N0W95	N20 W120	N15 W135	
N5W95	N5W125	N20 W135	
N10W95	N10 W125	N25 W135	
N5W100	N15 W125	N10 W140	
N5W105	N20 W125	N15 W140	
N0W110	N0W130	N20 W140	
N5W110	N5W130	N10 W145	
N0W115	N10 W130	N15 W145	
N5W115			

Comments: Feature 21 is the major destructional or cultural fill deposit in the depression of the former millrace. As such it represents the midden "proper" and yielded the vast majority of the historic and prehistoric artifacts recovered from the Neville House excavation. The Feature 21 fill was marked by an undecipherable array of overlapping disturbances left primarily, if not exclusively, as residue from the depredations of recent treasurer hunters. Frequently these "potholes" (with the "generic" designation, Feature 25) were detectable during excavation only by the notable absence of complete artifacts including whole bottles as well as lenses of redeposited mixed Stratum 3j and Feature 20 sediments (Feature 26). As these "potholes" were generally filled with redeposited and picked over Feature 21 sediments, they were usually undetectable in the loosely compacted midden fill. Normally these disturbances were identified only where they truncated underlying Feature 20 deposits or where dark Feature 21 sediments filled irrgular depressions cut into the top of the Stratum 3j alluvium, the final natural fill in the millrace channel. Because the center of the midden was literally honey-combed with these disturbances, possible natural levels or localized "loads" included within the Feature 21 filling episodes were hopelessly mixed both internally and with the artifacts from the underlying Feature 18/20 destructional fill. This mixing was particularly notable along the bottom of the former millrace depression west of the W120 grid line. There appears to be little or no demonstrable integrity to the

Feature 21 midden deposits in this area. The western margin of the fill representing the recent access road (Feature 30), dredged up from the railroad siding bed and deposited across the millrace depression, is situated between the W120 and W125 grid lines. East of this line Feature 21 exhibits a generally smooth interface with underlying Feature 20 deposits. If disturbances are present, few penetrate or truncate underlying Feature 20. This fact in turn argues that the Feature 21 deposits east of the western edge of the massive densely compacted Feature 30 fill were protected from the major depredations of the bottle collectors and that the majority of these disturbances post-date the construction of the road.

FEATURE 22 (Field Designation: F49) Rodent Burrows

Description: Feature 22 is a "generic" designation assigned to all identified rodent burrows and disturbances. These disturbances were particularly notable in the W95 transect trench where concentrations of uncarbonized nut hulls were recovered in loose fill in a labyrinth of tunnels attributable to a ground squirrel-size burrowing rodent. These burrows penetrated Stratum 1 and 3 deposits as well as Feature 20 and 21 fill.

Measurements: N/A.

N/S Profile: Map 3

Cultural Associations: Incidental historic artifacts.

Provenience:	Square	Stratum
	N0 W95	1 and 3
	N5 W95	

Comments: None.

FEATURE 23 (Field Designation: F32) Destructional Fill

Description: Feature 23 is a localized deposit or "load" within the Feature 21 destructional fill, the midden proper, in the W99.5 profile wall. Feature 23 is a thin lens of water-worn gravel intermixed with ash and cinders.

Measurements: Maximum length: unknown.
Maximum width: 1 foot 6 inches.
Maximum thickness: 1 inch.

N/S Profile: Map 3

Cultural Associations: Kaolin pipe fragment.

Provenience:	Square	Stratum
	N5 W95	3

Comments: The apparant source material for Feature 22 appears to be not dissimilar to the pea gravel deposit designated Feature 20 in the

1977 excavation (Richardson and Carlisle 1978:10).

FEATURE 24 (Field Designation: F63 and F72) Destructional Fill

Description: Feature 24 is the "generic" designation assigned to all ash and thermally altered fill deposits or "loads" identified within the major midden component (Feature 21). Feature 24 deposits exhibit loosely compacted, red to light red, burned matrices often containing significant admixtures of ash and charcoal.

Measurements: Maximum length: 2 feet 6 inches.
Maximum width: 1 foot, 9 inches.
Maximum thickness: 4 inches.

N/S Profile: Map 3

E/W Profile: Map 5

Cultural Associations: Incidental historic artifacts.

Provenience:	Square	Stratum
	N5 W105	3
	N5 W115	
	N10 W115	

Comments: The localized and discontinuous nature of the Feature 24 category of deposits suggests that they represent individual "loads" derived from thermally altered deposits or hearth residue rather than Feature 21 fill burned in situ to control offensive odors.

FEATURE 25 (Field Designation: F22, F150 and F151) "potholes" and Associated Fill

Description: Feature 25 is the "generic" designation to all identified recent disturbances which originated in either Stratum 4 or mixed Stratum 4/Feature 21 midden deposits. The overwelming majority, if not all, of these disturbance are attributable to the recent illicit depredations of bottle collectors' looting activity in the Neville House midden. The fill in these "potholes" is essentially reworked Feature 21 sediments and artifacts. Therefore, the Feature 25 category of excavations and associated fill were detectable in the loosely consolidated Feature 21 fill during the excavation or subsequently in profile walls only by 1) the notable absence of concentrations of large-size historic artifacts including such as whole bottles, 2) the presence of redeposited mixed stratum 3j and Feature 18/20 sediments above and adjacent to apparent artifact hiatuses in midden fill and/or detectable recent disturbances in underlying deposits and 3) the evidence that recent excavations truncated underlying Feature 20 deposits and/or penetrated stratigraphically earlier Stratum 3j alluvial sediments. An isolated Feature 25 pothole identified in the N20W145 and N20W150 units was excavated exclusively into Feature 18 and 20 deposits. All other Feature 25 disturbances were dug through Feature 21 fill and normally through underlying Feature 20 deposits into Stratum 3j alluvium.

Measurements: Maximum diameter: ca. 3 feet.
Maximum depth: ca. 2 feet 6 inches.

N/S Profile: Maps 3 and 4

E/W Profile: Map 5

Cultural Associations: The fill of this class of cultural disturbance consisted of essentially of reworked and back filled Feature 21 sediments and historic and occasional prehistoric artifacts but often with the notable absence or larger and/or complete historic items.

Provenience:	Square		Stratum
	N5W95	N20 W135	4
	N5W115	N15 W140	
	N10 W120	N15 W145	
	N10 W125	N20 W145	
	N10 W130	N20 W150	
	N15 W135		

Comments: The Feature 25 category of disturbances were generally detected only after excavation and, in addition, frequently appeared to overlap one another when their outlines could be discerned at all. As these disturbances also contained redeposited Feature 21 midden fill, there seemed to be no reason to distinguish their fill internally. Therefore, all cultural disturbances and their inclusive fill within the Feature 20/21 deposits, where they were isolatable, were designated as Feature 25 to simplify the construction and interpretation of profile maps and subsequent discussions of features. Most, if not all, of these disturbances are attributable to the recent depredations of bottle collectors. Relatively few of the disturbances demonstrably pre-date the deposition of the massive Feature 30 fill of the recent access road constructed by the Pittsburgh History and Landmark Foundation. The surface of the midden exhibited considerably more evidence of illicit digging in the summer of 1979 than it did during the University of Pittsburgh's (then) Archaeological Research Program's 1977 Phase 1 and 2 reconnaissance and test excavation (Richardson and Carlisle:1978 11-12). Even in 1977 a number of obviously recent "potholes" and associated fresh spoil piles were noted in the former millrace depression. It should be remembered, however, that at least some of those disturbances ascribable to the Feature 25 category could have been excavated in the late 19th century during the accumulation of the midden for the disposal of odiferous garbage. The recent thorough reworking of the Feature 21 midden deposits by the treasure hunters has completely eliminated any incontrovertible evidence for earlier excavations in the midden proper or for temporally stratified deposits.

FEATURE 26 (Field Designation: F25 and F26) "Constructional Fill"

Description: Feature 26 is the generic designation assigned to all "constructional fill" deposits or back dirt piles associated with Feature 25 disturbances which were composed of varying amounts of Feature 21 fill and Feature 20 and Stratum 3j sediments. Isolated

lenses of Feature 26 material occur throughout the Feature 21 fill west of the W120 grid line. Feature 26 deposits are usually lenses of moderately compacted, dense clay with varying admixtures of more loosely compacted, sandy loam midden sediments. These deposits exhibit poorly defined irregular edges, and the dominant sediments vary in color from dark brown to olive gray, reflecting the relative amounts of Feature 20 and Stratum 3j sediments encorporated in the matrix.

Measurements: Maximum length: 5 feet 10 inches.
Maximum width: unknown.
Maximum thickness: 8 inches.

E/W Profile: Map 5

Cultural Associations: Small numbers of historic artifacts typical of Feature 20 and 21 fill deposits.

Provenience:	Square	Stratum
	N10 W125	4
	N10 W130	

Comments: None.

FEATURE 27 (Field Designation: F8) "Constructional Fill"

Description: Feature 27 is the designation for all "constructional fill" or back dirt deposits associated with the isolated Feature 25 disturbance in the Feature 18/21 destructional fill in the W150 transect trench. The Feature 27 fills are composed of thin lenses of redeposited dense clay derived from Feature 19a and/or Stratum 3j. Horizontally, the Feature 27 category of fill occurs as a series of thin discontinuous lenses of dense clay capping Stratum 4 and/or redeposited Feature 18/20 fill around the perimeter of the isolated Feature 25 "pothole" in the W150 trench. Generally the Feature 27 sediments exhibited a more distinctly yellow color than the functionally similar Feature 26 fills and contained smaller admixtures of midden material.

Measurements: Maximum length: 1 foot 6 inches.
Maximum width: unknown.
Maximum thickness: 2 inches.

N/S Profile: Map 4

Cultural Associations: Incidental historic artifacts characteristic of Feature 18 and 20 fill deposits.

Provenience:	Square	Stratum
	N15 W150	4
	N20 W150	
	N25 W150	

Comments: None.

Another gold band lines interior to the decal.
Associated Maker's Marks, Figure: 40.
Vessel(s) Represented: 5 plates: rim diameter is 23.0 cm, base diameter is 14.0 cm; 5 saucers: rim diameter is 14.0 cm, base diameter is 7.0 cm; 4 cups: rim diameter 9.0 cm.
Comments: N/A.

Pattern: 281 **Paste:** Porcelain.
No. of Specimens: 26 **Figure:** 281
Decorative Technique: Overglaze decal with freehand gilding.
Description: The edge is gilded. The decal forms a border, the outer edge of which is a black and gold variation of the egg and dart motif. The lower section has a sequence of motifs around the band in this sequence: a 3-part medallion with a pink rose; scrolls enclosing a triangular area of light blue crossed by a basket-work of black scrolls enclosing a dark blue stippled area with 1 pink rose flanked by 2 yellow roses and small orange 5-petal blossoms, trailing pink leaf scrolls with 2 blue flowers each. The second half is then a mirror image of that already described. There is a gold band at the cup well of the saucers.
Associated Maker's Marks, Figure: 46.
Vessel(s) Represented: A minimum of 1 saucer: rim diameter is 14.0 cm, base diameter is 7.0 cm; 2 cups: rim diameter is 9.0 cm.
Comments: The decal as described is repeated several times on each item. These sections are poorly cut and placed overlapping at times and with end portions missing in some cases.

Pattern: 311 **Paste:** Porcelain.
No. of Specimens: 12 **Figure:** 311.
Decorative Technique: Overglaze decal.
Description: A geometric border encircles the ware. An additional motif of roses with trailing leaves is present.
Associated Maker's Marks, Figure: 41.
Vessel(s) Represented: 2 saucers: rim diameter is 14.0 cm, base diameter is 7.0 cm; 1 cup: rim diameter is 9.0 cm.
Comments: N/A.

Pattern: 315 **Paste:** Porcelain.
No. of Specimens: 31 **Figure:** 315.
Decorative Technique: Overglaze decal.
Description: The blank has a scalloped edge and a leaf motif at the rim. The decal consists of hanging balls of red roses and white blossoms suspended from a red ribbon bow. Between the balls and bow groups are double-draped garlands of small roses and blossoms, with a rose at each anchor point and a blossom at the center of the drape.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 3 plates: rim diameter is 22.0 cm, base diameter is 13.0 cm.
Comments: N/A.

PORCELAIN

DECORATIVE TECHNIQUES

OVERGLAZE DECAL ONLY, WITH AND WITHOUT GILDING, RIM ONLY

Pattern: 212 Paste: Porcelain.
No. of Specimens: 10 Figure: 212.
Decorative Technique: Overglaze decal, stenciled and freehand gilding.
Description: The edge is gilded. A series of decals encircles the rim. The solid colored aqua decal consists of an inverted triangle with leaf-like lateral extensions at the apex. The base expands into 2 scrolls. Gold stenciling of a stylized 4-petal flower with leaves and tendrils overlies each decal.
Associated Maker's Marks, Figure: 188.
Vessel(s) Represented: 1 cup: rim diameter is 9.0 cm; 1 saucer: rim diameter is 13.0 cm, base diameter is 9.0 cm.
Comments: The stenciled gilding may be part of the decal.

Pattern: 214 Paste: Porcelain.
No. of Specimens: 36 Figure: 214.
Decorative Technique: Overglaze decal and freehand gilding.
Description: The edge is gilded. The decal is a stylized holly sprig border in green and red. Periodically the sprigs change direction. Four lines descend from the juncture of the stems, terminating at a wreath with 5 berries.
Associated Maker's Marks, Figure: 165.
Vessel(s) Represented: A minimum of 4 cups: rim diameter is 8.0 cm, base diameter is 4.0 cm; 3 saucers: rim diameter is 13.0 cm, and base diameter is 6.0 cm.
Comments: N/A.

Pattern: 222 Paste: Porcelain
No. of Specimens: 13 Figure: 222.
Decorative Technique: Overglaze decal and freehand gilding.
Description: The edge is gilded. The decal consists of a series of concentric bands: a yellow border with a trident motif; a blue torque band; a narrow yellow band edged by blue. The inner two bands are interrupted quarterly by a blue and green shield with a pink rose and leaf.
Associated Maker's Marks, Figure: 108G.
Vessel(s) Represented: A minimum of 2 plates: rim diameter is 20.0 cm, base diameter is 12.0 cm.
Comments: N/A.

Pattern: 276 Paste: Porcelain.
No. of Specimens: 160 Figure: 276.
Decorative Technique: Overglaze and freehand gilding.
Description: A gold band encircles the ware. The decal consists of a band of alternating light pink roses and dark pink mums with leaves.

Among the overglaze patterns the distiction between "decals" and "transfers" was often hard to make. The latter term is derived from the method developed by Robert Hancock at Battersea, England, in 1753. This consisted of the direct transfer of pigment from a copper or steel engraving plate to the ceramic body by means of tissue paper. Transfers could be used over or under glaze. Multicolor prints necessitated multiple engravings and are not common. The transfer technique was unmistakably recognized on only two of the overglaze patterns in this assemblage. Blue transfers were used to simulate chinese wares. Some of the underglaze blue items that are listed as "stenciled" may have been made by this process.

"Decal" refers to the lithographic techniques that were developed in the latter part of the 19th century. Trimble(1962:155) claims that three Frenchmen developed the process in 1873 and that Theodore Haviland developed chromolithography sometime soon thereafter. New pigments were developed at this time that would withstand higher kiln temperatures (Fisher,1965:32). The combination of these pigments and the new lithographic process made possible more life-like decorations. Also called "decalomania", this technique was widely adopted since it made mass production of identical items both rapid and economical. Weiss(1971:199) describes the modern version of the process as follows:

> "...large editions of lithographs in several colours are produced at special printing presses. The printed surfaces are laid on the glaze which has been smeared with transfer gum. An intermediate layer of gelatine permits the paper to be pulled off in water."

"Sprigging" consists of raised decoration, often of a different colored paste, molded seperately and applied to the ware by means of a clay slip.

DECORATED PORCELAIN

by

Noel Strattan

INTRODUCTION

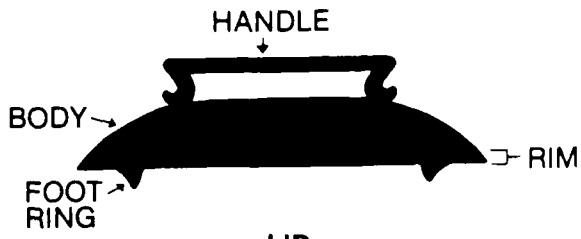
The decorated porcelain catagory consists of 4973 artifacts, and includes all decorated fragments of the vitreous ceramics wares. Most of the items represented are either of porcelain or bone china. To be included in this group the paste had to be of fine texture and only visibly distinguishable from the glaze by color. Most items in this group are very white, but there are two examples of colored paste.

Weiss (1971:183) defines porcelain as "a hard, dense, white translucent ceramic material, the characteristic crystalline component of which is melilite." While the items represented by this catagory of artifacts fit the descriptive portion of this defintion, their composition was not examined. Most are therefore listed as "Porcelain", as they are all either porcelain or wares made to simulate porcelain. Most of the datable items come from the late 19th or early 20th century, by which time the paste types were more or less standardized throughout the European industry (Fisher,1965:22). The primary concern for this investigation is the decoration of the wares and the techniques for applying that decoration.

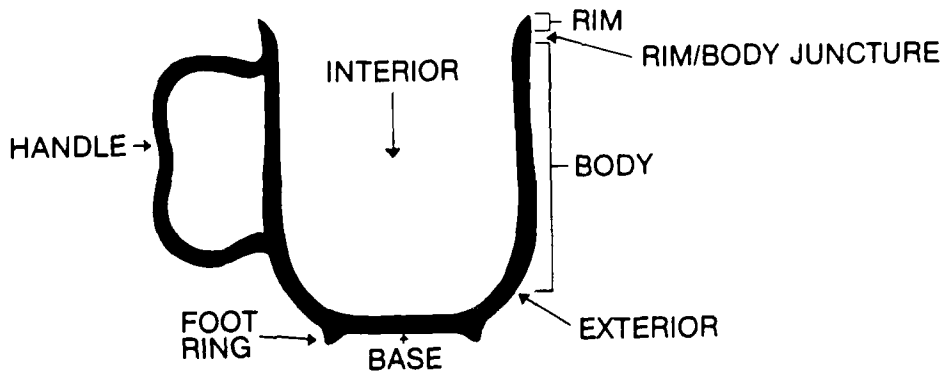
The assemblage was divided into 236 groups based on decoration. Five of these groups represented miscellaneous single pieces of no recognizable pattern separated by decorative technique. The remaining groups were treated as separate patterns. The type and minimum number of vessels present were determined, as well as their basal and rim diameters when present. Minimum numbers were established by reconstruction or use of a template to determine the number of circumferences necessary to account for all existing rim or base fragments. If pieces of the pattern were found in the CMM grouping, these were also measured. If the number of maker's marks present exceeded other minimum number determination, the maker's marks were used and this method of calculation noted.

The decorative technique was then examined and the pattern described. All pattern descriptions began at the rim. All blanks are plain unless otherwise noted. The pattern inventory presented below is sorted by decorative type and location of decoration on the item, i.e., whether on the rim, body, or both. The major decorative techniques are overglaze handpainting and/or decals. There is frequent use of gold, especially for gilding the edges of pieces.

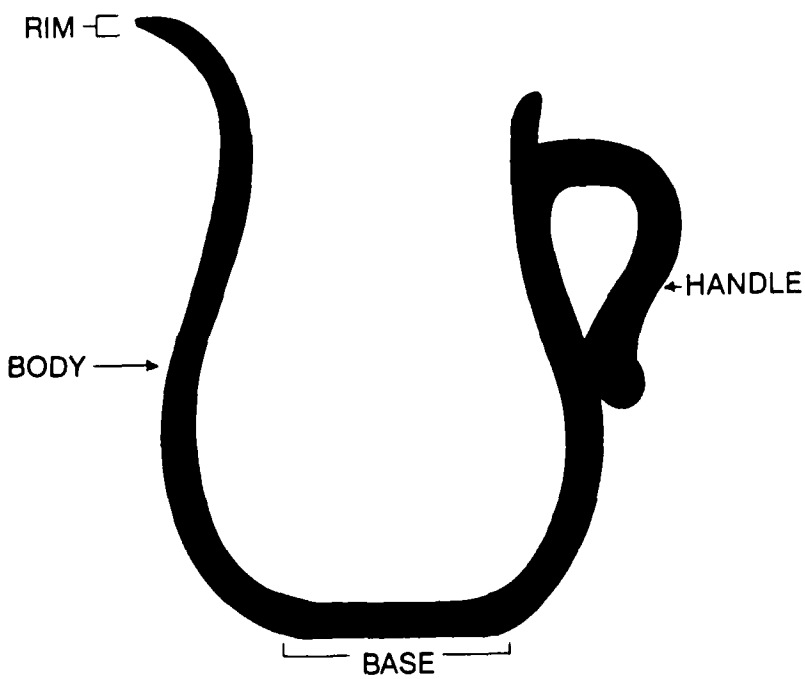
The underglaze patterns are, for the most part, either known or apparent oriental items. In addition to handpainting, the most common technique used is termed "stenciling" in the descriptions. These usually have the appearance of silk-screening. There are two basic types: elaborate designs in blue, and pictorials outlined by stenciling filled in with handpainting.



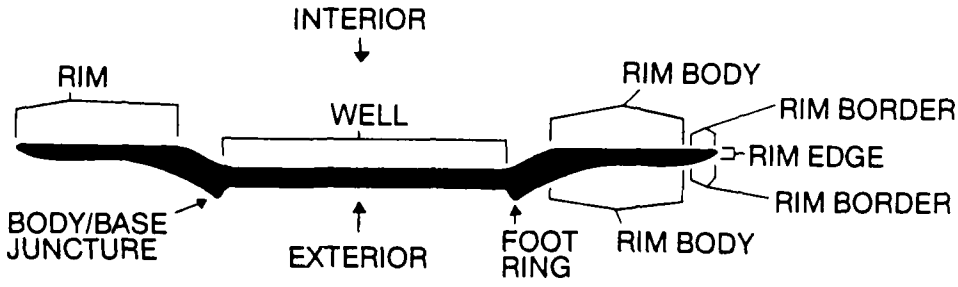
LID



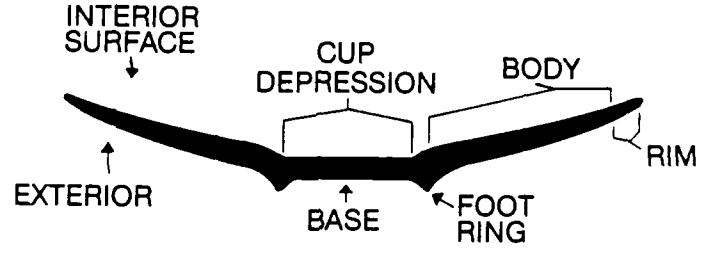
CUP



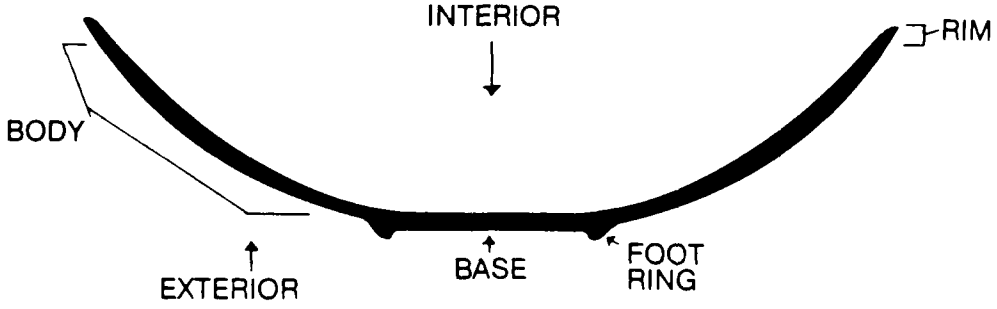
PITCHER



PLATE

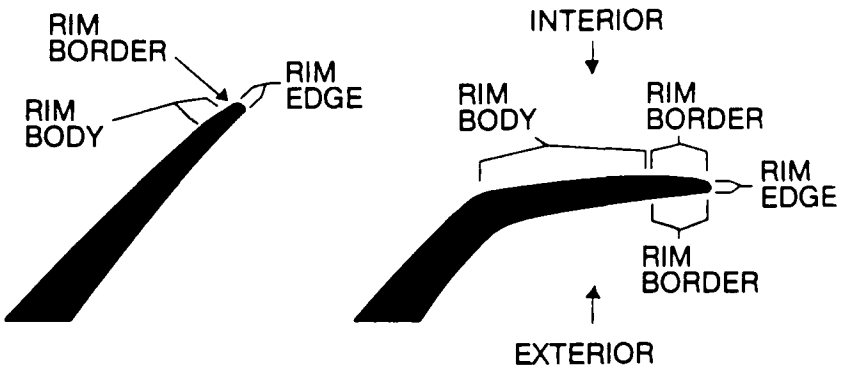


SAUCER

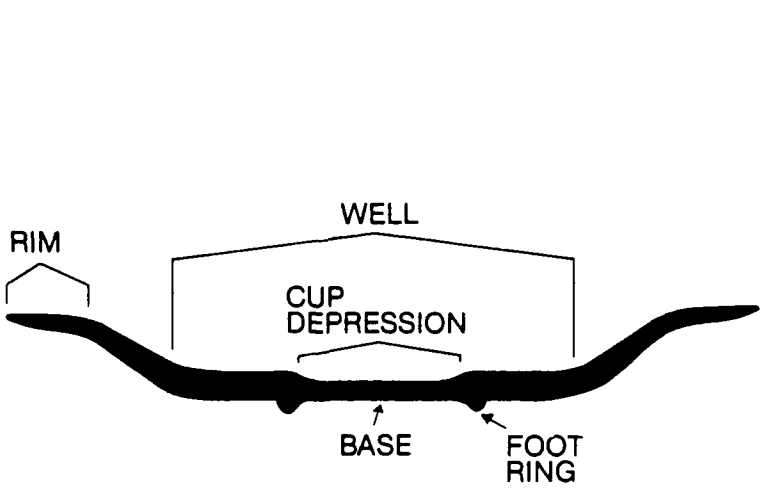


BOWL

CERAMIC VESSEL TERMINOLOGY



RIM TERMINOLOGY



SAUCER (plate-like)

6. serving dish
7. lid
8. pitcher
9. pot
10. creamer
11. sugar bowl
12. ewer
18. vase
19. slop jar
20. rolling pins
21. gravy boat
22. cannister
23. jardinier
99. unidentifiable

_____ Portion

1. rim
2. base
3. body
4. foot ring
5. well
6. body of rim
7. handle
8. foot
9. cup depression
10. spout

_____ Rim Diameter

_____ Base Diameter

_____ Decorative Technique (Rim _____ or Body _____)

1. handpainted
2. transfer print
3. decal
4. sponge spatter
5. gilded only
6. tinted glaze
7. colored paste
8. plain
9. unknown
10. stencil paint
11. sprigging
20. multiple (more than 4)

_____ Glaze

1. overglaze
2. underglaze
3. both

_____ Motif

1. floral
2. fruit
3. human/animal
4. pictoral
5. banded
6. geometric
7. solid color
8. luster
9. edge painted
10. amorphous
11. color accent to moulding
20. multiple (more than 4)

_____ Gilding

1. none
2. freehand
3. stencil
4. freehand and stencil
5. raised gold
6. decal
7. raised gold and freehand
8. pre worked foil

_____ Paste

2. procelain
4. whiteware
58. semi-vitreous

_____ Pattern Number

_____ Region

1. America
2. Europe
3. Asia
0. Unknown

____ City

_____ Country or State

_____ Company

_____ FC Number

_____ Piece Number

_____ Shape

1. plate
2. saucer
3. cup
4. bowl
5. platter
13. basin
14. chamber pot
15. miscellaneous
16. candy dish
17. miscellaneous decorative pieces

during initial stages of the detailed analyses.

Mark and manufacturer beginning and end dates and rim and base diameter were interval variables. The rim and base diameters for different vessels in each pattern were determined by comparison of large intact fragments or a number of smaller fitted fragments against a diameter arc form. Minimum vessel counts were only estimated from a quick evaluation of the number of complete diameters represented by the fragments of each vessel type in each pattern. Due to the enormous amount of time it would have taken, vessel fragments were not fitted together to determine the exact number of vessels represented.

Portion, rim decorative technique, body decorative technique, rim motif, body motif, rim gilding, and body gilding were essentially multi-state nominal variables. For each case a unique number was encoded which referred to the combination of specific elements from the coding lists that were present on a particular fragment. Vessel portion elements consisted of: 1) rim, 2) base, 3) body, 4) foot ring, 5) well, 6) body of rim, 7) handle, 8) foot, 9) cup depression, and 10) spout (see Figures 1, 2, and 3). If a fragment consisted of rim, body of rim, body, and well, the code number would be 1356. The decorative technique element list included: 1) handpainting, 2) transfer-print, 3) decal, 4) sponge/stamp, 5) gilding only, 6) tinted glaze, 7) colored paste, 8) plain, 9) unknown, 10) stencil painting, 11) sprigging. The decorative motif element list included: 1) floral, 2) fruit, 3) human/animal (single figures, portraits), 4) pictoral (composed scene), 5) banding, 6) geometric elements, 7) solid color, 8) luster color, 9) edge-painting, 10) other, 11) color accent to molding. Gilding elements were: 1) none, 2) freehand, 3) stencil, 4) freehand and stencil, 5) raised gold, 6) decal, 7) raised gold and freehand, 8) pre-worked foil. If a particular pattern exhibited both transfer-print and tinted glaze with floral and geometric elements accented by freehand gilding. The decorative technique code would be 26, the motif code would be 16, and the gilding code would be 2. During later analysis these variables were used as originally coded and also re-coded as distinct presence/absence elements to enable different data manipulations. It may be suggested that the presence/absence coding of individual elements was much more managable than the original coding.

After initial coding was completed additional variables were added. A function designation was encoded for each pattern. The functions included: 1) kitchen/utilitarian ware, 2) tableware, 3) vanity ware (basins, ewers, etc.), 4) tea sets/social-status (patterns that included only teacups, saucers, and small plates), 5) miscellaneous decorative objects. Cumulative potential date ranges were also computed for each pattern. A number of statistical analyses were then performed to determine any spatial and temporal covariance among the variable attributes coded. The results of these analyses are presented in the succeeding sections. The general descriptions of the patterns in each analyzed category follow. A replica of the coding sheets and keys used for ceramic analysis follows.

Upper Ohio Valley. The results of his analysis are presented in this report.

The porcelain, semi-vitreous, and whiteware categories were divided among three researchers who worked in collaboration. D. Casselberry did the documentary research on the maker's marks and sought information on ceramic manufacturers, manufacturer and exporter/importer locations, manufacturer and mark dates. N. Strattan analyzed the porcelain and J. Eddins dealt with the whiteware. Both cooperated in analysis of the semi-vitreous wares.

Each of the ceramic categories subject to detailed analysis were first sorted into pattern sets, given a number identifying the provenience, and counted. Each fragment was then examined and the resultant observations encoded on standardized forms for entry into a computerized data base. Strattan, Casselberry, and Eddins with the assistance of Mark Denton and advice from Robert Fryman and Ron Carlisle formulated an experimental system for the coding of information about: decorative techniques and motifs on the rim and body portions of vessels, vessel shape and portion, rim and base diameters, paste, site provenience, and maker's mark data. The system was altered and augmented as research proceeded.

The goal for the system was a separate recording of information on decorative technique and motif from the rim and body of vessels that would enable analysis of the changing covariance among elements of decoration with vessel shape, paste, and period and country of manufacture. Our intention, following March, was to help make the process of historic ceramic analysis and description simple and uniform, using terms and procedures that have a constant quality and that may serve as a "...sound basis for comparative study and classification "(March 1934:8). The standardized coding of observations about the ceramic patterns and their fragments was complimented by a written description of each pattern using the same terminology as utilized in the coding keys. In the description additional observations were made about decorative techniques, motifs, vessel forms, pattern contents, and pattern functions.

The variables included in the coding system were: vessel shape or type, vessel portion, rim and base diameters, rim and base decorative techniques, rim and base motifs, gilding on the rim and base, paste, pattern number, site provenience, and manufacture data. A number of these are nominal variables with multi-state non-overlapping designations in the coding key or nominal variables with unique designations. Twenty-three non-overlapping vessels form designations were used as the coding key for the vessel shape variable. These designations which included plate, saucer, cup, bowl, etc., were added to as the need arose over the course of research. The variables region, country, city, and manufacturer also represented lists of non-overlapping designations that grew during research. Paste was determined as either whiteware, porcelain, or semi-vitreous. Location of decoration was recorded as overglaze, underglaze, or both. Site provenience was coded as the bag lot field catalog number. Pattern referred to the arbitrary number given to each pattern set sorted

INTRODUCTION TO ANALYZED CERAMICS

by

John Eddins

A variety of ceramicwares and forms, totaling 33,271 specimens, were recovered from the Neville House midden. This represents slightly under 27% of the cultural material recovered. The ceramicwares included fragments of table ware and kitchen vessels, general utilitarian vessels, vanity sets, tea services, bricks, assorted decorative objects, and ceramic doll fragments.

The artifacts in the ceramicware class were divided into a number of categories based upon paste composition and variably on the nature of glazing and applied decoration. Table 1 (see Introduction) lists the ceramicware categories, category frequency and percentage, and the percentage of the site total represented by each category.

Ceramicware artifacts were removed from the field grouped by provenience unit (bag lot). In the laboratory they were washed, counted, numbered, separated into the defined categories, and stored by provenience lots for further analysis. These provenience lots and ther contents were entered into the site catalogues and recorded on computerized files.

A number of categories were then selected for more detailed analysis. This selection was prompted by the excessive number of artifacts, the limited number of researchers, and time constraints. Selection was based on the potential of a ceramic category to yield significant chronological and social information. The ceramic categories that were subjected to more detailed analysis were: decorated yellow ware, decorated porcelain, decorated whiteware, and decorated semi-vitreous ware.

The yellow ware category included Rockingham type brown ware and vessels with a buff paste 'intensified' to yellow by a clear lead or alkaline glaze (Ramsay 1939: 23). Specimens with a highly vitrified body were grouped as porcelain. There were over 4400 fragments of decorated porcelain representing over 200 patterns. Whitewares were defined as a factory produced, mold-made, "opaque, non-vitreous and more or less porous clay ware," with a cream to white body (Ramsay 1939:152). The decorated whiteware sample consisted of 4913 fragments from over 170 patterns. The semi-vitreous category was established to include all those wares appearing after the 1840's that are characterized by a dense, opaque, almost vitrified white to bluish or creamy white paste. It includes 'White Granites', 'Ironstones', 'Stone China', 'Hotel Ware', 'Semi-Porcelain', and a range of other variations on name and paste. There were 1318 fragments of decorated semi-vitreous wares from 45 patterns.

The yellow ware was further categorized and described by R. Fryman according to the standard usage applied to yellow wares produced in the

final of three major destructional fill deposited in the former millrace trough. The fill for the access road apparently was derived largely from the railroad siding bed on the valley floor below the millrace and contained abundant recent industrial debris including tie spikes, slag, "clinkers" and blocks of asphalt.

Measurements: Maximum (exposed) length: 20 feet.
Maximum width: 25 feet.
Maximum thickness: 2 feet 10 inches.

N/S Profile: Map 3

E/W Profile: Map 5

Cultural Associations: Recent industrial debris.

Provenience:	Square		Stratum
	N5 W100	N10 W115	4
	N5 W105	NOW120	
	NO W110	N5W120	
	N5 W110	N10 W120	
	NO W115	N15 W120	
	N5 W115		

Comments: The densely compacted nature of the Feature 30 limestone gravel fill necessitated the employment of picks, mattocks and shovels for its removal. The Feature 30 fill was composed of recent industrial debris dredged up from the railroad yard bed below the millrace and additionally was essentially unrelated to the other destructional filling episodes deliniated in the midden. Therefore, none of the Feature 30 matrix was subjected to screening, and none of the artifacts from this cultural feature were systematically retained.

FEATURE 28 (Field Designation: None) Destructional Fill.

Description: Feature 28 is a linear pocket of rust-stained midden deposit within the Feature 21, dump proper. Feature 28 exhibits indistinct horizontal and lateral margins.

Measurements: Maximum length: 5 feet, 7 inches.
Maximum width: unknown.
Maximum thickness: 7 inches.

E/W Profile: Map 5

Cultural Associations: Historical artifacts, particularly metal, characteristic of Feature 21 fill.

Provenience:	Square	Stratum
	N5 W95	3
	N5 W100	
	N5 W105	

Comments: None.

FEATURE 29 (Field Designation: F102) Sewer Line Excavation and Fill

Description: Feature 29 is the shallow trench excavated for a terra-cotta sewer pipe line leading from the Neville House caretaker's quarters which is situated on the terrace above and southwest of the midden. Feature 29 is a U-shaped excavation which cuts into Feature 16 and 17 destructional fill deposits in the W150 trench.

Measurements: Maximum (exposed) length: ca. 5 feet.
Maximum width: 1 foot.
Maximum depth: 1 foot 3 inches.

N/S Profile: Map 4

Cultural Associations: Terracotta sewer pipe.

Provenience:	Square	Stratum
	N25 W150	4

Comments: None.

FEATURE 30: (Field Designation: F37) Recent Access Road

Description: Feature 30 is the pulverized limestone fill for the bed of the recent access road constructed by the Pittsburgh History and Landmark Foundation across the midden and the depression of the former millrace channel. The road was constructed to provide access to the "Woodville" property from Pa. Route 50 via the bed of the abandoned railroad siding on the valley floor of the unnamed tributary of Chartiers Creek. The access road was built in anticipation of the removal of the drive way and terrace slope in front of the Neville House for the temporary Pa. Route 50 bridge by-pass. Feature 30 is the

Pattern: 319 Paste: Porcelain.
No. of Specimens: 6 Figure: 319.
Decorative Technique: Overglaze decal.
Description: The blank has scalloped edges and some scroll work. The decal is present mostly on the rim, but spills over the shoulder occasionally. Most of the design is scattered groups of yellow rosebuds with stems and leaves. There is at least one group that has a rose in full bloom.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 plate: rim diameter is 22.0 cm, base diameter is 12.0 cm.
Comments: N/A.

Pattern: 347 Paste: Porcelain.
No. of Specimens: 11 Figure: 347.
Decorative Technique: Overglaze decal and freehand gilding.
Description: The edge is gilded. A band encircles the ware. The banded decal consists of a band of blue 5-petal flowers with red star clusters and a band of twining leaves with 6 orange petals at the crossings of the 2 strands.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 cup: rim diameter is 7.0 cm; 1 saucer: rim diameter is 14.0 cm, base diameter is 7.0 cm.
Comments: N/A.

Pattern: 348 Paste: Porcelain.
No. of Specimens: 3 Figure: 348.
Decorative Technique: Overglaze decal with freehand gilding.
Description: The edge is gilded. The decal consists of a band of very realistic pansies in shades and tints of purple.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 cup: rim diameter is 9.0 cm.
Comments: N/A.

Pattern: 355 Paste: Porcelain.
No. of Specimens: 21 Figure: N/A.
Decorative Technique: Overglaze decal and freehand gilding.
Description: The edge is gilded. The decal border is a design of violets and leaves. The leaves arealternately light and dark green. Every other violet trails down from the border and has a bud associated.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 3 cups: rim diameter is 9.0 cm, base diameter is 4.5 cm; 2 saucers: rim diameter is 15.0 cm, base diameter is 9.0 cm.
Comments: N/A.

Pattern: 357 Paste: Porcelain.
No. of Specimens: 19 Figure: 357.
Decorative Technique: Overglaze decal and stenciled gilding.

Pattern: 389 Paste: Porcelain.
No. of Specimens: 16 Figure: N/A.
Decorative Technique: Overglaze decal and freehand gilding.
Description: The edge is gilded. The decal is a laurel border design separating 3 groups of pink roses with leaves and stems.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 nearly complete saucer: rim diameter is 14.0 cm, base diameter is 7.0 cm; 1 cup: rim diameter is 9.0 cm.
Comments: N/A.

DECAL ONLY, WITH AND WITHOUT GILDING, RIM AND BODY

Pattern: 201 Paste: Porcelain.
No. of Specimens: 496 Figure: 201.
Decorative Technique: Overglaze decal and freehand gilding.
Description: The pattern consists of green feather scrolls and blue 5-petal blossoms scattered in what appears to be random fashion. The design tends to be concentrated near the rims of plates, cups, and saucers, but may cover any area of the serving dishes. There is gilding on many of the serving pieces. The blank is known as "Ramson" (Schleiger, 1967). The serving pieces have ribbon handles with 2 holes and the end of the platters have wheat molding.
Associated Maker's Marks, Figure: 89E.
Vessel(s) Represented: 1 large oval platter with juice drains: base measurements, 32.0 cm x 21.0 cm; 2 covered vegetable dishes with lids, oval shaped: base measurements, 16.0 cm x 12.0 cm; 1 covered butter dish: base diameter of dish, 9.0 cm, diameter of cover is 14.0 cm; 1 oval platter: rim width is 19.0 cm, base width is 13.0 cm; 1 small narrow oval platter; 1 oval bowl; a minimum of 6 bowls: rim diameter is 13.0 cm, base diameter is 9.0 cm; a minimum of 8 cups: rim diameter is 9.0 cm, base diameter is 5.0 cm; a minimum of 5 saucers: rim diameter is 14.0 cm, base diameter is 9.0 cm; a minimum of 7 plates: rim diameter is 18.0 cm, base diameter is 12.0 cm; a minimum of 5 plates: rim diameter is 24.0 cm, base diameter is 14.0 cm; a minimum of 5 soup bowls: rim diameter is 20.0 cm, base diameter is 12.0 cm.
Comments: This pattern corresponds to Jacobson's (1979:191) "Princess" (factory name) and Schleiger's (1969:72) #490A. Schleiger lists pattern #57 as the factory named "Princess" pattern. There are similarities and the discrepency may come from the variations over time in this very popular pattern. Princess normally appears with pink flower, our blue being a less common variation.

This pattern is by far the most prevalant pattern at the site, accounting for 10% of the artifact class.

Pattern: 203 Paste: Porcelain.
No. of Specimens: 28 Figure: 203.
Decorative Technique: Overglaze decal.
Description: A border of small pink roses with twining ivy below encircles the ware. A rose and ivy cluster is found at the center of the saucers. A small amount of gilding is found on the cup handles.

Associated Maker's Marks, Figure: $89D_5$

Vessel(s) Represented: A minimum of 1 saucer: rim diameter is 14.0 cm, base diameter is 9.0 cm; 3 berry dishes: rim diameter is 9.0 cm, base diameter is 6.0 cm.
Comments: The berry dishes have the same diameter as the cups, but have a lower height and an unglazed base. This pattern is listed by Jacobson (1979:218) as "#412 Canby" and by Schleiger (1969:93) as #547. The blank is plain and it is Schleiger's "Sm.Bl.C.S.-C.".

Pattern: 206 Paste: Porcelain.
No. of Specimens: 12 Figure: 206.
Decorative Technique: Overglaze decal.
Description: This is an overall pattern of flowers and leaves done in pink and grey. The blank is steep sided and fluted.
Associated Maker's Marks, Figure: $89A_2$.
Vessel(s) Represented: 1 oval dish: 4-1/2 x 5-1/4 inches.
Comments: This pattern is listed by Jacobson (1979:161) 65, 156B and dated 1876-1889. The blank is cannele, straight.

Pattern: 208 Paste: Porcelain.
No. of Specimens: 7 Figure: 208.
Decorative Technique: Overglaze decal and freehand gilding.
Description: The blank is scalloped and seeded. There are 2 lines of gold, one on edge, one over seeds. "Pattern encircles plate. One flower grouping of blue flowers shading into white with pink centers. Other flower group yellow shading into white with pink centers. Both with green leaves, brown outline and small pink flowers. Between these groups 3 single green flowers shading into white with pink centers. In center of plate an American Beauty Rose and a bud in pink and yellow with green leaves" (Schleiger 1967:63).
Associated Maker's Marks, Figure: $89D_4$

Vessel(s) Represented: A minimum of 1 plate: rim diameter is 22.0 cm, base diameter is 14.0 cm.
Comments: This pattern is Schleiger (1967:63,65) #72.

Pattern: 217 Paste: Porcelain.
No. of Specimens: 76 Figure: 217.
Decorative Technique: Overglaze decal and freehand gilding.
Description: The blank has a scalloped effect below the rim area. The edge is gilded. A band of green and yellow encircles both the interior and exterior rim of the cup. It has groups of 2 flowers with leaves separated by a basket effect. The body has 2 groupings of roses with leaves. The saucer repeats the edge band and gold at the cupwell. Cup handles and bases are gilded.
Associated Maker's Marks, Figure: $87B_2$.
Vessel(s) Represented: A minimum of 4 saucers: rim diameter is 14.0 cm, base diameter is 9.0 cm; 7 cups: rim diameter is 10.0 cm, base diameter is 5.0 cm.
Comments: N/A.

Pattern: 219 Paste: Porcelain.
No. of Specimens: 109 Figure: 219.
Decorative Technique: Overglaze decal.
Description: the blank is very ornate with a minor scallop effect. Pattern fills the entire rim by repeating realistic apple branches with 2 clusters of pink and white blossoms each. The cluster nearer the base of the branch has leaves, shadows, and some lilies of the valley. A single cluster of 2 blossoms and 1 bud on a branch is found at the center of the plate.
Associated Maker's Marks, Figure: $83A_3$.
Vessel(s) Represented: A minimum of 11 plates: rim diameter is 22.0 cm, base diameter is 14.0 cm.
Comments: N/A.

Pattern: 220 Paste: Porcelain.
No. of Specimens: 124 Figure: 220.
Decorative Technique: Overglaze decal and freehand gilding.
Description: The edge is gilded. Each decal consists of dark red roses either in bud or fully opened. They are found widely scattered over the entire surface of the plates in apparent random distribution. Most are single or double, but one decal per plate has one large flower and several buds. All have small grey leaves and grey-green stems and full size leaves.
Associated Maker's Marks, Figure: 93B.
Vessel(s) Represented: A minimum of 10 plates: rim diameter is 16.0 cm, base diameter is 10.0 cm; 9 plates: rim diameter is 19.0 cm, base diameter is 12.0 cm.
Comments: N/A.

Pattern: 231 Paste: Porcelain.
No. of Specimens: 3 Figure: N/A.
Decorative Technique: Overglaze decal and freehand gilding.
Description: The edge is gilded, as are the handles and the bases. The pattern consists of a 1 cm band of highly stylized flowers. The branches are purple and the leaves are green. Flowers are orange, blue, and gold with black highlights and orange dot shading. There are 5 different flower units before the pattern repeats.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 serving dish: rim diameter is 19.0 cm, base diameter is 11.0 cm.
Comments: N/A.

Pattern: 236 Paste: Porcelain.
No. of Specimens: 6 Figure: N/A.
Decorative Technique: Overglaze decal and freehand gilding.
Description: The edge is gilded. The blank is quite complex, having concave sections that give a squared edge and a molded dot and petal cross band. In each concave section is a decal of a cluster of pink and yellow azeleas.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 platter: base diameter is 23.0 cm.
Comments: N/A.

Pattern: 267 **Paste:** Porcelain.
No. of Specimens: 4 **Figure:** 267.
Decorative Technique: Overglaze decal and freehand gilding.
Description: The edge and cup rim are gilded. The pattern is a 3-banded one. The first and third have green leaves twined around a red line. The center band is a motif of 2 pink roses and a section of leaves that resembles wheat repeated around the piece.
Associated Maker's Marks, Figure: 81B.
Vessel(s) Represented: 1 saucer: rim diameter is 14.0 cm, base diameter is 9.0 cm.
Comments: N/A.

Pattern: 282 **Paste:** Porcelain.
No. of Specimens: 6 **Figure:** 282.
Decorative Technique: Overglaze decal and freehand gilding.
Description: The blank has a small scallop on the rim with a ladder work impression extending down periodically into the body of the bowl. The top of each ladder is gilded. The decal consists of trailing leaves and branches with long bladed leaves. Small pink 5-petal flowers are scattered along the branches.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 bowl: rim diameter is 18.0 cm, base diameter is 12.0 cm.
Comments: N/A.

Pattern: 286 **Paste:** Porcelain.
No. of Specimens: 9 **Figure:** 286.
Decorative Technique: Overglaze decal and freehand gilding.
Description: The edge is gilded. Realistic holly is found around the rim of the plate, the body of the bowl, and in the center of the plate. There is a gold band around the base of the bowl.
Associated Maker's Marks, Figure: 94A, B.
Vessel(s) Represented: 1 bowl: rim diameter is 14.0 cm, base diameter is 8.0 cm; 1 plate: rim diameter is 17.0 cm, base diameter is 9.0 cm.
Comments: N/A.

Pattern: 287 **Paste:** Porcelain.
No. of Specimens: 5 **Figure:** 287.
Decorative Technique: Overglaze decal and freehand gilding.
Description: This pattern is a wreath done in 2-tone green, red, and gold. A segment of the wreath consists of 3 clusters of 3-lobed motifs, the base of each coming out of the tip of the preceeding. The outer 2 blades are dark green and the middle one is light green. Red berries are found between motifs. Each segment is bounded by light green ribbon. Stenciled gold overlies the dark green leaves. A small circle of the same pattern is found at the center of the plate.
Associated Maker's Marks, Figure: $91A_2$.
Vessel(s) Represented: 1 plate: rim diameter is 18.0 cm, base diameter is 10.0 cm.
Comments: This is evidently a special Christmas article. The words

"Made expressly for Jos. Horne Co." appear on the bottom.

Pattern: 312 **Paste:** Porcelain.
No. of Specimens: 14 **Figure:** 312.
Decorative Technique: Overglaze decal and freehand gilding.
Description: The blank has a scalloped border and is gilded to accent the scallops. The decal pattern consists of 2 staggered rows of single pink roses, each row alternating a bud and half open roses. There is a single gold band at the shoulder and a single pink rose at the center of the plate.
Associated Maker's Marks, Figure: $89D_3$.
Vessel(s) Represented: A minimum of 1 plate: rim diameter is 23.0 cm, base diameter is 16.0 cm.
Comments: N/A.

Pattern: 314 **Paste:** Porcelain.
No. of Specimens: 5 **Figure:** 314.
Decorative Technique: Overglaze decal and freehand gilding.
Description: The edge is gilded. The interior design begins with a wreathing of a green leaf motif similar to ivy, but having 4 leaves. Clusters of pink and white 5-petal flowers with green and grey leaves encircle the sides and are found at the center.
Associated Maker's Marks, Figure: 38B, 38C.
Vessel(s) Represented: A minimum of 2 fruit or sauce bowls: rim diameter is 14.0 cm, base diameter is 7.0 cm.
Comments: N/A.

Pattern: 316 **Paste:** Porcelain.
No. of Specimens: 4 **Figure:** N/A.
Decorative Technique: Overglaze decal and freehand gilding.
Description: The blank is scalloped and has a seed row. Rows extend down the body. The pattern consists of blue daisies with yellow centers and an abundance of green leaves. There are a few pink daisies mixed in with the blue. The pattern is found mostly around the rim, with occasional cascades of flowers down the body. Design is present on both interior and exterior surfaces of the cup. The cup handle is gilded.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 cup: rim diameter is 8.0 cm; 1 saucer: base diameter is 8.0 cm.
Comments: Blank appears to be Haviland "star", although no maker's mark is present. This may be a demitasse cup and saucer.

Pattern: 329 **Paste:** Porcelain.
No. of Specimens: 10 **Figure:** 329.
Decorative Technique: Overglaze decal and freehand gilding.
Description: The pattern consists of a bed of grey-green shadow foliage of lacy ferns overlaid by branches with small green 4- or 5-petal blossoms. The design is present on both interior and exterior surfaces of the cup. The cup handles are gilded and there is spot gilding on the base.

Associated Maker's Marks, Figure: $90B_1$.
Vessel(s) Represented: A minimum of 2 cups: rim diameter is 9.0 cm; 1 saucer: rim diameter is 14.0 cm.
Comments: This pattern is listed as Schleiger (1968:100) #836J.

Pattern: 334 Paste: Porcelain.
No. of Specimens: 10 Figure: N/A.
Decorative Technique: Overglaze decal and freehand gilding.
Description: The blank is fairly elaborate with gold highlighting its design. There are periodic circular areas of basket weaving effect. The body decal is a grouping of a rose, purple zinnias, and blue and yellow 5-petal flowers with buds trailing from the group.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 2 bowls: rim diameter is 15.0 cm, base diameter is 8.0 cm.
Comments: N/A.

Pattern: 344 Paste: Porcelain.
No. of Specimens: 6 Figure: 344.
Decorative Technique: Overglaze decal.
Description: The rim decoration consists of a leaf border and groupings of a single pink rose with a stem surrounded by numerous smaller roses and trailing leaves. The cup has one rose cluster in the center interior. The saucer has only the rim decoration.
Associated Maker's Marks, Figure: 11C.
Vessel(s) Represented: A minimum of 1 cup: rim diameter is 7.0 cm, base diameter is 3.5 cm; 1 saucer: base diameter is 7.0 cm.
Comments: N/A.

Pattern: 346 Paste: Porcelain.
No. of Specimens: 21 Figure: 346.
Decorative Technique: Overglaze decal and freehand gilding.
Description: The blank has uneven scallops around the edge and a raised geometric motif. A gold line encircles the rim edge. The pattern consists of a central group of 2 pink roses or one rose and one daisy flanked by smaller blue 5-petal flowers and leaves to form festoons which encircle the plate. The center of the plate contains a single rose.
Associated Maker's Marks, Figure: 39C.
Vessel(s) Represented: A minimum of 4 plates: rim diameter is 16.0 cm, base diameter is 9.0 cm.
Comments: N/A.

Pattern: 349 Paste: Porcelain.
No. of Specimens: 40 Figure: 349.
Decorative Technique: Overglaze decal.
Description: The pattern consists of sprays of roses in various stages from bud to full bloom. Thorns are visible. Blue-grey shadows of more roses and leaves underly the basic pattern. The blank has dot and line edging and periodic trellises. The cup handle has two holes. The pattern is found over all of the piece, with small groupings inside the

cups.
Associated Maker's Marks, Figure: 92B.
Vessel(s) Represented: A minimum of 5 cups: rim diameter is 9.0 cm, base diameter is 6.5 cm; 6 saucers: rim diameter is 15.0 cm, base diameter is 8.0 cm.
Comments: N/A.

Pattern: 361 **Paste:** Porcelain.
No. of Specimens: 38 **Figure:** 361.
Decorative Technique: Overglaze decal.
Description: A blue ribbon is draped around the rim of this ware in 3 loop/drape sections. Under the first loop is a cluster of 2 blossoms and 3 roses. Under the middle is a single rose. Under the third is a cluster of 2 daisies and 3 roses. Between ribbon sections are clusters of 2 roses and 1 daisy. This type of cluster is also found at the center of the dishes.
Associated Maker's Marks, Figure: 83A.
Vessel(s) Represented: A minimum of 3 berry bowls: rim diameter is 13.0 cm, base diameter is 9.0 cm.
Comments: N/A.

Pattern: 366 **Paste:** Porcelain.
No. of Specimens: 4 **Figure:** N/A.
Decorative Technique: Overglaze decal and freehand gilding.
Description: The blank has a gilded, plain edge, divided into segments by rays that extend to the cup well of the saucer and base fo the cup. A fleur-de-lis design is found at the base of each ray. The pattern consists of a border of pairs or triads of pink roses with twining leaves with occasional 5-petal blue flowers added. Isolated group of 2 roses, leaves, and blue flowers are found on the body of the pieces.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 cup: rim diameter is 9.0 cm, base diameter is 4.0 cm; 1 saucer: rim diameter is 13.0 cm, base diameter is 9.0 cm.
Comments: N/A.

Pattern: 371 **Paste:** Porcelain.
No. of Specimens: 9 **Figure:** N/A.
Decorative Technique: Overglaze decal.
Description: A slightly scalloped blank, has a pine and berry wreathing from which are draped crossing garlands of pink-red roses and leaves. The individual garlands consist of flowers that increase in size from the ends of the drapes to the middle. A twining of pine and berry and roses is probably found in the center.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 bowl: rim diameter is 16.0 cm.
Comments: N/A.

Pattern: 381 **Paste:** Porcelain.
No. of Specimens: 6 **Figure:** N/A.

Decorative Technique: Overglaze decal and freehand gilding.
Description: The rim of the blank has a ribbon effect. There is spot gilding along the rim and base. The pattern is found on both interior and exterior surfaces. It consists of trailing vines with small pink flowers and feather ferns. An occasional larger flower may be present.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 cup: rim diameter is 9.5 cm, base diameter is 6.0 cm.
Comments: Sample is not complete enough to fully determine the pattern.

Pattern: 411 **Paste:** Porcelain.
No. of Specimens: 2 **Figure:** 411.
Decorative Technique: Overglaze decal.
Description: The edge of this piece is a wreath of alternating green leaves and blue beads. Suspended from this wreath are draped chains of blue beads with floral medallions at the bottom of each loop. Inside each loop is a blue flower from which are draped leaf and berry chains that alternate with the bead chains. A ring of this design is also found in the center of the piece.
Associated Maker's Marks, Figure: $89C_2$.
Vessel(s) Represented: 1 saucer, possibly demitasse: rim diameter is 12.0cm, base diameter is 8.0 cm.
Comments: N/A.

Pattern: 436 **Paste:** Porcelain.
No. of Specimens: 13 **Figure:** 436.
Decorative Technique: Overglaze decal and freehand gilding.
Description: The blank has a very irregular edge with gilding accenting the high points. The pattern has 2 regions. The first is a band of alternating groups of 3 roses and 3 blue violets joined by leaves. The second is a region with alternating isolated roses and violets.
Associated Maker's Marks, Figure: 92A.
Vessel(s) Represented: A minimum of 2 plates: rim diameter is 18.0 cm, base diameter is 11.0 cm.
Comments: N/A.

RIM GILDING, BODY DECAL

Pattern: 202 **Paste:** Porcelain.
No. of Specimens: 8 **Figure:** 202.
Decorative Technique: Overglaze decal and freehand gilding.
Description: The blank has small scallops on large scallops and a molded lily design. There is a gold edge band with a geometric pattern in black overlying it. Interior to this is a band of pink 4-petal flowers with leaves with yellow buds between groups of 4 flowers. A gold band circles the cup well of the saucer.
Associated Maker's Marks, Figure: 1.
Vessel(s) Represented: 1 cup: rim diameter is 6.0 cm; 1 saucer: rim

diameter is 13.0 cm, base diameter is 7.0 cm.
Comments: N/A.

Pattern: 210 **Paste:** Porcelain.
No. of Specimens: 23 **Figure:** 210.
Decorative Technique: Overglaze decal.
Description: The blank has insert basket weave areas spaced around the edge. The rim is plain. The decals vary from piece to piece. Each has flowers under the basket areas and animals between. All of the flowers are similar, with dark pink flowers, green leaves, grey and gold stems and light pink highlights. The animals are either butterflies or birds, all highly colored. Some highlights on the animals are of raised slip.
Associated Maker's Marks, Figure: 89A.
Vessel(s) Represented: A minimum of 7 bowls: rim diameter is 14.0 cm, base diameter is 8.0 cm.
Comments: Schleiger (1970:13) lists this blank as #211. Jacobson (1979:167) lists it as "Osier".

Pattern: 213 **Paste:** Porcelain.
No. of Specimens: 5 **Figure:** N/A.
Decorative Technique: Overglaze decal and freehand gilding.
Description: The highly ornate blank is gilded on the highlights. The decal is near the shoulder. It consists of draped garlands of pink-violet and yellow roses. There are no center pieces identified for this pattern.
Associated Maker's Marks, Figure: $101A_2$.
Vessel(s) Represented: 1 plate, nearly complete: rim diameter is 16.0 cm, base diameter is 13.0 cm.
Comments: The pieces with the mark show that there is a central ring of the same pattern.

Pattern: 224 **Paste:** Porcelain.
No. of Specimens: 9 **Figure:** 224.
Decorative Technique: Overglaze decal and freehand gilding.
Description: This very ornate blank has ivy leaves and beading extending in from the rim in the interior surface. The edge is gilded. The decal has an arrangement of pink, white, and yellow roses at one point and individual blooms or buds of each color scattered around the remainder of the vessel.
Associated Maker's Marks, Figure: $101A_4$.
Vessel(s) Represented: 1 nearly complete shallow vessel: rim diameter is 20.0 cm, base diameter is 13.0 cm.
Comments: N/A.

Pattern: 227 **Paste:** Porcelain.
No. of Specimens: 4 **Figure:** N/A.
Decorative Technique: Overglaze decal and freehand gilding.
Description: The lid is vented with small round holes. A gold band encircles the rim in from the edge. The decal pattern consists of a

green twining branch encircling the lid that is periodically interrupted by clusters of flowers. A pink rose is the dominant feature of each of the 2 complete clusters present, but the other flowers vary greatly. The predominant colors are purples and yellows. No body pieces were identified.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 lid: rim diameter is 16.0 cm.
Comments: N/A.

Pattern: 235 **Paste:** porcelain.
No. of Specimens: 17 **Figure:** 235.
Decorative Technique: Overglaze decal and freehand gilding.
Description: The 28 x 20 cm rectangular blank has broad scallops that are gilded. Interior to this is a smaller molded scallops design with feather gilding that extends to the base. The underside of the flat base is unglazed. The interior has scattered decals of purple and yellow pansies and buds.
Associated Maker's Marks, Figure: 86A.
Vessel(s) Represented: 1 nearly complete dresser tray.
Comments: Although there may be 2 seperate concentrations of this pattern in N0 W115 and N5 W125, it is definitely only one item.

Pattern: 280 **Paste:** Porcelain.
No. of Specimens: 53 **Figure:** 280.
Decorative Technique: Overglaze decal and freehand gilding.
Description: The pieces are edge. The decal is a braided rope with a fringed effect. The background is black and the rope is gold with blue between the coils. There are periodic clusters of 3 flowers arranged in a triangle with 2 blue at the lower points and 1 lavender at the apex. The saucer has a gold band at the cup ring. The cup handle has a gold band.
Associated Maker's Marks, Figure: 102A.
Vessel(s) Represented: A minimum of 3 cups: rim diameter is 9.0 cm, base diameter is 5.0 cm; a minimum of 5 saucers: rim diameter is 15.0 cm, base diameter is 5.0 cm.
Comments: The CMM assemblage contains a minimum of 8 cups and 12 saucers.

Pattern: 284 **Paste:** Porcelain.
No. of Specimens: 19 **Figure:** 284.
Decorative Technique: Overglaze decal and freehand gilding.
Description: The blanks of this serving set have elaborately scalloped edges with a raised dor molding. The plate has cutout handles. The dot molding is highlighted in blue and gold. Below is a beaded band. They have a gold stencil of daisies hanging upside down from a mottled band. The center decal is a circular motif of a cluster of red roses and white hydrangea.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 serving vessel: rim diameter is 23.5 cm, base diameter is 14.5 cm; 1 bowl: rim diameter is 20.0 cm, base diameter is 12.0 cm.

Comments: Found only between W120 and W140.

Pattern: 285 Paste: Porcelain.
No. of Specimens: 33 Figure: 285.
Decorative Technique: Overglaze decal.
Description: The blank is plain. A pattern of green morning glories, touched in white, encircles the rim. They are fairly realistic with light brown foliage. There is not enough body pieces to determine the extent of the pattern.
Associated Maker's Marks, Figure: $90B_2$.
Vessel(s) Represented: A minimum of 2^2 cups: rim diameter is 10.0cm, base diameter is 5.0 cm; a minimum of 1 saucer: rim diameter is 14.0 cm, base diameter is 9.0 cm; a minimum of 1 plate: rim diameter is 22.0 cm, base diameter is 14.0 cm; 3 unidentifiables.
Comments: Schleiger (1970:100) lists this pattern as #341. This is the same pattern as 435 below except for color.

Pattern: 288 Paste: Porcelain.
No. of Specimens: 6 Figure: 288.
Decorative Technique: Overglaze decal and freehand gilding.
Description: The blank has a raised dot molding following the scalloped edge. Two gold bands, one on the edge and one covering the molding, encircles the vessel. The decal is mostly a green leaf motif with red tips. Small blue fine pointed flowers are sprinkled around.
Associated Maker's Marks, Figure: $89D_2$.
Vessel(s) Represented: 1 cup: rim diameter is 8.0 cm; 1 saucer: rim diameter is 11.0 cm, base diameter is 7.0 cm.
Comments: Jacobson (1979:206) has this pattern as #374, "Bartlett" with the "star" blank. All three cup fragments were in one FC in N5 W110. The saucer was confined to 2 adjacent squares, N5 W120 and 125. A single discarding of both items is indicated.

Pattern: 313 Paste: Porcelain.
No. of Specimens: 3 Figure: N/A.
Decorative Technique: Overglaze decal.
Description: The blank has flat scallops and an indistinguishable raised design. The rim has pink multi-petalled flowers with yellow centers, blue flowers with purple centers and feathered edges and much foliage. No body fragments were identified.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: Unknown: probably from one item.
Comments: N/A.

Pattern: 330 Paste: Porcelain.
No. of Specimens: 8 Figure: N/A.
Decorative Technique: Overglaze decal and freehand gilding.
Description: The blank has fluted, scalloped edges that are gilded internally and externally. The decal is a blue flower with the stem lying horizontally along the bowl. The vessel is decorated internally and externally.

Associated Maker's Marks, Figure: 89C.
Vessel(s) Represented: 1 candy dish.
Comments: Schleiger (1970:10,11) lists the blank as #205 and the gilding as 213.

Pattern: 336 **Paste:** Porcelain.
No. of Specimens: 57 **Figure:** 336.
Decorative Technique: Overglaze decal with freehand and stenciled gilding.
Description: The edge of the plain blank is gilded. An edge band is formed by groupings of three pink flowers resembling lady slippers connected by short garlands of green leaves. Interior to the floral band is stenciled gold band of triangles and crosses.
Associated Maker's Marks, Figure: 43.
Vessel(s) Represented: A minimum of 3 cups: rim diameter is 9.0 cm; a minimum of 2 saucers: rim diameter is 15.0 cm, base diameter is 9.0 cm.
Comments: N/A.

Pattern: 345 **Paste:** Porcelain.
No. of Specimens: 6 **Figure:** 345.
Decorative Technique: Overglaze decal.
Description: The scalloped rim has a floral design in the blank. The design consists of sprays of flowers from the daisy family in purple, pink-red, yellow, and white with abundant foliage. Each spray has 4 or 5 dominant flowers and several smaller auxillary blooms that trail down into a festoon. No center fragments were identified.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 plate: rim diameter is 20.0 cm, base diameter is 12.0 cm.
Comments: N/A.

Pattern: 364 **Paste:** Porcelain.
No. of Specimens: 69 **Figure:** 364.
Decorative Technique: Overglaze decal and stenciled gilding.
Description: The blank has a scalloped edge with an indented punctate design. A series of gold geometric scrolls joined by a scroll chain that encircles the rim. The outer edge of the well is encircled by a ring of alternating 2 and 3 rose clusters. A rose culter is present at the center of the plate.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 3 plates: rim diameter is 18.0 cm, base diameter is 12.0 cm.
Comments: N/A.

Pattern: 367 **Paste:** Porcelain.
No. of Specimens: 2 **Figure:** 367.
Decorative Technique: Overglaze decal.
Description: This very small cup has no rim decoration. The body has 5 different blue decals of scrolls or flowers scattered near the

handle. The opposite side has one large decal of 2 cherubs with flowers in wreaths and a basket. One is reclining; the other is sitting holding a wreath.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 nearly complete cup: rim diameter is 6.0 cm, base diameter is 3.5 cm.
Comments: Either a child's item or demitasse.

Pattern: 368 **Paste:** Porcelain.
No. of Specimens: 9 **Figure:** 368.
Decorative Technique: Overglaze decal and stenciled gilding.
Description: A geometric pattern of stenciled gold is found on the rim. The shoulder is encircled by a green laurel band below which are festoons of pink roses and leaves.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: Possible creamer: rim diameter is 6.0 cm, base diameter is 5.0 cm.
Comments: N/A.

Pattern: 379 **Paste:** Porcelain.
No. of Specimens: 13 **Figure:** 379.
Decorative Technique: Overglaze decal and freehand gilding.
Description: The plain blank saucer is bowl shaped. The edge of each item is gilded. The body decal has very realistic branches of roses each holding one to five pink roses and leaves. Highlights of the branches and the leaf tips are pink. There are at least 3 branches on each saucer.
Associated Maker's Marks, Figure: 93A.
Vessel(s) Represented: A minimum of 7 cups: rim diameter is 9.0 cm; a minimum of 6 saucers: rim diameter is 14.0 cm, base diameter is 10.0 cm.
Comments: N/A.

Pattern: 384 **Paste:** Porcelain.
No. of Specimens: 2 **Figure:** N/A.
Decorative Technique: Overglaze decal and freehand gilding.
Description: The edge is gilded and has another thin band of gold. Interior to the gold is a border pattern of pink roses with leaves, all facing to the right. No body pieces were identified.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 cup: rim diameter is 9.0 cm; 1 saucer: rim diameter is 14.0 cm.
Comments: N/A.

Pattern: 385 **Paste:** Porcelain.
No. of Specimens: 7 **Figure:** 385.
Decorative Technique: Overglaze decal and freehand gilding.
Description: The rim of the blank is divided into wedges, each of which is outlined in gold bands. In each section thus formed are spaced 3 flower stems, some with single blooms and some with multiple

Pattern: 247 **Paste:** Porcelain.
No. of Specimens: 3 **Figure:** N/A.
Decorative Technique: Overglaze handpainting and freehand gilding.
Description: The blank has a flat unglazed bottom, irregular shape and steep sides. The border is a patchwork of at least orange, yellow and green with enameled flowers and gold scroll. The center is a realistic watercolor effect of a scene with at least 2 seated figures in the foreground.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 odd dish, decorative.
Comments: N/A.

Pattern: 248 **Paste:** Porcelain.
No. of Specimens: 17 **Figure:** N/A.
Decorative Technique: Overglaze handpainting and freehand gilding.
Description: The blank has a square rim and a round base. The exterior has scattered blue butterflies. The interior has areas outlined by blue bands of overlapping alternating cectefois making square borders. Inside is a floral medallion in the watercolor effect and enamels. The rest of the item has enamelled flowers, some realistic and some abstract. Areas of color are done with the wash effect. There is highlight gilding throughout.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 miscellaneous decorative object: base diameter is 12.0 cm.
Comments: N/A.

Pattern: 250 **Paste:** Porcelain.
No. of Specimens: 10 **Figure:** 250.
Decorative Technique: Overglaze handpainting and freehand gilding.
Description: The blank is slightly fluted. The rim has orange lobed areas that have overlying gold scroll work. The main design is a picture of water and horizon with palm and flowers in the foreground.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 probable plate, decorative: rim diameter is 19.0 cm, base diameter is 11.0 cm.
Comments: N/A.

Pattern: 254 **Paste:** Porcelain.
No. of Specimens: 2 **Figure:** N/A.
Decorative Technique: Overglaze handpainting and freehand gilding.
Description: The edge of the blank is ruffled and was gilded. The gilded area is now blue. Pink daubs are scattered over the body. These have been made into 5-petal flowers by gold and white enamel.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 saucer: rim diameter is 10.0 cm, base diameter is 7.0 cm.
Comments: N/A.

of scroll and flowers. No body fragments were identified.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 cup: rim diameter is 10.0 cm.
Comments: N/A.

Pattern: 422 **Paste:** Porcelain.
No. of Specimens: 2 **Figure:** N/A.
Decorative Technique: Overglaze decal and handpainting.
Description: The rim is plain. The body pattern consists of large violets with leaves. The centers are highlighted with white raised slip.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 unidentifiable, probable bowl.
Comments: N/A.

Pattern: 501 **Paste:** Porcelain.
No. of Specimens: 35 **Figure:** N/A.
Decorative Technique: Overglaze decal and handpainting, with or without gilding.
Description: This category consists of all fragments containing overglaze decals and handpainting that could not be attributed to any of the above patterns.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: N/A.
Comments: N/A.

HANDPAINTED ONLY (WITH AND WITHOUT GILDING) RIM AND BODY

Pattern: 225 **Paste:** Porcelain.
No. of Specimens: 8 **Figure:** 225.
Decorative Technique: Overglaze handpainting and freehand gilding.
Description: The edge has a wide band of gilding. The background has an airbrush effect of green, beige and orange. The center has large, naturalistic pink roses with leaves.
Associated Maker's Marks, Figure: 91A.
Vessel(s) Represented: 1 plate, decorative: base diameter is 14.0 cm.
Comments: Very typical of handpainted Limoges wares like #401.

Pattern: 242 **Paste:** Porcelain.
No. of Specimens: 6 **Figure:** 242.
Decorative Technique: Overglaze handpainting and freehand gilding.
Description: The edge is ruffled and gilded. The sides are perpendicular to the base. The exterior of the sides have alternating single roses with leaves and gold 3-leaf motif. One rose is found on the base of the interior.
Associated Maker's Marks, Figure: 10A.
Vessel(s) Represented: 2 heart-shaped, lidless, decorative boxes.
Comments: 5 of the 6 fragments are located in F21 of N0 W95, probably representing one item.

leaves. The flowers are painted pink.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 saucer: rim diameter is 14.0 cm, base diameter is 9.0 cm.
Comments: N/A.

Pattern: 299 **Paste:** Porcelain.
No. of Specimens: 5 **Figure:** N/A.
Decorative Technique: Overglaze decal(?), handpainting and freehand gilding.
Description: The blank is plain except for a beaded edge that is gilded. The center has a brown outline decal (or transfer) of a riot of flowers filling the entire well. These flowers and leaves have been painted green, pink and yellow.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 plate: base diameter is 9.0 cm.
Comments: N/A.

Pattern: 304 **Paste:** Porcelain.
No. of Specimens: 2 **Figure:** 304.
Decorative Technique: Tinted glaze, overglaze decal, handpainting and freehand gilding.
Description: The blank is a maple leaf shaped with raised dots. The dots are gilded. A decal and painted decoration at the center is a picture of a building bearing the legend "Queen's Royal Hotel, Niagrara-on-the-Lake".
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 dish, decorative
Comments: A souvenir piece.

Pattern: 322 **Paste:** Porcelain.
No. of Specimens: 9 **Figure:** N/A.
Decorative Technique: Overglaze decal, handpainting and freehand gilding.
Description: No rim fragments were identified. 2 vertical bands of lime green and pink are separated by areas of white bordered in gold. There is gold scroll work in the white areas. A decal of a bouquet of assorted pink, red and blue 5-petal flowers is located in the pink area.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 vase.
Comments: N/A.

Pattern: 405 **Paste:** Porcelain.
No. of Specimens: 7 **Figure:** N/A.
Decorative Technique: Overglaze decal, handpainting and freehand and stenciled gilding.
Description: The edge is gilded. A green scalloped border edge with gold is next. There is a gold dot in each scallop. The next band has repeated single pink roses. This is followed by a stenciled gold band

Pattern: 409 **Paste:** Porcelain.
No. of Specimens: 3 **Figure:** 409.
Decorative Technique: Overglaze decal, handpainting and freehand gilding.
Description: The pictorial saucer has a background of blues and greens representing ice with trees and shrubs around. The decals are 2 children in winter dress, one sprawled in the ice.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 saucer: rim diameter is 15.0 cm, bse diameter is 9.0 cm.
Comments: N/A.

RIM GILDED, BODY HANDPAINTED AND DECAL

Pattern: 211 **Paste:** Porcelain.
No. of Specimens: 15 **Figure:** N/A.
Decorative Technique: Overglaze decal, handpainting and freehand gilding.
Description: This squat bowl has scalloped edges. The edge and handles are gilded. The body decoration is a decal of small bell-shaped flowers on stems. The yellow and orange colors of the flowers are handpainted.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 sugar bowl: rim diameter is 6.0 cm; 1 sugar bowl lid: rim diameter is 5.0 cm.
Comments: Probable European manufacture.

Pattern: 233 **Paste:** Porcelain.
No. of Specimens: 6 **Figure:** N/A.
Decorative Technique: Overglaze decal, handpainting and stenciled gilding.
Description: The edge of the blank is flaired and there is an unidentified molded floral pattern. There is no rim pattern. The body decoration consists of an irregular green luster band periodically interrupted by a decal of a large dark rose. A stenciled gold swirl motif runs along the top of the band. The center is not known.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 bowl, shallow, decorative: base diameter is 16.0 cm.
Comments: N/A.

Pattern: 273 **Paste:** Porcelain.
No. of Specimens: 3 **Figure:** N/A.
Decorative Technique: Overglaze decal, handpainting and freehand gilding.
Description: The blank has beaded and plain flutes running down from the rim in a spiral. The edge and rim are gilded. The body pattern is a decalled outline of a stem with 3 buds, 3-5 petal flowers, and

below the design on the cup. The cup body is slightly fluted. There are portions of the decal on the cup interior.
Associated Maker's Marks, Figure: 43.
Vessel(s) Represented: A minimum of 2 cups: rim diameter is 9.0 cm; a minimum of 2 saucers: rim diameter is 15.0 cm, base diameter is 10.0 cm; a minimum of 3 saucers: rim diameter is 14.0 cm, base diameter is 9.0 cm.
Comments: N/A.

Pattern: 376
No. of Specimens: 15
Decorative Technique: Overglaze decal, handpainting and freehand stenciled gilding.
Description: The saucer is a plain blank. The cup has an excurvate rim. The edge is gilded and has a stenciled gold laurel band. The body has scattered clumps of one to three red roses decals. The roses are hand colored. The roses are found on both the interior and exterior of the cup.
Associated Maker's Marks, Figure: 71A.
Vessel(s) Represented: A minimum of 1 cup: rim diameter is 9.0 cm; a minimum of 1 saucer: rim diameter is 14.0 cm, base diameter is 8.0 cm.
Comments: N/A.

Paste: Porcelain.
Figure: N/A.

Pattern: 395
No. of Specimens: 5
Decorative Technique: Overglaze decal, handpainting and freehand gilding.
Description: The blank is a molded, rectangular basket. The sides have gilded edges and a pink wash. The basal interior is white with a decal of a bouquet of pink and blue daisies.
Associated Maker's Marks, Figure: 174.
Vessel(s) Represented: 1 decorative object, basket.
Comments: Probable European manufacturer.

Paste: Porcelain.
Figure: 395.

Pattern: 398
No. of Specimens: 7
Decorative Technique: Overglaze decal, handpainting and freehand gilding.
Description: The blank has shallow, irregular scallops and the edge is gilded. The rim is divided into semi-rectangular areas by a series of molded parallel lines. The shoulder is fluted. The pattern does not follow any of these molded areas. There is a decal of green beads around the rim followed by a band of a leaf and berry chain with small white flowers at the low point of the drapes and a single flower in the middle of the area bordered by each drape. Between drapes is an area filled by a bow and a single hanging leaf and berry motif. Bow, flowers, and some leaves are handpainted in yellow.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 plate, nearly complete: rim diameter is 20.0 cm, bse diameter is 12.0 cm.
Comments: N/A.

Paste: Porcelain.
Figure: N/A.

7.0 cm, base diameter is 5.0 cm.
Comments: N/A.

Pattern: 439 Paste: Porcelain.
No. of Specimens: 4 Figure: 439.
Decorative Technique: Overglaze decal and handpainting.
Description: The decoration consists of three alternating rows of crude roses. Rows 1 and 3 are composed of single roses. The center row is made of alternating two and three rose groups.
Associated Maker's Marks, Figure: 69A, B.
Vessel(s) Represented: 1 cup, fragment; 1 saucer: rim daimeter is 12.0 cm, base diameter is 8.0 cm.
Comments: N/A.

HANDPAINTING AND DECAL (WITH AND WITHOUT GILDING) RIM ONLY

Pattern: 265 Paste: Porcelain.
No. of Specimens: 15 Figure: 265.
Decorative Technique: Overglaze decal, handpainting and freehand gilding.
Description: The edge is gilded. The rim pattern consists of a decal of wreaths surrounding single roses alternating with green scrolls and leaves. The roses are painted. Both motifs have lead appendages that extend a short way toward the base. The body is plain.
Associated Maker's Marks, Figure: 5.
Vessel(s) Represented: 1 cup: rim diameter is 9.0 cm; a minimum of 3 plates: rim diameter is 16.0 cm, base diameter is 9.0 cm.
Comments: N/A.

Pattern: 351 Paste: Porcelain.
No. of Specimens: 3 Figure: 351.
Decorative Technique: Overglaze decal, handpainting and freehand gilding.
Description: The edge is scalloped and gilded. A gold rim band is interrupted by a blue bow outlined in red. The body decal has leaf streamers and roses, but is too incomplete to determine the pattern. The vessel is banded inside and out.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 unidentifiable, probable cup.
Comments: N/A.

Pattern: 363 Paste: Porcelain.
No. of Specimens: 44 Figure: 363.
Decorative Technique: overglaze decal, handpainting and freehand gilding.
Description: The edge is a molded shelf. On this is a green border with a gold motif. The body has a grouping of red roses and morning glories with small red and blue 5-petal flowers interspersed with leaves. There is a gold line at the top of the body, the cup well, and

gold-colored band decal with black spiked edges and a series of black horizontal ovals. This band is interrupted by a cluster of 3 pink roses with leaves. The cup has a gold band at the base; the saucer has one around the cup well. The cup handle has gilded edges and the same gold-colored band, interrupted by a single rose.
Associated Maker's Marks, Figure: $90C_3$.
Vessel(s) Represented: A minimum of 1 cup: rim diameter is 9.0 cm, base diameter is 5.0 cm; a minimum of 1 saucer: rim diameter is 16.0 cm, base diameter is 10.0 cm.
Comments: N/A.

Pattern: 418 **Paste:** Porcelain.
No. of Specimens: 6 **Figure:** N/A.
Decorative Technique: Overglaze decal, handpainting and freehand gilding.
Description: The rim is scalloped, with the flutes extending down the rim to make a petal effect. The decal is a brown outline with handpainted blue coloring. The pattern is unclear from the stamp, but is evidently floral. There is gilding in the hollows of the scallops.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 plate: rim diameter is 20.0 cm; 4 unidentifiables.
Comments: N/A.

Pattern: 420 **Paste:** Porcelain.
No. of Specimens: 11 **Figure:** 430.
Decorative Technique: Overglaze decal, handpainting and freehand gilding.
Description: The edge is gilded. The decal is an outline of a spray of the main flowers, one of which is always a rose, surrounded by small flowers, birds and leaves. These smaller ones include a circle of 4 small pink flowers below the spray. The flowers are handpainted in red, purple, and blue, and the leaves in yellow and green. Small flower and leaf trailings connect the sprays and there is a loop in each trailer halfway between the sprays. The interior and exterior of the cup are both decorated.
Associated Maker's Marks, Figure: 162.
Vessel(s) Represented: A minimum of 1 cup: rim diameter is 9.0 cm, base diameter is 4.5 cm; a minimum of 1 saucer: rim diameter is 14.0 cm, base diameter is 7.0 cm.
Comments: N/A.

Pattern: 432 **Paste:** Porcelain.
No. of Specimens: 7 **Figure:** 432.
Decorative Technique: Overglaze decal and handpainting.
Description: The blank is fluted. Although this is a set, no two pats are exactly the same, each being some combination of flowers and butterflies. The decal is brown with yellow and orange handpainting filling in some areas.
Associated Maker's Marks, Figure: 104A.
Vessel(s) Represented: A minimum of 6 butter pats: rim diameter is

Comments: The decal resembles #408 below and may represent 2 different uses of the same decal. Probable European manufacture.

Pattern: 397 **Paste:** Porcelain.
No. of Specimens: 10 **Figure:** N/A.
Decorative Technique: Overglaze decal and handpainting.
Description: A trailing design of outlined double blossoms is dense in a brown decal. The blossoms are at various stages of opening and are always seen in side view. Those that are most fully opened are handpainted blue with yellow centers.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 plate: rim diameter is 15.0 cm, base diameter is 9.0 cm.
Comments: N/A.

Pattern: 408 **Paste:** Porcelain.
No. of Specimens: 3 **Figure:** 408.
Decorative Technique: Overglaze decal, handpainting and freehand and stenciled gilding.
Description: The blank has a compound scallop edge that is gilded. A wreath motif with blue ribbon twining around it is followed by a blue band bounded by gold. A gold ivy stencil runs along the center of this band. The body decal hangs from the shoulder of the plate. It consists of festoons of 4 pink roses from the anchor points of which hang sprays of 5 blue petal blossoms.
Associated Maker's Marks, Figure: 116A.
Vessel(s) Represented: A minimum of 1 plate: rim diameter is 15.0 cm, base diameter is 9.0 cm.
Comments: The decal resembles #382 and may represent 2 different uses of the same decal.

Pattern: 412 **Paste:** Porcelain.
No. of Specimens: 18 **Figure:** N/A.
Decorative Technique: Overglaze decal, handpainting and freehand gilding.
Description: The scalloped border is painted green and edged in either side with gold. The body decals are large pink roses. These are repeated around the interior rim, forming a large band around the upper half of the cup. The handle is gilded.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 cup: rim diameter is 9.0 cm.
Comments: N/A.

Pattern: 413 **Paste:** Porcelain.
No. of Specimens: 9 **Figure:** 413.
Decorative Technique: Overglaze decla, handpainting and freehand gilding, and colored glaze.
Description: The edge is banded in gold. The outer 2/3 of the vessel is cream colored. A black band of handpainting separates the cream area from the white. One-third of the way into the cream area is a

gilding.
Description: The pattern consists of chained garlands with a 5-petal pink flower on one segment and a green bow on the other. The outline is a brown decal and the colors are handpainted.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 cup: rim diameter is 6.5 cm, base diameter is 3.5 cm.
Comments: N/A.

Pattern: 375 **Paste:** Porcelain.
No. of Specimens: 33 **Figure:** 375.
Decorative Technique: Overglaze decal and freehand gilding.
Description: The unevenly scalloped edge is gilded. The decal consists of green wreaths around a single rose and bud sprays that alternate with groups of 2 single roses, 2 blue buds and green crosses. The center has a spray of 2 roses, rose buds, and blue buds.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 3 plates: rim diameter is 18.0 cm, base diameter is 12.0 cm.
Comments: N/A.

Pattern: 378 **Paste:** Porcelain.
No. of Specimens: 13 **Figure:** 378.
Decorative Technique: Overglaze decal, handpainting and freehand gilding.
Description: The blank has both large and small scallops. The edge is gilded. The decal is a brown design of trailing vines wit leaves that have been handpainted in grey and green. Yellow handpainted roses have been added both on the rim and at the center of the plate. The cup is decorated on both the interior and exterior surfaces.
Associated Maker's Marks, Figure: $86A_2$.
Vessel(s) Represented: A minimum of 1 cup: rim diameter is 8.0 cm; a minimum of 1 saucer: base diameter is 10.0 cm; a minimum of 2 plates: rim diameter is 20.0 cm, base diameter is 13.0 cm.
Comments: N5 W110 contained 4 of the 13 fragments, representing all the vessel types. The other fragments were broadly scattered west of W110.

Pattern: 382 **Paste:** Porcelain.
No. of Specimens: 18 **Figure:** 382.
Decorative Technique: Overglaze decal, handpainting and freehand and stenciled gilding.
Description: There is a green band around the rim. The edge is gilded and a stenciled gold pattern of alternating clubs (clover) and fleur-de-lis overlay the green. The body decoration is a decal of festoons of 4 pink roses with leaves. From each anchor point hangs a spray of small blue 5-petal blossoms. The center has a spray of roses and blue blossoms. The cup handle is gilded.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 cup: rim diameter is 9.0 cm; a minimum of 3 plates: rim diameter is 15.0 cm, base diameter is 9.0 cm.

Decorative Technique: Overglaze decal, handpainting and freehand gilding.
Description: The neck is gilded. There are two groupings of pink and white blossom decals, highlighted with white raised enamel paint. A larger group denotes the front of the shakers, with a smaller group on the back.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 2 shakers, salt and pepper: base diameter is 3.5 cm.
Comments: N/A.

Pattern: 358 **Paste:** Porcelain.
No. of Specimens: 11 **Figure:** 358.
Decorative Technique: Overglaze handpainting, decal and freehand and stenciled gilding.
Description: The edge is gilded. The border is rough, painted in light green that fades towards the center. On the lower rim and shoulder are clumps of 3 pinks roses with leaves alternating with 2 single roses, all joined by ropes of ivy. Some of the highlights are accented by white enamel. A gold stenciled cross and dart motif overlies a dark green line around the center of the plate. Immediatly above this line, single column line type stenciled flowers are scattered. The center has a rose cluster with leaves.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 plate: rim diameter is 17.0 cm, base diameter is 11.0 cm.
Comments: N/A.

Pattern: 359 **Paste:** Porcelain.
No. of Specimens: 93 **Figure:** 359.
Decorative Technique: Overglaze decal and freehand gilding.
Description: The large bowl is slightly fluted and the edge is beaded and slightly flared. The small bowls have scalloped edges. All edges are gilded. The decal has pink roses and lavender violets with leaves. Groups of 2 roses and 2 violets alternate with groups of 4 roses and 1 violet, tied together by streamers of leaves and 3 violets. The design is found on both the interior and exterior of the large bowl and on the interior of the small bowls. The large one has a gold band on the exterior at the base. The decals, although the same color and form, are smaller on the smaller bowls than on the large.
Associated Maker's Marks, Figure: $83A_2$.
Vessel(s) Represented: A minimum of 1 bowl: rim diameter is 20.0 cm, base diameter is 16.0 cm; a minimum of 7 bowls: rim diameter is 13.0 cm, base diameter is 8.0 cm.
Comments: The CMM assemblage contains a minimum of 8 small bowls. This evidently a berry set that utilized 2 sizes of decals on the 2 sizes of vessels.

Pattern: 347 **Paste:** Porcelain.
No. of Specimens: 2 **Figure:** N/A.
Decorative Technique: Overglaze decal, handpainting and freehand

Decorative Technique: Overglaze decal and freehand gilding.
Description: Only body pieces were identified. The blank is slightly squared, has a scalloped base, and a raised irregular line in the interior at the base. This last is gilded. The decal is found in the interior and has groupings of purple-pink flowers of the mum family.
Associated Maker's Marks, Figu : $101A_5$.
Vessel(s) Represented: 1 bowl.
Comments: N/A.

Pattern: 365 **Paste:** Porcelain.
No. of Specimens: 5 **Figure:** 365.
Decorative Technique: Overglaze decal and stenciled gilding.
Description: The edge is scalloped, but the edge design is not known. Sprays of pink blossoms (similar to apple blossoms), with leaves are found grouped around the upper section of the exterior body of the bowls and the outer 1/2 of the body lid. The interior center also has a small spray.
Associated Maker's Marks, Figure: $11B_3$.
Vessel(s) Represented: 1 lid; 2 large serving dishes.
Comments: N/A.

Pattern: 500 **Paste:** Porcelain.
No. of Specimens: 255 **Figure:** N/A.
Decorative Technique: Overglaze decal.
Description: These specimens represent those pieces that have decal decorations that could not be identified as any of the above patterns.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: N/A.
Comments: N/A.

HANDPAINTED AND DECAL (WITH AND WITHOUT GILDING) RIM AND BODY

Pattern: 215 **Paste:** Porcelain.
No. of Specimens: 31 **Figure:** N/A.
Decorative Technique: Overglazed handpainting, decal and freehand gilding.
Description: The blank is highly sculptured. Each sculptured section is handpainted: a flower filled in with pink with blue leaves; a yellow cloud; an indented arc from rim to well filled with pink and bordered by yellow. The sculpting is all highlighted by gold. A decal of trailings of small roses extends from the rim into the well. These flowers are filled in with handpainting and leaves have been added.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 2 plates: rim diameter is 20.0 cm, base diameter is 13.0 cm.
Comments: 18 fragments come from F16 N0 W95 and N5 W95.

Pattern: 237 **Paste:** Porcelain.
No. of Specimens: 9 **Figure:** N/A.

Decorative Technique: Overglaze decal.
Description: The blank has large scallops and an indistinguishable molded design. The rim design has blue flowers outlined in brown. The stems are brown lines shaded in blue. Some small 5-petal flowers are present. No body pieces were identified.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 plate.
Comments: N/A.

Pattern: 433 Paste: Porcelain.
No. of Specimens: 1 Figure: 433.
Decorative Technique: Overglaze decal and stenciled gilding.
Description: A floral stencil of gilding is found at the rim. The draped garlands of pink and yellow roses is located closer to the shoulder than the edge, but on the rim.
Associated Maker's Marks, Figure: $101A_3$.
Vessel(s) Represented: 1 saucer: rim diameter is 14.0 cm, base diameter is 9.0 cm.
Comments: N/A.

RIM UNKNOWN, BODY DECAL

Pattern: 205 Paste: Porcelain.
No. of Specimens: 4 Figure: N/A.
Decorative Technique: Overglaze decal, stencil, and freehand gilding.
Description: The blank is plain. The edge is gilded. A stenciled band in green paint is composed of connected 3-leaf motifs. Interior to this is a large gold band followed by a decal of a floral and ribbon band containing roses, daisies, leaves, and fruit. There is another gold band and a smaller version of the stencil.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 saucer: rim diameter is 14.0 cm, base diameter is 9.0 cm.
Comments: N/A.

Pattern: 241 Paste: Porcelain.
No. of Specimens: 6 Figure: N/A.
Decorative Technique: Tinted glaze, overglaze decal, and freehand gilding.
Description: The rim is folded in some areas and it is convoluted. The rim is painted with a yellow-colored glaze. Gold follows the design of the mold. A white cartouche has a decal of winged infants at play.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 vase.
Comments: N/A.

Pattern: 298 Paste: Porcelain.
No. of Specimens: 2 Figure: 298.

gilding.
Description: The edge is gilded. The rim has a stenciled gold curl and leaf border. The upper body has garlands of pink roses and leaves on either side of the vessel that do not meet under the spout.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 creamer.
Comments: N/A.

Pattern: 435 Paste: Porcelain.
No. of Specimens: 10 Figure: 435.
Decorative Technique: Overglaze decal.
Description: The blank is plain. A pattern of pink morning glories ranging in color from pale pink to dark pink encircles the rim. The foliage is shadow grey. There is not enough body pieces to determine the extent of the pattern.
Associated Maker's Marks, Figure: $90B_3$.
Vessel(s) Represented: A minimum of 1 cup: rim diameter is 10.0 cm; a minimum of 1 saucer: rim diameter is 14.0 cm, base diameter is 9.0 cm.
Comments: Schleiger (1970:100) lists this pattern as 341A. This is the same pattern as 285 above.

Pattern: 446 Paste: Porcelain.
No. of Specimens: 3 Figure: 446.
Decorative Technique: Overglaze decal and freehand gilding.
Description: The edge of the plain blank is gilded. The pattern is a band of alternately facing, evenly spaced pink roses with 5 leaves each. Small vine trailings from each rose meet to form a garland below the band. The edge of the cup well is gilded.
Associated Maker's Marks, Figure: 185.
Vessel(s) Represented: A minimum of 2 cups: rim diameter is 9.0 cm; a minimum of 1 saucer: rim diameter is 15.0 cm, base diameter is 9.0 cm.
Comments: N/A.

Pattern: 451 Paste: Porcelain.
No. of Specimens: 7 Figure: N/A.
Decorative Technique: Overglaze decal and freehand gilding.
Description: The cup blank is collared with a wheat motif in the collar area. The edge is gilded and a band resembling a twisted ribbon of gold separates the collar from the body. The body design of assorted pink and blue flowers with leaves and stems is present on both the interior and exterior surfaces.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 cup: rim diameter is 10.0 cm.
Comments: N/A.

RIM DECAL, BODY UNKNOWN

Pattern: 360 Paste: Porcelain.
No. of Specimens: 5 Figure: N/A.

blooms. The flowers vary greatly, but are all red or blue. No center pieces were identified.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 plate: base diameter is 16.0 cm.
Comments: N/A.

Pattern: 388 **Paste:** Porcelain.
No. of Specimens: 16 **Figure:** N/A.
Decorative Technique: Overglaze decal and freehand gilding.
Description: The plain blank edge is double-banded with gold. The pattern consists of spaced groupings of three red roses connected by arching leaf patterns over and under to form a band of flowers. The upper arch has a small rose and two yellow flowers among the leaves. The lower arch has one small purple flower.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 cup: rim diameter is 10.0 c m; a minimum of 7 saucers: rim diameter is 15.0 cm, base diameter is 7.0 cm.
Comments: The cup and saucer were represented by separate concentrations with the cup being in the W95 squares and the saucers being in the W125-130 squares. (One cup fragment in N10 W143).

Pattern: 416 **Paste:** Porcelain.
No. of Specimens: 5 **Figure:** 416.
Decorative Technique: Overglaze decal and freehand and stenciled gilding.
Description: This very delicate blank is scalloped, fluted and twisted. The cup rim is slightly flaired. The edge is gilded and a stenciled gold dart pattern is found on both the interior and exterior rims. The decal is a violet with leaves and buds associated.
Associated Maker's Marks, Figure: $38A_2$.
Vessel(s) Represented: A minimum of 1 plate: rim diameter is 8.0 cm.
Comments: N/A.

Pattern: 426 **Paste:** Porcelain.
No. of Specimens: 4 **Figure:** N/A.
Decorative Technique: Overglaze decal and freehand gilding.
Description: The blank is very elaborate with scalloping and cartouches. Some gilding frames the decals in the cartouches. The decal is a festoon with a yellow blossom and a red rose at the fullest part of the festoon with small blue and pink flowers around this area. The repeat and central design of this pattern were not established.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 plate.
Comments: N/A.

Pattern: 428 **Paste:** Porcelain.
No. of Specimens: 6 **Figure:** N/A.
Decorative Technique: Overglaze decal and freehand and stenciled

Pattern: 260 **Paste:** Porcelain.
No. of Specimens: 5 **Figure:** 260.
Decorative Technique: Overglazed handpainting and freehand and raised gilding.
Description: There are 3 cartouches along the edge containing pink roses and leaves. At least one has a blue rose, too. The entire rim is flat gold except for these cartouches. It is banded at the edge and shoulder by raised glassy bands. A pair of blossoms and leaves in raised glossy gold fills the area between cartouches. The center has one pink rose with green leaves and blue shadow leaves.
Associated Maker's Marks, Figure: 108C.
Vessel(s) Represented: 1 plate: rim diameter is 13.0 cm, base diameter is 7.0 cm.
Comments: N/A.

Pattern: 272 **Paste:** Porcelain.
No. of Specimens: 17 **Figure:** 272.
Decorative Technique: Overglaze handpainting.
Description: The design on this plate is all outlined in black that may have been stenciled. The are daubed thickly. The border is red rimmed. A pink band is then found that is edged with intersecting black diagonal lines interrrupted periodically for a blue oval with yellow flowers. At the shoulder is a band of black-edged pink fleur-di-lis. Between these 2 bands are trailing flowers in yellow, pink and blue. The well uses the same stencil and daub technique for a flower and peacock design.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 plate: rim diameter is 17.0 cm, base diameter is 14.0 cm.
Comments: Definitely oriental, probably Japanese.

Pattern: 274 **Paste:** Porcelain.
No. of Specimens: 44 **Figure:** N/A.
Decorative Technique: Overglaze handpainting and freehand gilding.
Description: The rim has a wavy gilt border and then a row of red zinnias with white enamel centers. Between the band and the base are purple-red roses or buds. All flowers have watercolor effect leaves and stems.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 cup: rim diameter is 10.0 cm, base diameter is 4.5 cm; a minimum of 3 saucers: rim diameter is 14.0 cm, base diameter is 9.0 cm; 1 unidentifiable.
Comments: Although this pattern is widely dispersed, it occurs mostly in the F21 8-20 cm. The area from N5 W105 through N5-N0 W115 accounts for 65% of the pattern, with saucers predominating in one, cups in two.

Pattern: 275 **Paste:** Porcelain.
No. of Specimens: 59 **Figure:** 275.
Decorative Technique: Overglaze handpainting and freehand gilding.
Description: The decoration is on both interior and exterior surfaces

of the cup. Gold curling lines descending from the rim toward the base alternate with stylized purple flowers with leaves done in the watercolor effect.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 cup: rim diameter is 10.0 cm, base diameter is 4.5 cm; a minimum of 3 saucers: rim diameter is 14.0 cm, base diameter is 9.0 cm.
Comments: N/A.

Pattern: 289 **Paste:** Porcelain.
No. of Specimens: 4 **Figure:** N/A.
Decorative Technique: Overglaze handpainting and raised gold.
Description: The blank is slightly fluted and twisted. The decoration is all raised with ferns ans stems in gold and flowers in white, blue and yellow enamels.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 cup; 1 saucer: rim diameter is 11.0 cm, base diameter is 6.0 cm.
Comments: N/A.

Pattern: 293 **Paste:** Porcelain.
No. of Specimens: 8 **Figure:** N/A.
Decorative Technique: Overglaze handpainting and freehand and raised gilding.
Description: The major flower of this pattern is missing. The minor flowers are purple wnd white buds and blossoms. The stems are of gold. The background of the rim area is beige air brush effect. Life-like leaves from one major flow are present.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 plate: rim diameter is 20.0 cm, base diameter is 14.0 cm.
Comments: N/A.

Pattern: 294 **Paste:** Porcelain.
No. of Specimens: 14 **Figure:** 294.
Decorative Technique: Overglaze handpainting and freehand gilding.
Description: The blank has large scallops and is deeply fluted. There is a red border that extends downward in waves that sometimes enclose circular cartouches that once held some gold motif that is now not discernable. There is much gold embellishment in the red area. The remainder of the body has a generous scattering of fairly realistic flowers (zinnias, mums, roses and violets) in pastel colors. The cup handles are red and gold.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 2 cups (or 1 cup with two handles): rim diameter is 9.0 cm; 1 saucer: rim diameter is 14.0 cm, base diameter is 10.0 cm.
Comments: N/A.

Pattern: 301 **Paste:** Porcelain.

No. of Specimens: 22 Figure: 301.
Decorative Technique: Overglaze handpainting and freehand gilding.
Description: The rim has an orange edge. Next is a band of orange shields pointing downward with grey points between. All of this area has gold scroll work. The neck is a dark orange area with a lobed lower edge. This area has extensive gold trailings and at least one gold bird. The body is white with several types of birds, including one large perched bird with exteremely long tail feathers and crest and one swallow on the wing. Several types of flowers are also present, including plum blossoms and peonies. All done in shades of tints of orange and black. Details are often done in gold.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 large vase: rim diameter is 9.0 cm.
Comments: No fragments of this vessel were found west of W130. 9 fragments (41% of sample) were found in N10 W125.

Pattern: 306 Paste: Porcelain.
No. of Specimens: 4 Figure: 306.
Decorative Technique: Overglaze handpainting and freehand gilding.
Description: The edge is gilded. Handpainted violets in violet, red and yellow-grey are scattered all over the surface.
Associated Maker's Marks, Figure: 114A.
Vessel(s) Represented: A minimum of 1 plate: rim diameter is 18.0 cm, base diameter is 11.0 cm.
Comments: There were 2 maker's mark examples which may indicate that there were 2 specimens. The entire sample is from N0 W95 and N5 W95.

Pattern: 307 Paste: Porcelain.
No. of Specimens: 9 Figure: 307.
Decorative Technique: Overglaze handpainting and freehand gilding.
Description: The edge is gilded. The rim design has yellow and pink flowers and black trim. A band of light yellow is followed by a band of geometric designs done in dacker yellow. The flowers are repeated in the center.
Associated Maker's Marks, Figure: $108H_3$.
Vessel(s) Represented: 1 plate: rim diameter is 19.0 cm, base diameter is 13.0 cm.
Comments: N/A.

Pattern: 309 Paste: Porcelain.
No. of Specimens: 3 Figure: 309.
Decorative Technique: Overglaze handpainting and freehand gilding.
Description: The 7cm square blank has slightly flaired sides and pealed corners. The sides are nearly perpendicular to the base. The edge is gilded. The entire piece is painted pale yellow. Small blue flowers are located along 3 sides of the base.
Associated Maker's Marks, Figure: 156.
Vessel(s) Represented: 1 square dish, decorative.
Comments: N/A.

Pattern: 318 Paste: Porcelain.
No. of Specimens: 21 Figure: 318.
Decorative Technique: Overglaze handpainting and freehand and raised gilding.
Description: This dish has flutes and 3 feet. Most of the painting is done with enamels. An aqua border is scalloped. A banded area follows with the following segments: aqua with dots, pink-red with cresents, and another aqua with dots. This area is interrupted by cartouches that contain fairly natural flowers. The center is probably a large flower group, but is not clear.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 tripod dish, decorative.
Comments: N/A.

Pattern: 321 Paste: Porcelain.
No. of Specimens: 8 Figure: 321.
Decorative Technique: Overglaze handpainting and freehand and raised gilding.
Description: The blank is a round shallow bowl with full curve, convoluted edges. The edge is yellow with raised gild seeds inside and out. The interior has a gold basket pattern. A blue band where the sides and base join is outlined with raised gold seeds and interrupted by a large red-brown 4 petal flower, similar to dogwood. The flower is outlined with raised gold surrounded by leaves. There is a circular leaf motif scattered along the band. There is no center present. The exterior has at least 2 smaller versions of the flower and leaves near the rim and some of the circular leaves and vines. There is a gold band around the base.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 bowl, decorative: base diameter is 12.0 cm.
Comments: N/A.

Pattern: 353 Paste: Porcelain.
No. of Specimens: 8 Figure: 353.
Decorative Technique: Overglaze handpainting and freehand gilding.
Description: The border is basically orange with elaborate gold work. It is interrupted often by rectangular areas of other colors. Body has a Japanese scene of a village, river, people and fish. The interior has very crude flowers made of circles and leaves. The bottom rim and entire base are orange. The base has three swallows flying over hills or waves.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 cup: rim diameter is 10.0 cm, base diameter is 4.5 cm.
Comments: This piece is Japanese importware. It shows elements found in various other pieces of this collection (247, 266, and 294).

Pattern: 370 Paste: Porcelain.
No. of Specimens: 5 Figure: N/A.
Decorative Technique: Overglaze handpainting and freehand gilding.
Description: The edge and handle are gilded. Infrequent gold scrolls

descend from the rim. The basic pattern is a painting of large red and pink flowers.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 cup: rim diameter is 9.0 cm, base diameter is 5.0 cm.
Comments: The painting portion of the cup is signed with 2 initials: a "G" and another that is either L, R, or K.

Pattern: 380 **Paste:** Porcelain.
No. of Specimens: 26 **Figure:** 380.
Decorative Technique: Overglaze handpainting and freehand gilding.
Description: The edge is gilded and there are gold accents throughout. The design is partitioned by bands of orange which range from single lines to broad areas with elaborate floral or geometric gilding. The design areas are usually large floral designs done in oranges, browns, and black. One is a plum tree in bloom with a swallow flying; one has a domestic scene with at least 5 people; others are more geometric than pictoral. The base (from bottom up) has 4 narrow bands of orange, 1 wide orange with overlapping gold cresents, and another narrow band. The handle is dark orange and geometrically gilded.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 pitcher: base diameter is 10.0 cm.
Comments: Quite similar to #301, Asian.

Pattern: 401 **Paste:** Porcelain.
No. of Specimens: 13 **Figure:** N/A.
Decorative Technique: Overglaze handpainting.
Description: Large floral designs are handpainted onto a dark background of blue, red and dull yellows.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: Unidentifiable.
Comments: This category lumps a series of fragments that may or may not belong to one item. Some do fir together, but not all. The decorative technique is typical of handpainted styles from the Limoges Area.

Pattern: 415 **Paste:** Porcelain.
No. of Specimens: 5 **Figure:** N/A.
Decorative Technique: Overglaze handpainting.
Description: There are orange crescents with yellow scrolls along the interior rim. The interior body design has large non-realistic green and pink flowers with olive-colored leaves and a blue butterfly. The exterior has some of the flowers but no rim decoration or butterflies.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 bowl: rim diameter is 12.0 cm, base diameter is 4.0 cm.
Comments: N/A.

Pattern: 437 **Paste:** Porcelain.
No. of Specimens: 1 **Figure:** N/A.

Decorative Technique: Overglaze handpainting and freehand gilding.
Description: This lid is probably from a doll tea set. It is molded. The edge is scalloped and fluted with gold in the low areas. Swirled gold and a gold band encircles the handle. The piece is painted green near the edge, blending into pink toward the center.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 lid, nearly complete.
Comments: N/A.

Pattern: 441 **Paste:** Porcelain.
No. of Specimens: 8 **Figure:** 441.
Decorative Technique: Overglaze handpainting and freehand gilding.
Description: The lobed orange edge band has gold scrolls in it. The body has a wren in flight and many flowers. The largest are orange with gold highlights. There is an orange ring around the base with a wavy gold line.
Associated Maker's Marks, Figure: 199.
Vessel(s) Represented: A minimum of 1 cup: rim diameter is 10.0 cm.
Comments: Japanese.

Pattern: 442 **Paste:** Porcelain.
No. of Specimens: 21 **Figure:** 442.
Decorative Technique: Overglaze handpainting and freehand gilding.
Description: The lobed orange band around the rim has gold scroll work. The predominate color is orange. The flowers are orange, orange outlines filled with orange or yellow, or grey outline filled with yellow, purple or pink.
Associated Maker's Marks, Figure: 195.
Vessel(s) Represented: A minimum of 1 saucer: base diameter is 8.0 cm.
Comments: Japanese.

Pattern: 447 **Paste:** Porcelain.
No. of Specimens: 14 **Figure:** N/A.
Decorative Technique: Overglaze handpainting and freehand gilding.
Description: The cup has very steep sides. The body decoration has tall grasses and iris with a few other flowers and a bird with a blue taft, green back, and orange belly.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 2 cups: rim diameter is 6.0 cm, base diameter is 4.5 cm; 1 saucer: rim diameter is 12.0 cm, base diameter is 7.0 cm.
Comments: Japanese.

Pattern: 292, 339, 340, 342, 438 **Paste:** Porcelain.
No. of Specimens: 27 **Figure:** 340.
Decorative Technique: Overglaze handpainting and freehand gilding.
Description: These are all part of a set of fruit plates. The blank for each is the same: a shallow broad scalloped edge. The edge is gilded. Next comes a band of color edged in black with 2 gold bands

inside. The well has a fruit motif. Each number above has a different color band and different fruit as follows: 292-medium blue, apple or orange; 330-pink, apple and cherries; 340-pastel blue, peach and 1 unknown; 342-lavender, lemon and cherries; 438-orange, no center fruit available.
Associated Maker's Marks, Figure: $100A_4$.
Vessel(s) Represented: 292: 1 plate; 339: 1 plate; 340: 2 plates; 342: 1 plate; 438: 1 plate. All with rim diameters of 18.0 cm and base diameters of 11.0 cm.
Comments: These patterns are fairly widely dispersed. N5 W120 and N10 W120 both contain three of the 5 variations; N15 W120 and N10 W125 contain 2 variations. All other squares represented have only one variation each.

RIM HANDPAINTED, BODY GILDED

Pattern: 262 **Paste:** Porcelain.
No. of Specimens: 4 **Figure:** 262.
Decorative Technique: Overglaze handpainting and freehand and raised gilding.
Description: The rim design is a matte gold band with leaves in shiny gold and a band of raised gold 5-petal flowers and dots. A yellow rosebud and leaves hand down from the border. There is pink and yellow shading around the rose which may be underglaze.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 lid: rim diameter is 7.0 cm, interior ring diameter is 5.0 cm; 1 saucer: rim diameter is 15.0 cm, base diameter is 8.5 cm.
Comments: Possibly from a boullion set.

Pattern: 290 **Paste:** Porcelain.
No. of Specimens: 6 **Figure:** N/A.
Decorative Technique: Overglaze handpainting and freehand gilding.
Description: The blank is twisted and fluted. The edge is gilded and there is freehand gold scrollwork on the rim. The designs follow the raised and lowered portions. The raised have a trailing of small flowers tapering down from one major flower. The stylized flowers vary greatly. The lowered areas have a series of gold dots that descend in size and portion. There is a single rose in the center of the cup well.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 cup: rim diameter is 6.0 cm; 1 saucer: base diameter is 7.0 cm.
Comments: N/A.

Pattern: 325 **Paste:** Porcelain.
No. of Specimens: 1 **Figure:** N/A.
Decorative Technique: Overglaze handpainting and freehand gilding.
Description: The edge is sculptured and gilded. The design is green and pink autumn maple leaves with raised gold veining and stems. The

raised gold stems all connect to the same branches.
Associated Maker's Marks, Figure: 84.
Vessel(s) Represented: 1 plate.
Comments: The CMM category has approximately 3/4 of the plate and the description comes from this material.

Pattern: 350 **Paste:** Porcelain.
No. of Specimens: 20 **Figure:** 350.
Decorative Technique: Overglaze handpainting and freehand gilding.
Description: The rim has a wheat pattern periodically interrupted by a cartouche with a flower made of 4 circles, a diamond shape and small dots. There is also a single gold band. The body has a brown stem running around the vessel. It has alternating single pink roses with leaves, small red and orange 5-petal flowers and single blue 5-petal flowers with orange centers on the saucers. The cups have an added blue flower with each rose.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 2 cups: rim diameter is 9.0 cm, base diameter is 5.0 cm; 3 saucers: rim diameter is 14.0 cm, base diameter is 9.0 cm.
Comments: N/A.

Pattern: 372 **Paste:** Porcelain.
No. of Specimens: 29 **Figure:** 372.
Decorative Technique: Overglaze handpainting and freehand and raised gilding.
Description: The bowls have flat rims and nearly straight sides. The bases are unglazed. The rim has a neat gild band with raised white dots. 2 parallel gold bands enclose the remaining rim design. The enclosed area on the bowls is divided into quarters by a set of 2 plain gold bars on either side of a mat bar with raised dots. The resulting quarters are again divided by a single gold bar into 2 segments. At each of these bars or sets of bars, there is a single pink blossoms similar to a dogwood. One set of bars on each vessel has 2 blossoms. The blossoms are highlighted with white enamel. The saucers are divided into 8ths and 16ths by the bars.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 2 saucers: rim diameter is 14.0 cm, base diameter is 9.0 cm; a minimum of 2 bowls: rim diameter is 10.0 cm, base diameter is 6.0 cm.
Comments: The saucers seem to fit the bowls and these are possibly part of a dessert or berry set.

Pattern: 391 **Paste:** Porcelain.
No. of Specimens: 12 **Figure:** 391.
Decorative Technique: Overglaze handpainting and freehand gilding.
Description: The edge is gilded. There is a pictorial of a coastal scene with a lighthouse on rocks in the midst of trees, a wharf and a mountain in the background, executed mostly in greys with brown and green highlights. The mountain in the background is executed mostly in greys with brown and green highlights. The mountain is blue with a

snowcap.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 cup: rim diameter is 9.0 cm, base diameter is 4.5 cm; 1 saucer: rim diameter is 13.0 cm, base diameter is 8.0 cm.
Comments: N/A.

Pattern: 396 **Paste:** Porcelain.
No. of Specimens: 14 **Figure:** N/A.
Decorative Technique: Overglaze handpainting and freehand gilding.
Description: The form is a squat pitcher. The edge is gilded. The rim has a band of gold leaves and dots. Individual or small sprays of flowers are scattered over the exterior surface and the interior of the lip. The flowers are red, orange, yellow, blue, or purple and of varying form.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 squat pitcher, nearly complete: rim diameter is 11.0 cm.
Comments: N/A.

Pattern: 419 **Paste:** Porclain.
No. of Specimens: 4 **Figure:** N/A.
Decorative Technique: Overglaze handpainting and stenciled gilding.
Description: The entire rim is dark green with the design in stenciled gold over it. The edge is gilded. Inside this is a band of triangular basket work with tassels and diamond shape with tassels facing inward. This band repeated in the inside edge of the green with the tassels shoulder followed by a stenciled band similar to the ones on the rim. The diamonds have no extensions and the ones on the baskets look like a three leaf motif. An unidentifiable stencil design is also present in the center.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 plate: rim diameter is 16.0 cm, base diameter is 10.0 cm.
Comments: N/A.

Pattern: 425 **Paste:** Porcelain.
No. of Specimens: 5 **Figure:** N/A.
Decorative Technique: Overglaze handpainting and freehand gilding.
Description: The ware is very heavy. The edge is gilded. The body design is composed of 3- or 5-petal blue flowers with feathered edges, red sepals and grey stems and leaves highlights. They are arranges in sprays, sparse in the upper portion, and a single bunch with 2 flowers and 4 leaves near the base.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 cup: rim diameter is 9.0 cm, base diameter is 4.5 cm.
Comments: N/A.

RIM HANDPAINTED, BODY PLAIN

Pattern: 216 **Paste:** Porcelain.
No. of Specimens: 38 **Figure:** 216.
Decorative Technique: Overglaze handpainting and freehand, stenciled and raised gilding.
Description: The edge and handles are gilded. A green border has stenciled diamond gilding. It is interrupted for segments containing a single flower, leaves, and a trailing bud all outlined in raised gold. Smaller interruptions of an amorphous floral motif are also found. The band ends with another gold edge. The body is plain.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 3 cups: rim diameter is 10.0 cm; a minmum of 2 saucers: rim diameter is 15.0 cm, base diameter is 9.0 cm.
Comments: N/A.

Pattern: 221 **Paste:** Porcelain.
No. of Specimens: 7 **Figure:** 221.
Decorative Technique: Overglaze handpainting and freehand gilding.
Description: The oval blank has a rim design only. The edge is gilded and another gold band is found 2.5 cm from the edge. The band thus formed is divided into boxes by groups of two parallel gold lines. The boxes alternate the two following floral arrangements: a branch with small stylized purple blossoms centered in an orange peony with leaves and a few blue buds; and a central orange daisy with leaves having a symetrical arrangement of stems with purple and blue flowers in profile on either side.
Associated Maker's Marks, Figure: 108A.
Vessel(s) Represented: 1 platter.
Comments: All but one fragment were found in N5 W85 and W90.

Pattern: 285 **Paste:** Porcelain.
No. of Specimens: 5 **Figure:** 285.
Decorative Technique: Overglaze handpainting and freehand and raised gilding.
Description: The design is confined to a 2.5 cm rim band. The edges of the band are a raised dot border. The band is yellow except within rectangles that have 2 raised gold flowers and within raised gold diamonds with a raised dot in the center and flat gold rays from the center to angles.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 cup: rim diameter is 10.0 cm; 1 saucer: rim diameter is 14.0 cm, base diameter is 10.0 cm.
Comments: N/A.

Pattern: 308 **Paste:** Porcelain.
No. of Specimens: 11 **Figure:** 308.
Decorative Technique: Overglaze handpainting and freehand and raised gilding.
Description: The design is confined to the rim which has raised gold rose garlands and a band of regular gold and yellow with a wheat motif.

Associated Maker's Marks, Figure: 108D.
Vessel(s) Represented: A minimum of 2 cups: rim diameter is 9.0 cm, base diameter is 4.0 cm; a minimum of 1 saucer: rim diameter is 14.0 cm, base diameter is 9.0 cm.
Comments: N/A.

Pattern: 320 **Paste:** Porcelain.
No. of Specimens: 10 **Figure:** 320.
Decorative Technique: Overglaze handpainting.
Description: The design is confined to the rim. A yellow/gold luster band and a black line encircle the vessels. These are interrupted twice by fruit and leaf border cartouches each containing a cornacopia with a plant that has a row of red fruits and a purple flower. There are 2, 5 petal double flowers of orange and yellow. The leaves of the borders sprout from a leaf cluster at the top of the featured arrangement.
Associated Maker's Marks, Figure: $108H_3$.
Vessel(s) Represented: A minimum of 2 plates: rim diameter is 15.5 cm, base diameter is 10.0 cm; a minimum of 1 bowl: rim diameter is 15.0 cm, base diameter is 7.0 cm.
Comments: No fragments found west of W105. All of the bowl fragments were in N0 W95 and N5 W95. The plate was in N5 W105.

Pattern: 323 **Paste:** Porcelain.
No. of Specimens: 4 **Figure:** N/A.
Decorative Technique: Overglaze handpainting and freehand gilding.
Description: The bowl shaped saucer is edged in green. A gold band follows that is interruped by a gold mediallion. Immediately below are spaced at least 4 single roses with leaves. Another gold band is found where the shoulder would be. The body is plain.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 saucer: rim diameter is 14.0 cm, base diameter is 8.0 cm.
Comments: N/A.

Pattern: 328 **Paste:** Porcelain.
No. of Specimens: 14 **Figure:** 328.
Decorative Technique: Overglaze handpainting and freehand gilding.
Description: The ware is heavy with a thickening near the rim of the cup. The border band has a repeated pattern of a pink rose with leaf, a triple circle and dart motif, a smaller rose and leaf divider, another triple circle and dart motif. This band is bounded on both sides by a very tiny leaf and pink flower border.
Associated Maker's Marks, Figure: 101A.
Vessel(s) Represented: 2 cups: rim diameter is 8.0 cm; a minimum of 2 saucers: rim diameter is 15.0 cm, base diameter is 9.0 cm.
Comments: N/A.

Pattern: 335 **Paste:** Porcelain.
No. of Specimens: 3 **Figure:** 335.

Decorative Technique: Overglaze handpainting.
Description: There is a 1.0 cm green luster border followed by a black line. There is one cluster of lime green leaves near the border.
Associated Maker's Marks, Figure: 109.
Vessel(s) Represented: A minimum of 1 saucer: rim diameter is 14.0 cm, base diameter is 9.0 cm.
Comments: All three fragments are in NO W95 F21 12-16".

Pattern: 383 **Paste:** Porcelain.
No. of Specimens: 33 **Figure:** 383.
Decorative Technique: Overglaze handpainting and freehand gilding.
Description: The edge of this pattern is yellow band with gold bands interior to the yellow. The bands are periodically interrupted by circles that extend to the edge. These encircle outlined flowers. The circles are joined by draped leaves that have pink flowers at the center of the drape. A trailing at the left of each drape has a blue 5 point flower at its end. There are black highlights throughout.
Associated Maker's Marks, Figure: 108B.
Vessel(s) Represented: A minimum of 6 plates: rim diameter is 16.0 cm, base diameter is 10.0 cm.
Comments: N/A.

Pattern: 386 **Paste:** Porcelain.
No. of Specimens: 12 **Figure:** N/A.
Decorative Technique: Overglaze handpainting.
Description: A brown banded pale green border has groups of fairly crude pink 5 petal blossoms with yellow centers. Between each group is a blue geometric design of a diamond over an X.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 cup: rim diameter is 9.0 cm; 1 saucer: rim diameter is 14.0 cm, base diameter is 9.0 cm.
Comments: N/A.

RIM PLAIN, BODY HANDPAINTED

Pattern: 204 **Paste:** Porcelain.
No. of Specimens: 2 **Figure:** 204.
Decorative Technique: Overglaze handpainting.
Description: This is a scene of a windmill and water done in blues and greys.
Associated Maker's Marks, Figure: 90A.
Vessel(s) Represented: 1 cup, probably a demitasse: rim diameter is 6.0 cm.
Comments: N/A.

Pattern: 295 **Paste:** Porcelain.
No. of Specimens: 3 **Figure:** N/A.
Decorative Technique: Overglaze handpainting.
Description: The blank is saucer shaped with a shallow rim. A raised area and hole in the middle show its origin. The design is only on the

body and consists of large yellow and brown generalized flowers.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 lamp base: rim diameter is 13.0 cm, base diameter is 13.0 cm.
Comments: N/A.

TINTED GLAZE AND HANDPAINTING

Pattern: 234 **Paste:** Porcelain.
No. of Specimens: 7 **Figure:** N/A.
Decorative Technique: Tinted glaze and overglaze handpainting.
Description: The straight sided cup is rose colored with a red edge band.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 cup: rim diameter is 7.0 cm, base diameter is 6.0 cm.
Comments: N/A.

Pattern: 257 **Paste:** Porcelain.
No. of Specimens: 13 **Figure:** N/A.
Decorative Technique: Tinted glaze, overglaze handpainting and freehand gilding.
Description: The blank is scalloped and fluted. The edge and cup ring are gilded. The cup well and cup inside are white. All else is creamed colored. Various types of flowers are present in brown outlines filled by red, yellow and purple. Some leaves and buds are aqua. Flowers sprigs found randomly on body.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 cup: rim diameter is 6.0 cm; aminimum of 1 saucer: rim diameter is 12.0 cm, base diameter is 8.0 cm.
Comments: N/A.

Pattern: 259 **Paste:** Porcelain.
No. of Specimens: 3 **Figure:** 259.
Decorative Technique: Tinted glaze and overglaze painting.
Description: The blank has rings in the body and a knob handle. The design consists of amorphous designs in dark green and brown over a light green glaze.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 lid: rim diameter is 6.0 cm.
Comments: Small lid (6.0 cm rim) of sugar bowl or teapot size.

Pattern: 278 **Paste:** Porcelain.
No. of Specimens: 2 **Figure:** N/A.
Decorative Technique: Tinted glaze and overglaze handpainting.
Description: The plate rim is glazed in green luster glaze. There is a black line at the shoulder. No body pieces were identified.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 plate.

Comments: Similar to #341 below. Both patterns found W105 and east.

Pattern: 279 **Paste:** Porcelain.
No. of Specimens: 22 **Figure:** 279.
Decorative Technique: Tinted glaze and overglaze handpainting.
Description: Blue luster glaze with a black edge and handle.
Associated Maker's Marks, Figure: 47.
Vessel(s) Represented: 1 creamer: rim diameter is 10.0 cm, base diameter 6.0 cm.
Comments: All fragments in W100 and east. 68% of the pattern is in NO W95 in the F21 below 4".

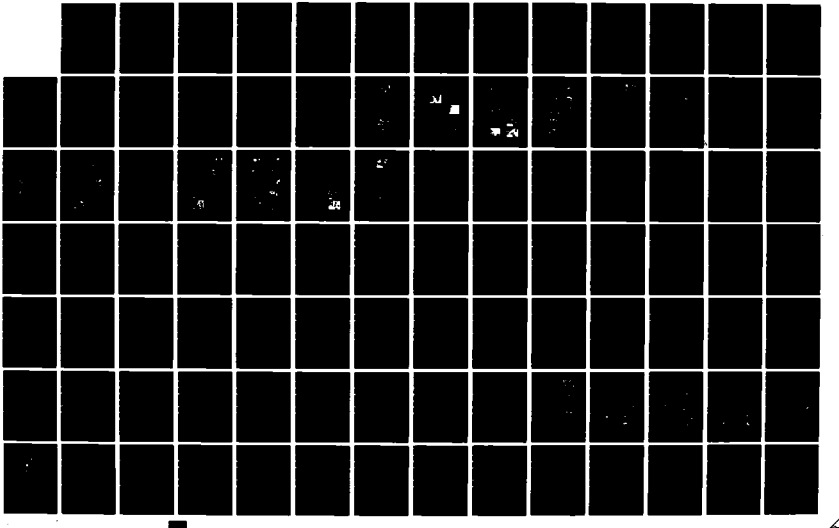
Pattern: 302 **Paste:** Porcelain.
No. of Specimens: 48 **Figure:** 302.
Decorative Technique: Tinted glaze and overglaze handpainting and freehand gilding.
Description: The vessel is basically light green glazed with a scalloped edge and fluted body. There is some gilding in the troughs of the scallops. There are molded areas in the shape of a scroll, a fan, and an oval that are not green. The fan is outlined in gold and has black ribs. The scene on it is a house and small boat with mountians in the background. The scroll rolls have a woven bamboo look and is outlined in black. There is an ornate design and a central picture of a bird in a tree. The oval is outlined in green and gold and has a scene of trees and flowers and possibly a human figure. All these areas are clustered on one half of the vessel, its "front".
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 large vase: rim diameter is 13.0 cm, base diameter is 11.0 cm.
Comments: N/A.

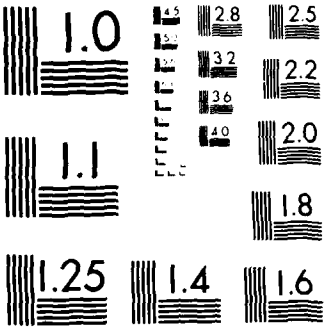
Pattern: 326 **Paste:** Porcelain.
No. of Specimens: 12 **Figure:** 326.
Decorative Technique: Tinted glaze and overglaze handpainting.
Description: Yellow lusterware with black edging.
Associated Maker's Marks, Figure: 49.
Vessel(s) Represented: 1 creamer.
Comments: N/A.

Pattern: 337 **Paste:** Porcelain.
No. of Specimens: 7 **Figure:** 337.
Decorative Technique: Tinted glaze and overglaze handpainting.
Description: The rim is blue-green luster glaze. At the shoulder is a line of black and a line of red. The CMM pieces indicate that the center has a handpainted brown basket of flowers with a purple and blue ribbon on the handle.
Associated Maker's Marks, Figure: $108H_2$.
Vessel(s) Represented: 1 plate: rim diameter is 18.0 cm, base diameter is 11.0 cm.
Comments: All fragments W95 and east or surface.

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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS 1963-A

Pattern: 341 Paste: Porcelain.
No. of Specimens: 3 Figure: N/A.
Decorative Technique: Tinted glaze and overglaze handpainting.
Description: The plate rim is glazed with a blue luster glaze. There is a black line at the shoulder. Very little center was identified, but the design includes a ribbon.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 plate: rim diameter is 19.0 cm, base diameter is 11.0 cm.
Comments: Similar to #278 above. Both patterns W105 and east.

Pattern: 445 Paste: Porcelain.
No. of Specimens: 15 Figure: N/A.
Decorative Technique: Tinted glaze(?) and overglaze handpainting and freehand gilding.
Description: The edge is scalloped. The border is either blue glaze or underglaze paint and has gold scroll work over it. The body has freehand roses and occasional light blue bands with white enamel dots and gold edging.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 cup: rim diameter is 10.0 cm; a minimum of 1 saucer: rim diameter is 14.0 cm, base diameter is 10.0 cm.
Comments: None east of W125.

Pattern: 450 Paste: Porcelain.
No. of Specimens: 5 Figure: N/A.
Decorative Technique: Tinted glaze and overglaze handpainting.
Description: The grey-purple luster rim has a black line at the shoulder. The cup body is not available. The center of the plate has stylized 5 petal flowers.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 cup; a minimum of 1 plate: rim diameter is 18.0 cm, base diameter is 11.0 cm.
Comments: N/A.

HANDPAINTING AND STENCILING

Pattern: 266 Paste: Porcelain.
No. of Specimens: 15 Figure: N/A.
Decorative Technique: Overglaze handpainting and stenciling and freehand gilding.
Description: The fluted blank has an orange edge and some gilding. The body has a silk screened landscape done in red. There are mountains in the background, a row of stilted houses and zigzag bridges. There are 2 women on a bridge. The foreground has water reeds, iris flowers and some fish. Blotches of handpainting of blue for the mountainsm blue and pink for the flowers and blue and green for the kimonos are used.

Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 cup: rim diameter is 7.0 cm; 1 saucer: rim diameter is 14.0 cm, base diameter is 7.0 cm.
Comments: N/A.

Pattern: 324 **Paste:** Porcelain.
No. of Specimens: 9 **Figure:** N/A.
Decorative Technique: Overglaze handpainting and stenciling.
Description: The rim has a green enamel edge. A silk screen landscape in black includes some buildings and people but is not clear. The bushes and trees have some daubed coloring in pink, green and yellow. Numerous red berries (cherries?) dot the trees.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 cup: rim diameter is 9.0 cm; a minimum of 1 saucer: rim diameter is 14.0 cm, base diameter is 9.0 cm.
Comments: 66% of this pattern, representing both pieces, was found in N5 W105.

Pattern: 421 **Paste:** Porcelain.
No. of Specimens: 12 **Figure:** N/A.
Decorative Technique: Overglaze stencil and handpainting and freehand gilding.
Description: The edge has a blue scalloped band with a gold wavy overband. The body has a red stenciled design of a house and garden with flowers, trees, a moon of sun, 2 standing ladies and 2 seated ladies. Daubed color is added to the figures.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 cup; 2 saucers: rim diameter is 14.0 cm, base diameter is 8.0 cm.
Comments: N/A.

RIM HANDPAINTED, BODY UNKNOWN

Pattern: 305 **Paste:** Porcelain.
No. of Specimens: 6 **Figure:** 305.
Decorative Technique: Overglaze handpainting and freehand gilding.
Description: The pattern covers the rim from edge to shoulder. The area is divided into alternating large and small blocks. The large blocks each contain a branch with red flowers and blue berries. The smaller blocks each have a central blue 8 petal flower and a 4 lobed outer area with a flower in each lobe.
Associated Maker's Marks, Figure: 108F.
Vessel(s) Represented: 1 plate: rim diameter is 20.0 cm, base diameter is 12.0 cm.
Comments: 5 of the 6 fragments are from FC8651, the General Surface.

Pattern: 404 **Paste:** Porcelain.
No. of Specimens: 4 **Figure:** 404.
Decorative Technique: Overglaze handpainting and stenciled and

freehand gilding.
Description: The edge is scalloped and gilded. The border is green with a stenciled gold medallion overlay and darts that extend below the border. No body pieces were identified.
Associated Maker's Marks, Figure: 107.
Vessel(s) Represented: 1 plate: rim diameter is 16.0 cm, base diameter is 10.0 cm.
Comments: N/A.

Pattern: 414 **Paste:** Porcelain.
No. of Specimens: 13 **Figure:** N/A.
Decorative Technique: Overglaze handpainting and freehand gilding.
Description: The blank is very heavy and includes several molded designs. These include oak leaves highlighted by gold. A blue ribbon circle encloses a freehand flower with leaves. The frequency of the design is not clear. Flower types vary but include roses and mums. The primary design is the gold on the moldings. No body pieces were identified.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 cup; 1 platter; a minimum of 1 plate: rim diameter is 24.0 cm, base diameter is 14.0 cm.
Comments: N/A.

RIM UNKNOWN, BODY HANDPAINTED

Pattern: 238 **Paste:** Porcelain.
No. of Specimens: 2 **Figure:** N/A.
Decorative Technique: Overglaze handpainting.
Description: The form is a cylindrical covered jar of which we have only the bottom. The area that would be inside the lid is unglazed. A floral border design in red and green runs down the sides and along the bottom of this front. The front has a man and a woman in Georgian dress. The back has a purple and a yellow flower.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 cover jar: base diameter is 4.0 cm, rim diameter is 3.0 cm.
Comments: N/A.

Pattern: 252 **Paste:** Porcelain.
No. of Specimens: 8 **Figure:** 252.
Decorative Technique: Molding and handpainting and freehand gilding.
Description: A base and a handle are present, but the vessel type is unclear. Molded apple blossoms are painted in a natural manner. The handle is a branch. Stems, leaves and buds are present. some highlights are gilded. The interior is plain glazed. The exterior is not glazed. No rim was identified.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 decorative object.
Comments: N/A.

Pattern: 255 Paste: Porcelain.
No. of Specimens: 3 Figure: N/A.
Decorative Technique: Overglaze handpainting and freehand gilding.
Description: The porcelain is very thick and heavy, but seems to be of a good quality paste. No rim pieces were identified. The body decoration consists of large flowers and leaves done in pink, blue and green enamels.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 bowl: base diameter is 11.0 cm.
Comments: N/A.

Pattern: 291 Paste: Porcelain.
No. of Specimens: 14 Figure: N/A.
Decorative Technique: Overglaze transfer and handpainting and freehand gilding.
Description: The edge of this blank has variously sized scallops. Triangular areas of lotus blossoms point down into the body. Between the points an enclosed wreath of roses and leaves alternate with a scroll enclosed half wreath and a grouping of 4 blossoms in pink, yellow and green. The design is present on the interior of the cup and a single gold line is found on the exterior.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 saucer: rim diameter is 13.0 cm, base diameter is 6.0 cm; 9 unidentifiables.
Comments: The unidentifiables are probably portions of 1 cup.

Pattern: 352 Paste: Porcelain.
No. of Specimens: 4 Figure: N/A.
Decorative Technique: Overglaze handpainting and transfer.
Description: The scalloped rim is not decorated. The body has a brown transfer pattern filled with yellow paint situated at the shoulder and possibly the center. It represents stylized flowers either with 5 petals or a multi-petal variety.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 plate: rim diameter is 20.0 cm, base diameter is 12.0 cm.
Comments: N/A.

Pattern: 423 Paste: Porcelain.
No. of Specimens: 3 Figure: N/A.
Decorative Technique: Overglaze handpainting.
Description: No rim pieces were identified. The interior body has handpainted stylized orange flowers and leaves. Certain areas farther from the well have a yellow wash background.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 2 saucers: base diameter is 7.0 cm.
Comments: N/A.

Pattern: 431 Paste: Porcelain.
No. of Specimens: 13 Figure: N/A.
Decorative Technique: Overglaze handpainting and freehand gilding.
Description: No rim pieces were identified. The body has stylized purple flowers and leaves with some highlights done in raised white enamel. There is some freehand gilding in no discernable pattern.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 cup; a minimum of 1 saucer: base diameter is 9.0 cm.
Comments: N/A.

Pattern: 434 Paste: Porcelain.
No. of Specimens: 2 Figure: N/A.
Decorative Technique: Overglaze handpainting.
Description: The vessel appears to be a sugar or creamer. The profile is distinctive, being a squat vessel with a tall base. The rim is not available. The body has handpainted flowers with leaves.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 Unknown.
Comments: The sample is badly burned. The glaze may have been tinted.

Pattern: 502 Paste: Porcelain.
No. of Specimens: 156 Figure: N/A.
Decorative Technique: Overglaze handpainting.
Description: This category consists of all fragments containing overglaze handpainting that could not be attributed to any of the above patterns
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: N/A.
Comments: N/A.

TINTED GLAZE ONLY, WITH AND WITHOUT GILDING

Pattern: 207 Paste: Porcelain.
No. of Specimens: 5 Figure: 207.
Decorative Technique: Tinted glaze and freehand gilding.
Description: The vessel has a scalloped edge. The entire bowl is glazed with a light green glaze. The edge is slightly gilded.
Associated Maker's Marks, Figure: 89B.
Vessel(s) Represented: 1 bowl: rim diameter is 15.0 cm, base diameter is 7.0 cm.
Comments: In addition to the maker's mark, the bottom has the following notation done in the same green as the surface: "Marry Xmas 1890". The blank is Schleiger (1967:16-17) #14. The mark gives a date between 1842 and 1890.

Pattern: 226 Paste: Porcelain.
No. of Specimens: 8 Figure: N/A.
Decorative Technique: Tinted glaze.
Description: The exterior of cup and the interior of saucer are gold

luster glazed.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 cup: rim diameter is 10.0 cm, base diameter is 4.5 cm; 1 saucer: rim diameter is 14.0 cm.
Comments: N/A.

Pattern: 244 **Paste:** Porcelain.
No. of Specimens: 18 **Figure:** N/A.
Decorative Technique: Tinted overglaze and freehand gilding.
Description: The mold is textured like leather and represents a satchel or purse, but may have had some form of lid. The exterior is painted a flat brown.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 miscellaneous item.
Comments: Pattern concentrated in N5 W105 and W110.

Pattern: 251 **Paste:** Porcelain.
No. of Specimens: 4 **Figure:** 251.
Decorative Technique: Tinted glaze?
Description: The blank is molded to look like a woven basket and the rim indicates that it had a lid. The interior is plain. The base is not glazed. The exterior is yellow, either tinted glaze or underglaze paint.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 decorative basket.
Comments: N/A.

Pattern: 256 **Paste:** Porcelain.
No. of Specimens: 2 **Figure:** N/A.
Decorative Technique: Tinted glaze.
Description: The saucer has a 1.0 cm yellow luster band on the rim.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 saucer: rim diameter is 12.0 cm, base diametr is 5.0 cm.
Comments: N/A.

Pattern: 261 **Paste:** Porcelain.
No. of Specimens: 8 **Figure:** N/A.
Decorative Technique: Tinted glaze.
Description: The paste is low grade but vitreous. The ware is heavy. The basal rim is very deep. The sides are straight, giving a cylindrical shape. The interior and exterior are glazed a dark green.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 unidentified vessel: rim diameter is 7.0 cm, base diameter is 7.0 cm.
Comments: The vessel is probably a jar or bottle, possibly a wine bottle. It may be a vase.

Pattern: 263 **Paste:** Porcelain.

No. of Specimens: 13 **Figure:** 263.
Decorative Technique: Tinted glaze and freehand and stenciled gilding.
Description: A cobalt blue band encircles the rim. Over the blue are placed the following gold bands: the edge is molded in a 3 leaf clover pattern, each motif being gilded; a solid gold band; a dart and lattice stencil gold band; a plain blue band; and a final solid gold band at the edge of the blue area. The body is plain. There is a trailing vine gold motif on the interior cup rim.
Associated Maker's Marks, Figure: 88B.
Vessel(s) Represented: A minimum of 2 cups: rim diameter is 9.0 cm, base diameter is 4.0 cm; a minimum of of 1 saucer: base diameter is 10.0 cm.
Comments: N/A.

Pattern: 269 **Paste:** Porcelain.
No. of Specimens: 3 **Figure:** N/A.
Decorative Technique: Tinted glaze and freehand and raised gilding.
Description: A cobalt blue band encircles the rim. There are rows of raised gold dots on either edge of this band and small clusters of dots all over it. The body is white with a raised gold pattern of geometric medallions and leafy tendrils. The rim is not glazed.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 lid: rim diameter is 5.0 cm.
Comments: This is possibly the lid to a powder dish.

Pattern: 270 **Paste:** Porcelain.
No. of Specimens: 5 **Figure:** N/A.
Decorative Technique: Tinted glaze and freehand gilding.
Description: The edge is gilded. The exterior is an overall matte golden yellow. The interior is white.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 cup: rim diameter is 8.0 cm, base diameter is 5.0 cm.
Comments: N/A.

Pattern: 399 **Paste:** Porcelain.
No. of Specimens: 10 **Figure:** N/A.
Decorative Technique: Tinted glaze.
Description: These cups have a blue/purple luster exterior and gold luster interior.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 2 cups: rim diameter is 10.0 cm.
Comments: These maybe the cups for saucers #443 below. The saucers are the same blue/purple but have no gold luster.

Pattern: 403 **Paste:** Porcelain.
No. of Specimens: 3 **Figure:** 403.
Decorative Technique: Tinted glaze and freehand gilding.
Description: The edge is gilded and the remainder has a mottled matt pink finish.

Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 cup, demitasse: rim diameter is 6.0 cm, base diameter is 5.0 cm.
Comments: This pattern is found in the western section of the site. One fragment in N20 W125 and two in N15 W150.

Pattern: 338 **Paste:** Porcelain.
No. of Specimens: 8 **Figure:** N/A.
Decorative Technique: Tinted glaze and freehand gilding.
Description: The edge and cup well edge are gilded. The interior of the cup and the exterior are white. The exterior cup and interior saucer surfaces are a matt beige.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 cup: rim diameter is 6.0 cm, base diameter is 5.0 cm; 2 Saucers: rim diameter is 12.0 cm, base diameter is 8.0 cm.
Comments: One saucer fragment does not fit the other four. It is the only fragment that is not surface or in the joining squares N0 W95, N5 W95 and W100. It is from N15 W120.

Pattern: 393 **Paste:** Porcelain.
No. of Specimens: 9 **Figure:** N/A.
Decorative Technique: Tinted glaze and freehand and stenciled gilding.
Description: The cup exterior has a 2 cm dark green rim band. The edge is gilded. Irregular dots nearly fill the green band with a pebble effect. Stenciled leaves overlap the boundry between the green rim and white body. The interior rim has a stenciled gold band of medallions with flowers and dots as elements.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 cup: rim diameter is 10.0 cm.
Comments: One fragment from n15 W120 F36, all others concentrated in N0 W85 and W90 and N5 W90 in F16.

Pattern: 399 **Paste:** Porcelain.
No. of Specimens: 10 **Figure:** N/A.
Decorative Technique: Tinted glaze.
Description: These cups have a blue/purple luster exterior and gold luster interior.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 2 cups: rim diameter is 10.0 cm.
Comments: These maybe the cups for saucers #443 below. The saucers are the same blue/purple but have no gold luster.

Pattern: 403 **Paste:** Porcelain.
No. of Specimens: 3 **Figure:** N/A.
Decorative Technique: Tinted glaze and freehand gilding.
Description: The edge is gilded and the remainder has a mottled matte pink finish.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 cup, demitasse: rim diameter is 6.0 cm, base diameter is 5.0 cm.

Comments: The pattern is found in the western section of the site. 1 in N20 W125 and 2 in N15 W150.

Pattern: 424 **Paste:** Porcelain.
No. of Specimens: 5 **Figure:** 424.
Decorative Technique: Tinted glaze and raised gold.
Description: The exterior is a pale green matt with a leaf pattern in raised gold and black.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 unidentified miscellanous decorative item.
Comments: Probably either a puff box or hair receiver from a dresser set. All west of W120.

Pattern: 443 **Paste:** Porcelain.
No. of Specimens: 9 **Figure:** N/A.
Decorative Technique: Tinted glaze.
Description: This a blue/purple lusterware item.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 2 saucers: rim diameter is 14.0 cm, base diameter is 9.0 cm.
Comments: May match cups #399 above.

Pattern: 444 **Paste:** Porcelain.
No. of Specimens: 1 **Figure:** N/A.
Decorative Technique: Tinted glaze and freehand gilding.
Description: This is a gold lusterware item.
Associated Maker's Marks, Figure: 111.
Vessel(s) Represented: 1 saucer.
Comments: Including the CMM fragment, the saucer is nearly complete.

GILDING ONLY

Pattern: 209 **Paste:** Porcelain.
No. of Specimens: 12 **Figure:** 209.
Decorative Technique: Overglaze freehand and raised gold.
Description: The cup is pedestaled and has an ornate handle. The pattern is found on the interior and exterior of the cup. There is a raised gold border and 2 more lines of beads at the shoulder. Between these are intertwined ribbon, leaves and buds all done in gold. There are scattered dot flowers. All highly textured.
Associated Maker's Marks, Figure: $108E_2$.
Vessel(s) Represented: A minimum of 1 cup: rim diameter is 9.0 cm; a minimum of 1 saucer: rim diameter is 15.0 cm, base diameter is 10.0 cm; 3 unidentifiable fragments, probably a cup or saucer.
Comments: N/A.

Pattern: 271 **Paste:** Porcelain.
No. of Specimens: 42 **Figure:** N/A.

Decorative Technique: Overglaze freehand gilding.
Description: There is double band of gold around the rim. The body is plain.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 2 cups: rim diameter is 10.0 cm, base diameter is 4.0 cm; a minimum of 2 saucers: rim diameter is 15.0 cm, base diameter is 8.0 cm.
Comments: N/A.

Pattern: 303 Paste: Porcelain.
No. of Specimens: 5 Figure: N/A.
Decorative Technique: Overglaze stenciled gilding.
Description: The blank has a scalloped edge and some ornate molding. The design is a gold stencil consisting of 4 pointed crosses with a tulip between each pair of arms, giving an 8 pointed star effect, alternating in a 3:1 ratio with a pendant motif.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 bowl, serving dish: rim diameter is 26.0 cm, base diameter is 17.0 cm.
Comments: N/A.

Pattern: 373 Paste: Porcelain.
No. of Specimens: 4 Figure: 373.
Decorative Technique: Overglaze freehand gilding.
Description: The rim has one wide and 3 narrow gold bands.
Associated Maker's Marks, Figure: $102A_2$.
Vessel(s) Represented: 1 saucer: rim diameter is 15.0 cm, base diameter is 9.0 cm.
Comments: N/A.

Pattern: 503 Paste: Porcelain.
No. of Specimens: 254 Figure: N/A.
Decorative Technique: Overglaze gilding.
Description: This catagory consists of all fragments showing only gilding that could not be assigned to any other pattern. Most of the pieces are rim fragments that probably belong to various "edge gilded" patterns, but could not be matched.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: N/A.
Comments: N/A.

SPRIGGING

Pattern: 243 Paste: Porcelain.
No. of Specimens: 3 Figure: N/A.
Decorative Technique: Sprigging.
Description: The sample has high relief of 5 petal blue flowers joined to a white base.
Associated Maker's Marks, Figure: N/A.

Vessel(s) Represented: 1 handle, decorative.
Comments: N/A.

Pattern: 268 **Paste:** Porcelain.
No. of Specimens: 7 **Figure:** 268.
Decorative Technique: Sprigging.
Description: The rim is plain. The white fluted body has sprigging in the form of low relief blue flowers and leaves.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 unidentifiable, possible creamer?
Comments: N/A.

TRANSFER

Pattern: 317 **Paste:** Porcelain.
No. of Specimens: 10 **Figure:** 317.
Decorative Technique: Overglaze transfer and freehand gilding.
Description: The scalloped rim is edged in gold. The rim has a solid orange scalloped band with scrolls at intervals around the rim. A solid band of orange is then followed by a finer scalloped band. The body has a design of trailing flowers and leaves in orange transfer. Some are roses, most are indistinguishable. There are some flowers in the exterior of the cup body.
Associated Maker's Marks, Figure: 317.
Vessel(s) Represented: 1 cup fragment; 1 saucer: rim diameter is 14.0 cm, base diameter is 7.0 cm.
Comments: N/A.

COLORED PASTE

Pattern: 333 **Paste:** Porcelain.
No. of Specimens: 2 **Figure:** 333.
Decorative Technique: Colored paste.
Description: The relief work is white on an underglazed blue base. The rim consists of a series of half rosettes. The center has reclining women holding grapes in her upraised hand. Cupid sits on her knee. There is a flower motif below them.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 oval dish, decorative.
Comments: Cameo jasperware. This item is believed to be an imitation of the Wedgewood wares.

Pattern: 427 **Paste:** Porcelain.
No. of Specimens: 3 **Figure:** N/A.
Decorative Technique: Colored paste and freehand gilding.
Description: The paste is grey-green. The only decoration is gold dripped around the rough edge. The ware is not glazed.
Associated Maker's Marks, Figure: N/A.

Vessel(s) Represented: 1 miscellanious decorative object: rim diameter is 7.0 cm, base diameter is 8.0 cm.
Comments: This is a piece of novelty-ware. The item represented is probably a trinket box or hair receiver. The item was molded in a worn mold. The line at the equator is readily visible. Although the paste is very fine, the item is very crude.

UNDERGLAZE DECORATION

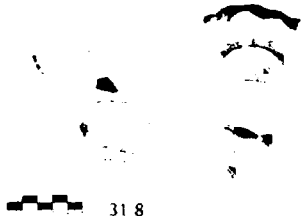
HANDPAINTING ONLY, (GILDING MAY BE OVERGLAZE)

Pattern: 240 and 327 **Paste:** Porcelain.
No. of Specimens: 13 **Figure:** N/A.
Decorative Technique: Underglaze handpainting and overglaze freehand gilding.
Description: The blank is slightly fluted with concave scallops in the rim. There is no shoulder. The edge is gilded. There are freehand gildings accenting seni-floral moldings. #240 has a pale green wash at the rim, fading by the time it reaches the area where the shoulder should be. #327 has a salmon wash.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 plate: rim diameter is 16.0 cm, base diameter is 10.0 cm.
Comments: It is unclear whether the two pattern numbers represent one or two objects.

Pattern: 300 **Paste:** Porcelain.
No. of Specimens: 6 **Figure:** N/A.
Decorative Technique: Underglaze handpainting.
Description: The blue-grey painting of grass and 3 leaved plants seem to grow from the base toward the rim, generously covering the body. The rim is plain.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 creamer: base diameter is 4.5 cm.
Comments: N/A.

Pattern: 406 **Paste:** Porcelain.
No. of Specimens: 6 **Figure:** 406.
Decorative Technique: Underglaze handpainting.
Description: The rim is not available. The body shows portions of a scene with a lamp lighter. Part of a saying on the side is visible "Watchman...What a ...Nig..." All done in dark green, brown and black.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 pitcher.
Comments: Although there is no maker's mark, the object is an example of a type of pitcher marketed by the Buffalo Pottery (Richardson: personnal comm.).

Pattern: 448 **Paste:** Porcelain.



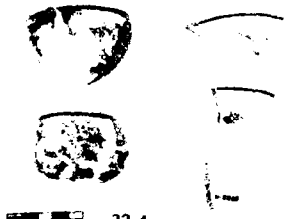
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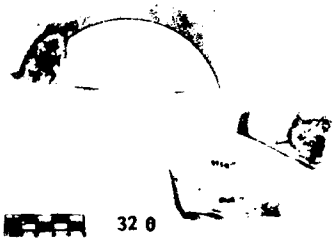
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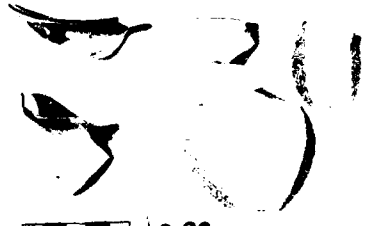
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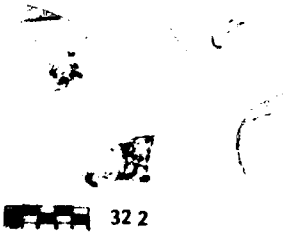
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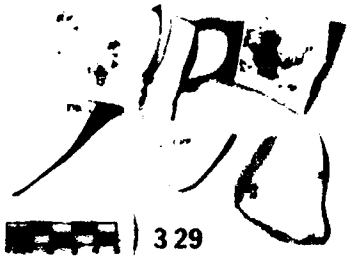
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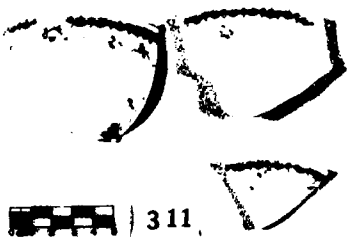
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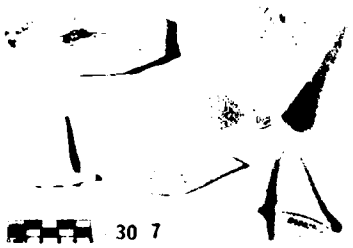
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30 6



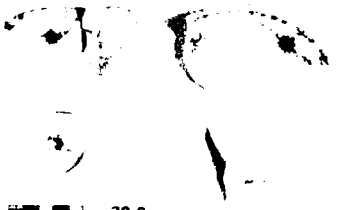
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30 7



3 12



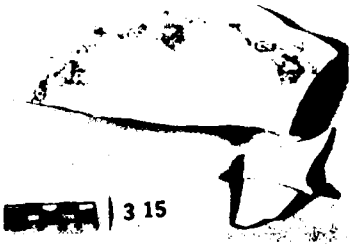
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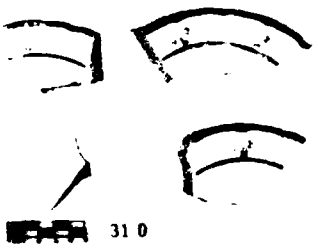
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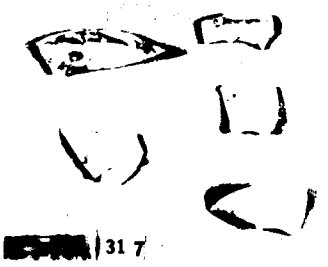
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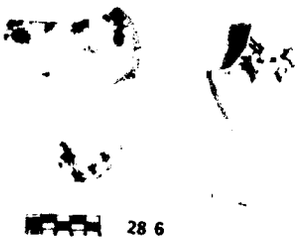
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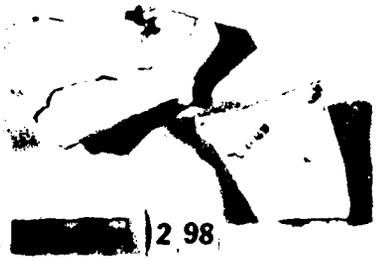
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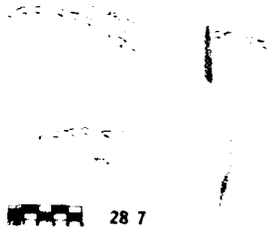
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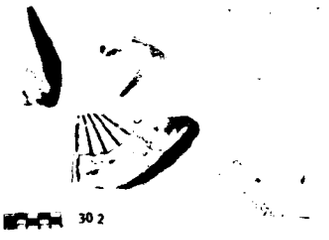
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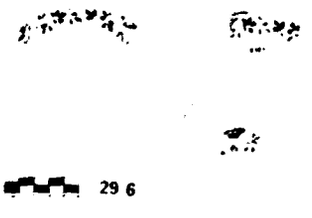
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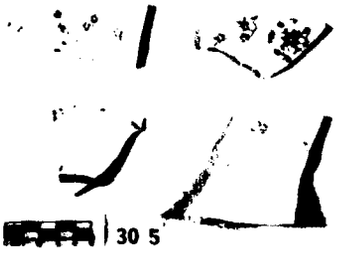
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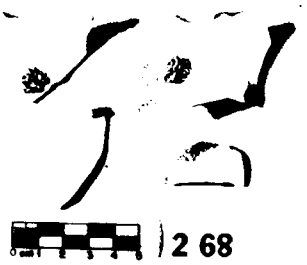
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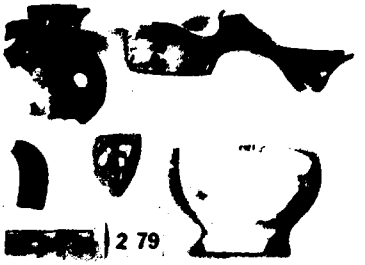


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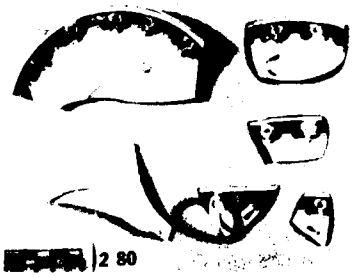


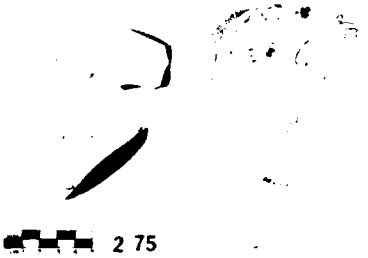
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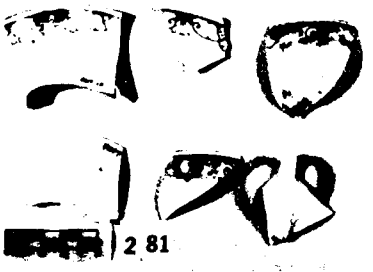

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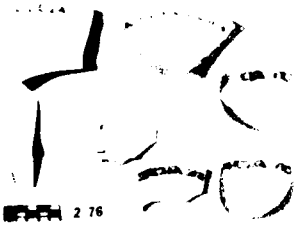

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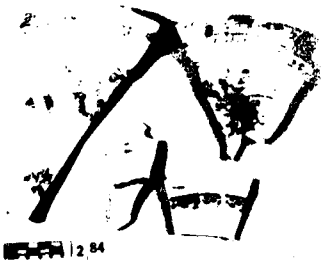

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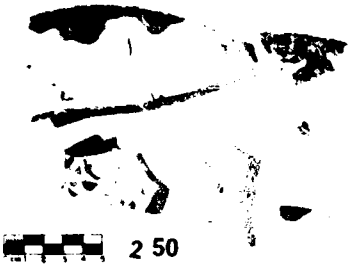

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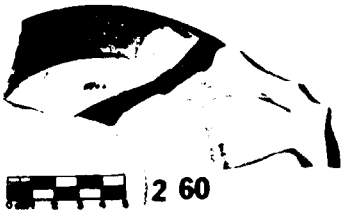

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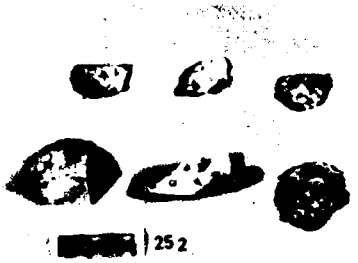
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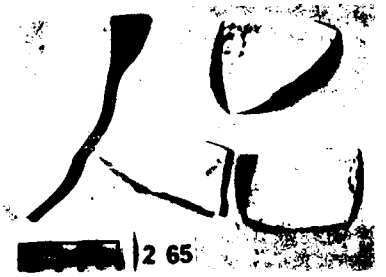
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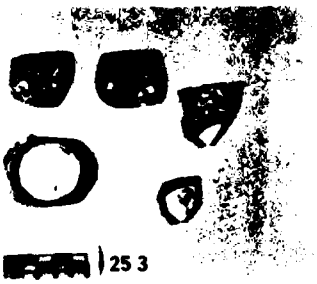
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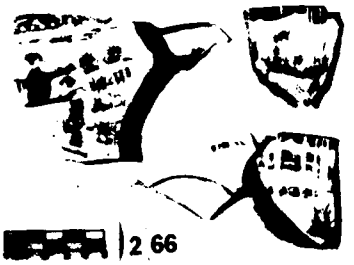
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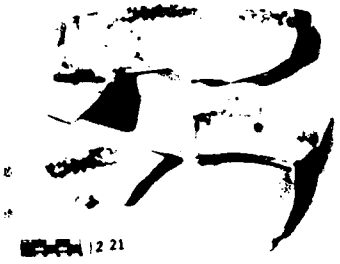
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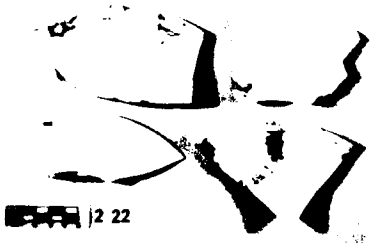
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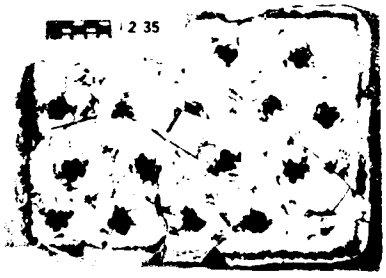


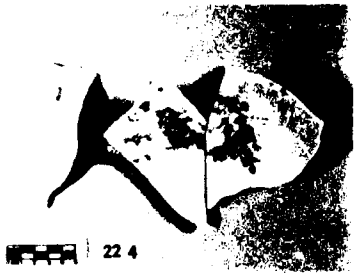
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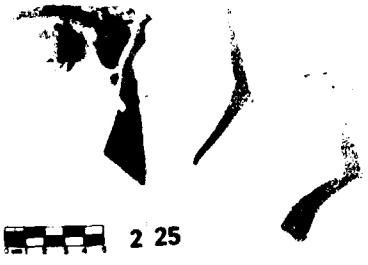

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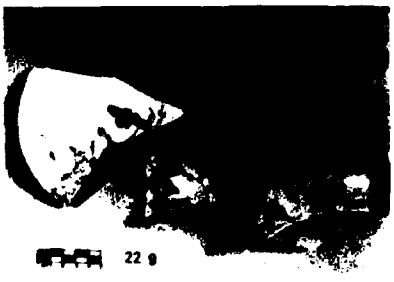

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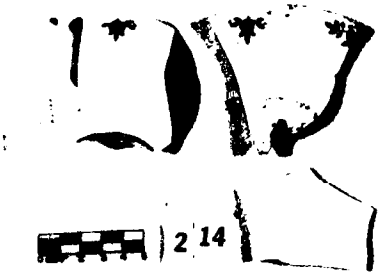

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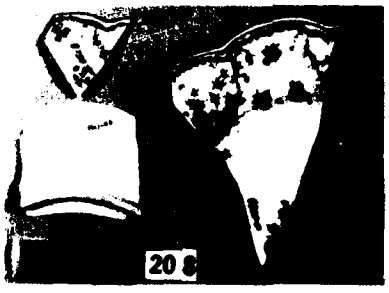

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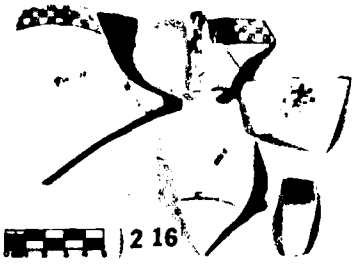
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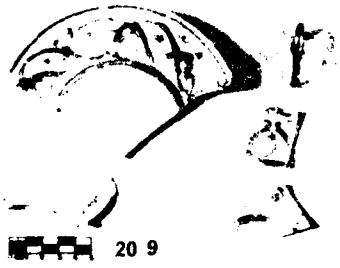
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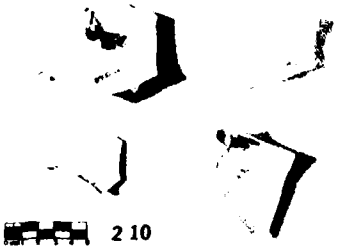


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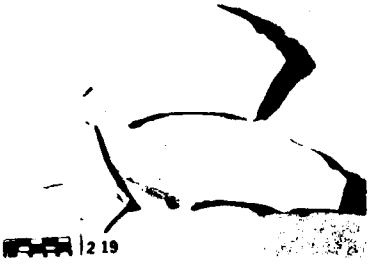


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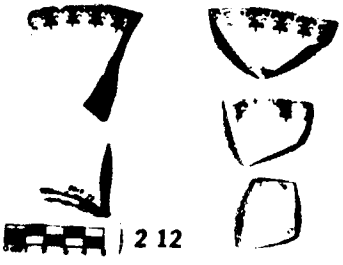




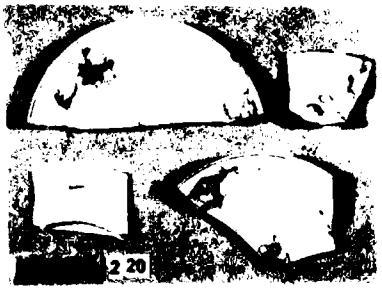
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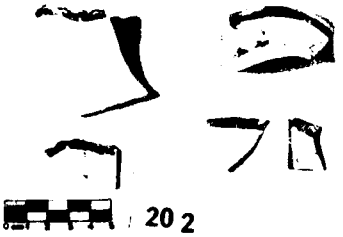
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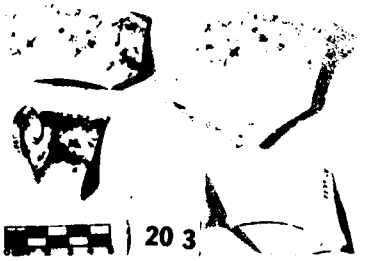
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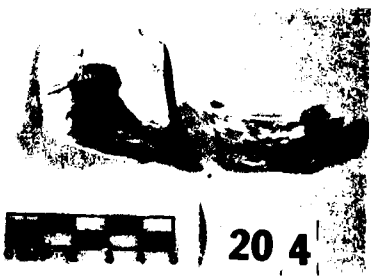
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Description: The blank scalloped border with overlying gilding. The cup handle is orange. The body is a picture of a landscape of hills, water, 2 huts and trees. There is a large wren flying overhead. The foreground is a closeup of flowers. Most of the paint is overglaze. The sky has a cream colored underglaze background.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 cup: rim diameter is 9.0 cm; 1 saucer: rim diameter is 14.0 cm, base diameter is 9.0 cm.
Comments: N/A.

Pattern: 394 **Paste:** Porcelain.
No. Of Specimens: 4 **Figure:** N/A.
Decorative Technique: Underglaze handpainting and overglaze handpainting and freehand gilding.
Description: There are underglazed bands of blue and orange down the rim forming a dark background. The edge is gilded. The overglaze enamels are applied like oil painting. They depict trees bushes, a windmill and the horizon.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 cup: rim diameter is 10.0 cm.
Comments: N/A.

Pattern: 430 **Paste:** Porcelain.
No. of Specimens: 5 **Figure:** N/A.
Decorative Technique: Underglaze handpainting and overglaze decal and freehand gilding.
Description: The rim has a negative laurel pattern of white in gold. Interior to that is a gold bar and spear border. The remainder of the interior is filled with large red/orange and yellow rose decals placed over areas of pink and yellow underglaze wash.
Associated Maker's Marks, Figure: 45C.
Vessel(s) Represented: 2 bowls: rim diameter is 13.0 cm, base diameter is 7.0 cm.
Comments:N/A.

HANDPAINTING AND DECAL, WITH AND WITHOUT GILDING

Pattern: 310 **Paste:** Porcelain.
No. of Specimens: 20 **Figure:** 310.
Decorative Technique: Underglaze handpainting and overglaze decal and stenciled gilding.
Description: A dark green underglaze band is found at the edge and at the shoulder. These bands have a gold stenciled overlay. Decals of double roses with bud and leaf are spaced around the plates between the 2 bands.
Associated Maker's Marks, Figure: 39B.
Vessel(s) Represented: A minimum of 2 plates: rim diameter is 16 cm, base diameter is 9.0 cm.
Comments: Extremely wide distribution ranging from W85 to W140 in several levels.

not glazed. The edge is highly scalloped and gilded. Inside the gold, an underglaze green wash fades towards the center. The overglaze handpainted design of festoons of yellow-green and blue leaves and ferns with pink 5 petal flowers outline the center area.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 dresser tray.
Comments: All these in N15 W135, F16 16-20".

Pattern: 239 **Paste:** Porcelain.
No. of Specimens: 10 **Figure:** 239.
Decorative Technique: Underglaze handpainting and overglaze handpainting and freehand gilding.
Description: The item is kidney or oval shaped. The bottom is not glazed. The very irregular edge is gilded. The rim has a green underglaze wash. The center is white with orange flowers with black centers, gree leaves and a few yellow tendrils.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 dresser tray.
Comments: All but 2 fragments in the F16 of N5 W100.

Pattern: 283 **Paste:** Porcelain.
No. of Specimens: 26 **Figure:** N/A.
Decorative Technique: Underglaze and overglaze handpainting.
Description: The lower portion of each vessel has an underglaze pink wash over molded flowers. Very little of the overglaze design is present. There is no rim available. The body has purple pom-pom flowers, pink roses and gold pom-poms on a white background.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 vase?: base diameter is 10.0 cm; 1 lid: base diameter is 5.0 cm; 1 pot.
Comments: N/A.

Pattern: 343 **Paste:** Porcelain.
No. of Specimens: 14 **Figure:** N/A.
Decorative Technique: Underglaze handpainting and overglaze handpainting and freehand gilding.
Description: The area near the rim has blue coloring done with an airbrush effect. The center body area has orange/pink ub the same technique. The base has both colors. There is a blue painted line at the equator. The rim is gilded.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 2 cups: rim diameter is 10.0 cm, base diameter is 4.5 cm.
Comments: Concentrated between W85 and W95, mostly the upper levels of F21.

Pattern: 392 **Paste:** Porcelain.
No. of Specimens: 15 **Figure:** 392.
Decorative Technique: Underglaze handpainting and overglaze handpainting and freehand gilding.

border is made up of flying birds with out-stretched wings and tails. The cup well is surrounded by grass and flowers, including peonies, morning glories and mums. There are swallows both on the wing above the plants and among them.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 cup: rim diameter is 7.0 cm; a minimum of 2 saucers: rim diameter is 11.0 cm, base diameter is 6.0 cm.
Comments: Border similar to body decoration of #253 above.

Pattern: 410 **Paste:** Porcelain.
No. of Specimens: 6 **Figure:** 410.
Decorative Technique: Underglaze handpainting and stenciling.
Description: The blank has a scalloped edge. The blue silk-screen patterns are present on both surfaces. The exterior has a border of flowers with 5 leaves and 3 feathered petals alternating with a round motif, possibly fruit, surrounded by leaves and scrolls. Below this are 4 lines. The interior is divided into wedges by lines running down the scallops to the base. The areas have the following designs: a realistic peony and bud with leaves on a white background; a smaller design of a daisy type flower with scroll work stems on a dark background; a hexagonal block with 6 petal circle flower diaper and a cartouch with a humming bird and flower; and a repeat of the second motif. 2 bands seperate this blocked area from the center which has a cross motif with leaves between the arms. This is surrounded by a circle of petals that each have a different design on them, alternating a dark diaper and a light flower motif.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 bowl: rim diameter is 18.0 cm, base diameter is 9.0 cm.
Comments: N/A.

Pattern: 504 **Paste:** Porcelain.
No. of Specimens: 40 **Figure:** N/A.
Decorative Technique: Underglaze or overglaze handpainting and/or stenciling.
Description: This catagory contains all of the oriental fragments that could not be grouped with patterns above and were too incomplete for individual description.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: N/A.
Comments: N/A.

OVER AND UNDERGLAZE DECORATION
HANDPAINTING, WITH AND WITHOUT GILDING

Pattern: 232 **Paste:** Porcelain.
No. of Specimens: 3 **Figure:** N/A.
Decorative Technique: Underglaze handpainting and overglaze handpainting and freehand gilding.
Description: The item is rectangular or kidney shaped. The bottom is

is made of joined hexagons each containing a 5 petal flower made from 6 circles. Several lines follow the tops of these boxes. This border is interrupted for cartouches, each of which contains an iris or a daisy type flower. Two or more lines are below the band. The bodies have iris leaves and round objects at their bases that may be rocks.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 2 cups: rim diameter is 8.0 cm, base diameter is 3.5 cm.
Comments: The paste and ink types of the 2 cups are slightly different, but the pattern is identical.

Pattern: 356 **Paste:** Porcelain.
No. of Specimens: 6 **Figure:** 356.
Decorative Technique: Underglaze stenciling.
Description: The blue pattern is probably silk-screened. The border has white plum blossoms on a blue scalloped band. The body has a bed of mums and zinneas with a bird flying overhead. The bird resembles the swallow found on the oriental wares, but the tail is not forked.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 cup: rim diameter is 8.0 cm; 1 saucer: rim diameter is 11.0 cm.
Comments: N/A.

Pattern: 390 **Paste:** Porcelain.
No. of Specimens: 5 **Figure:** 390.
Decorative Technique: Underglaze stenciling.
Description: The blank is fluted. The blue silk-screened design is a series of bands as follows: alternating upright and inverted equilateral triangles; white; geometric scrolls that may repesent stylized plants; white; and a repeat of the triangular band.
Associated Maker's Marks, Figure: 112.
Vessel(s) Represented: A minimum of 1 probable cup: rim diameter is 5.0 cm.
Comments: Found in 3 adjacent squares in the F21 from 12-24 inches. This proximately strengthens the assumption that this is a single item.

Pattern: 407 **Paste:** Porcelain.
No. of Specimens: 6 **Figure:** N/A.
Decorative Technique: Underglaze stenciling.
Description: No rim was available. The body has islolated crossed segments of flowering bamboo and mums done in blue.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 cup: base diameter is 4.0 cm; 1 saucer: base diameter is 7.0 cm.
Comments: N/A.

Pattern: 417 **Paste:** Porcelain.
No. of Specimens: 14 **Figure:** N/A.
Decorative Technique: Underglaze stenciling.
Description: The decoration is done in blue silk-screening. The

STENCILING ONLY

Pattern: 249 **Paste:** Porcelain.
No. of Specimens: 1 **Figure:** N/A.
Decorative Technique: Underglaze stenciling.
Description: The cup has steep sides and an underglaze bottom. The blue design is probably silk-screened. A circle with a blossom at the center has snakes radiating from it. There are scattered background motifs that resemble footprints. A dog with a fan tail is seen facing each direction around the cup.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 cup fragment.
Comments: N/A.

Pattern: 253 **Paste:** Porcelain.
No. of Specimens: 8 **Figure:** 253.
Decorative Technique: Underglaze stenciling.
Description: The 2 tone blue design is probably silk-screened. The border is a dark band with white scrolls and morning glories. The body is mostly scroll work and leaves. A crested bird is seen with out stretched wings and tail. A basal border is formed of alternating scales and fans.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 2 cups: rim diameter is 8.0 cm, base diameter is 3.5 cm; a minimum of 1 saucer: base diameter is 6.0 cm.
Comments: This is the Japanese "flying turkey" pattern.

Pattern: 277 **Paste:** Porcelain.
No. of Specimens: 74 **Figure:** 277.
Decorative Technique: Underglaze stenciling.
Description: The decorations are done in blue. The rim is a flower border. The saucer has figures at the quarters with trees and bushes between. The motifs are pagoda or incense burner and 3 men looking right, a single man with a cone looking right, a pair of men looking left, a single man looking right. All are in oriental garb; most look mournful or worried, but all expressions are individual. The center has grass and bushes. The cups seem to be the same with the positoned around them.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 3 cups: rim diameter is 10.0 cm, base diameter is 4.0 cm; a minimum of 6 saucers: rim diameter is 15.0 cm, base diameter is 9.0 cm.
Comments: Generally distributed with minor concentrations at N16 W125(10), N5 W130(6), N10W130(6) and N15W135(7).

Pattern: 354 **Paste:** Porcelain.
No. of Specimens: 7 **Figure:** 354.
Decorative Technique: Underglaze stenciling.
Description: The blue pattern is probably silk-screened. The border

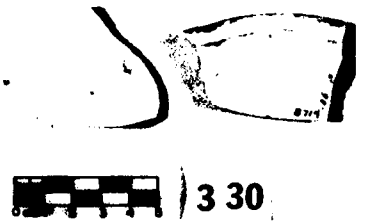
No. of Specimens: 11 Figure: 448.
Decorative Technique: Underglaze handpainting.
Description: The paste is porcelain, but not refined. The rim is plain. The body is grey. The body exterior has linear patterns in 2 tones of blue. The interior is glazed except for a band at the neck. The rim is flared and there is a very short neck.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 ginger jar: rim diameter is 7.0 cm.
Comments: N/A.

Pattern: 449 Paste: Porcelain.
No. of Specimens: 8 Figure: N/A.
Decorative Technique: Underglaze handpainting and overgalze freehand gilding.
Description: The edge is gilded. Freehand flowers and geometric designs are executed in a colbalt type blue. There is a single line of blue around the interior of the lip. Descending size dots of gold run down the outer surface of the spout.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 creamer.
Comments: N/A.

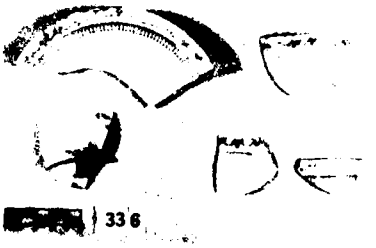
HANDPAINTING AND STENCILING

Pattern: 246 Paste: Porcelain.
No. of Specimens: 7 Figure: N/A.
Decorative Technique: Underglaze handpainting and stenciling.
Description: The entire pattern is done in blue using short lines and dots. The vessel is decorated inside and out. Some areas have a pale blue wash. Near the rim is a border of flowers with lined petals and a center of dots. Some seated and standing human figures are found. The inside has a pale band and the center is a large bird motif, possibly a phoenix. The exterior has a pale line and a motif of overlapping rectangles. Probably silk screening.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 bowl: rim diameter is 15.0 cm, base diameter is 5.5 cm.
Comments: All non-surface finds in the W130 and W135.

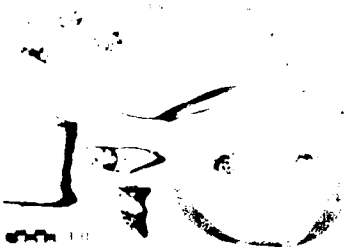
Pattern: 296 Paste: Porcelain.
No. of Specimens: 5 Figure: 296.
Decorative Technique: Underglaze handpainting and stenciling.
Description: The design is done in colbalt blue. There is a band on the rim and at the cup well. 4 flowers are found at the quarters. A leaf border connects them. 2 are realistic blossoms; 2 are blossoms with coronas. Probably silk-screening.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 saucer: rim diameter is 11.0 cm, base diameter is 5.0 cm.
Comments: N/A.

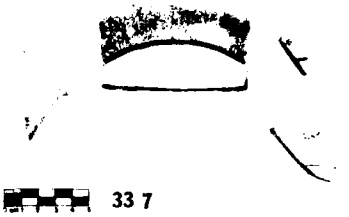


3 30



33 6

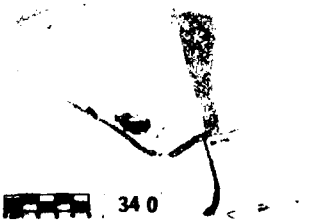




33 7



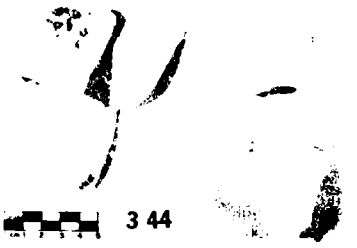
3 32



34 0



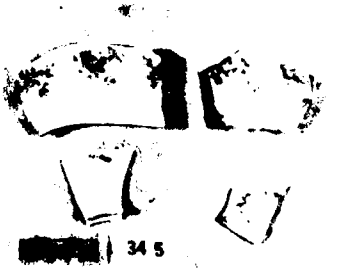
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3 44



3 35



34 5



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347



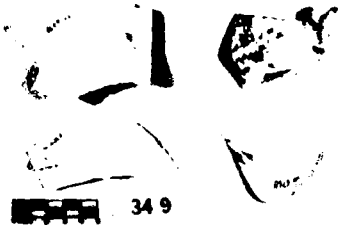
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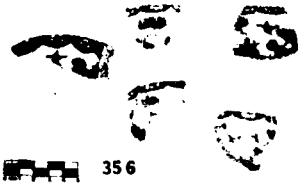
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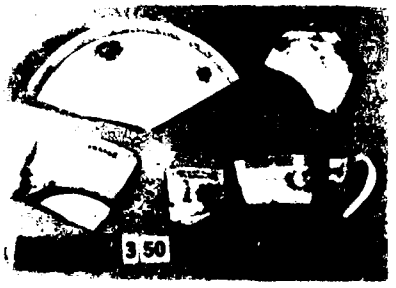
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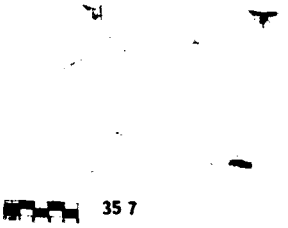
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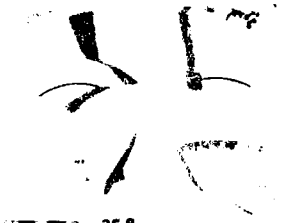
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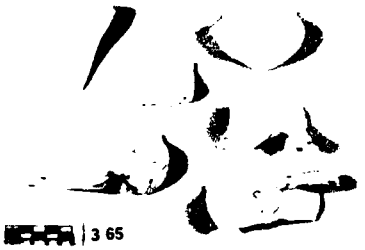
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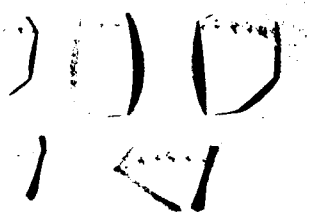
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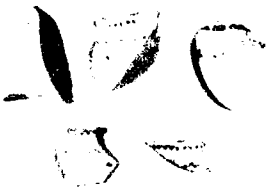
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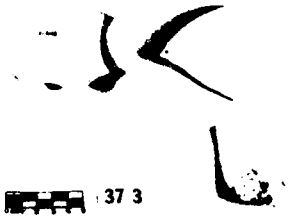
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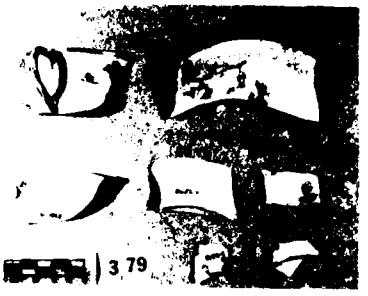
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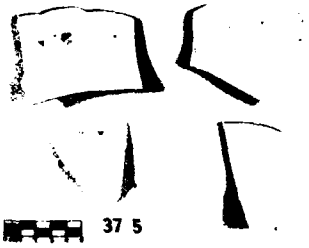
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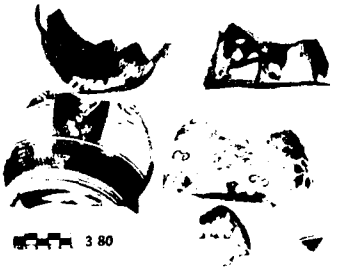
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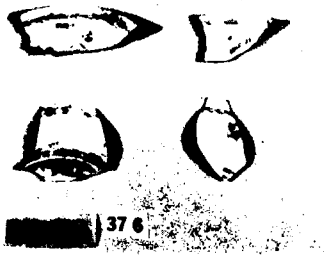
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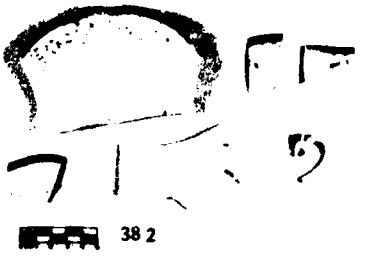
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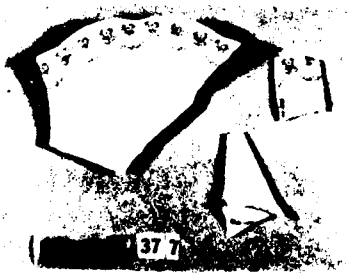
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37 6



38 2



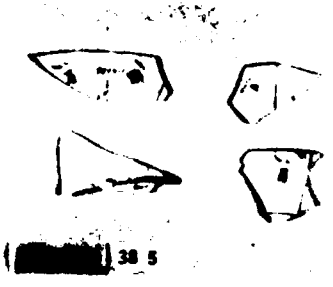
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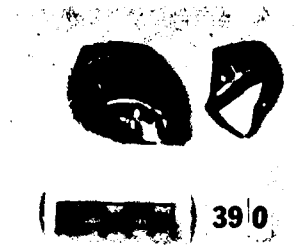
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3 78



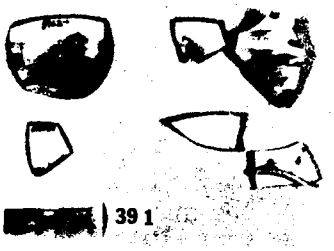
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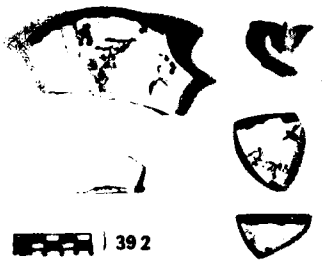
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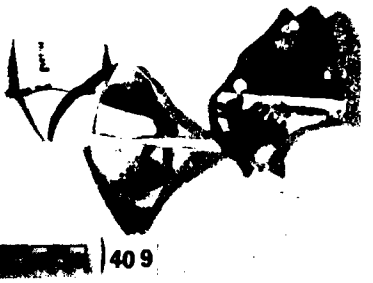
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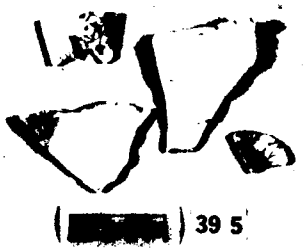
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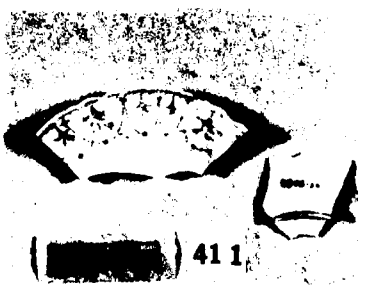
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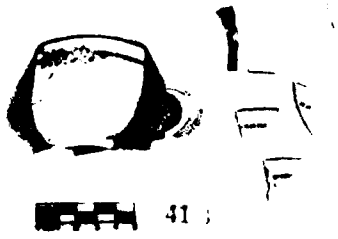
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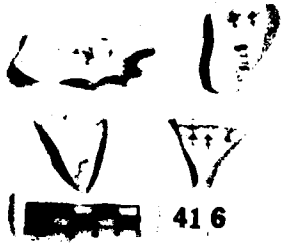
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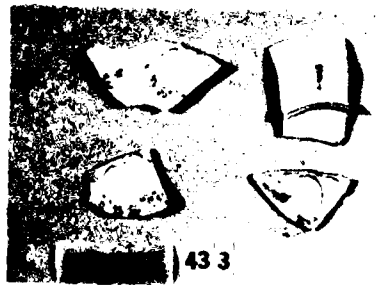
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43 2



41 6



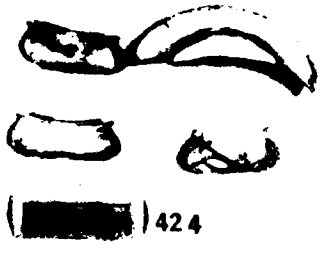
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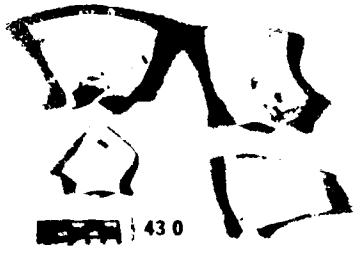
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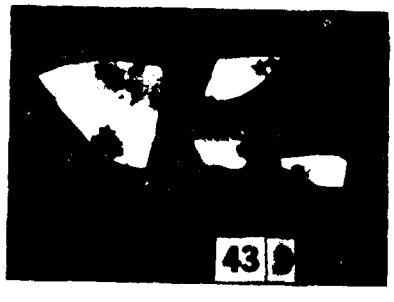
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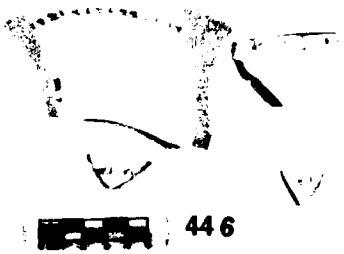


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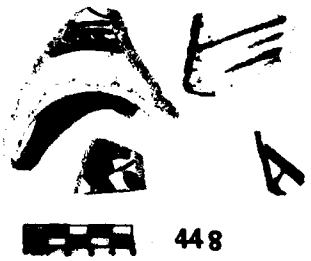




4 42



446



448

CONCLUSIONS

In examining the decorated porcelain vessel forms, it is found that one pattern (201) represents a set of dishes consisting of at least three sizes of plates, soup bowls, cups, saucers, dessert bowls, an oval serving dish, three sizes of platters, two covered vegetable dishes, and a covered butter dish. The Sears and Roebuck catalogues of 1893-1906 do not include this variety of serving dishes in anything less than a service for twelve. Although the largest number of a single item found is eight cups, this appears to have been a large service that was totally discarded. Although most of the fragments belonging to this set were found in the main dump area, the pattern is present throughout the site. It is not possible to determine if it was discarded as a group or piece by piece as they broke. Most likely some were discarded seperately and, when the set was sufficiently depleted to require replacing, the remainder was discarded en masse.

Other possible table services were represented by seven patterns that have plates and cups and/or saucers. One of them (414) also has a platter. Six of these have dinner size plates. The seventh (265) has dessert size plates, cups, and saucers that may have been part of a tea set.

There are 50 patterns for which only plates were represented. Various sizes from 15 to 24 cm were included. Thirty-eight of these patterns had minimum numbers of only one. All others have six or less except pattern 219 which has a minimum of eleven 22 cm plates. This was probably also a dinner set. One additional pattern, 220, was represented by two sizes of plates, ten 16 cm and nine 19 cm plates.

Seventeen patterns were represented by one size of bowl. These are small enough to probably be dessert or berry bowls. Three of the others are possible soup bowls. The remainder are large bowls, such as fruit bowls, and may have been usable for serving.

Five sets that include bowls are also present. Two of these, 286 and 320, have a dessert size plate and a 14 to 15 cm bowl. Pattern 372 has berry bowls and saucers. Pattern 284 has a large plate and bowl that were probably a serving set, possibly for cake and fruit. The Fall 1897 Sears and Roebuck catalogue lists a German bread and milk set that has a large bowl, plate, and a pitcher. Pattern 359 is a basic berry set with one large (20 cm) and eight small (13 cm) bowls.

The most common types of artifacts found in the assemblage were cups and saucers. These do tend to be easily broken, but the numbers present may also reflect the 19th century fashion of using and collecting diverse cups and saucers for tea. There are 33 patterns of a single cup and saucer. Another 36 patterns have fragments of more than one cup and/or saucer, but no other vessels. The strong relationship between the tea service and porcelain is also suggested in pattern 211 which consists of eight creamers and one sugar bowl.

The twenty-one remaining patterns include a variety of household

and personal items. Tableware is futher seen in a set of six butterpats (432), salt and pepper shakers (237), and several serving dishes and platters. Dresser sets are represented by three dresser trays (232, 235, 239) and one hair receiver or puff box (424). There are several items that can be discribed as knicknacks or souvenirs including a maple leaf-shaped dish bearing a picture of "Queen's Royal Hotel, Niagara-on-the-Lake" (304). Also present are four vases, a lamp base (295), and a ginger jar (448).

The distribution across the site was examined for each pattern. In some cases the fragments were clustered as would be expected for a single item, but the most noteworthy result was the wide distribution of most patterns, especially through the central portion of the site. Specific examples of unusual distributions are noted in the descriptions of their patterns.

Of the 236 patterns present, 87 had identifiable maker's marks (see Casselberry). Of these, 65 are European, 18 are Japanese and 4 are American. The obvious preference for European wares is an acknowledged characteristic of the turn-of-century American market. The American factories were concentrating more on whitewares. The rise of the decal method of decoration made European porcelain plentiful and affordable. The era of "china to order" was basically ended by the disasterous fire at ching-te-chen in 1853 (Weiss,1971:46). The Japanese wares present in this assemblage are a representative sample of the entire assemblage. The American items, however, are mostly novelty items: two heart shaped boxes (New Jersey, 242), a creamer (Ohio,245), a demitasse cup and saucer (344) and an adage pitcher (New York, 406).

Of the 65 European patterns, 30 are from Limoges, France. Of these, 15 bear one of the Haviland marks. This includes the large sevice mentioned above (201). The prevalence of their patterns is a tribute to the success of the Haviland Company in catering to the American consumer.

Table 1.

Distribution of Maker's Marks by Country

Limoges, France		total: 30
The Haviland's	15	
Other	15	
Japan		total: 18
Germany		total: 17
Bavaria	4	
Other	13	
Austria		total: 12
England		total: 4
United States		total: 4
New York	2	
New Jersey	1	
Ohio	1	
Czechoslovakia		total: 2
Total		87

The dates represented by the maker's marks span the period from 1842 to the present date. The earliest end date on any one mark is 1889. A total of 10 patterns definately predate 1900, while 55 others have beginning dates before 1900.

The decorative techniques also help to determine the dating of the assemblage. The decal technique was not developed until 1873 and the multi-colored decals somewhat later. All patterns using this technique are more recent than that date. This includes 102 individual patterns and one of the miscellaneous groups, or 43.6% of the total number of patterns. Those of this group that include handpainting are probably the earlier examples, with the more elaboate multi-colored decals being the later.

None of the sources consulted was clear as to exactly when and where the multi-color decals were developed. As noted above, Trimble (1962:155) attributed them to Theodore Haviland. It is interesting, therefore, to note that of the 41 decal patterns for which dates are known, only eight definately predate 1900. Of these, five have Haviland and Company and three have Theodore Haviland marks. The earliest beginning date on these examples is 1876. Pattern 235, from R. Deliniers (also of Limoges) bears a 1875-1905 date.

The vast majority of the patterns present are small floral motifs. This is true of all the overglaze decorative types. Wegars and Carley (1982:7) found this to be true in their decaled wares as well. The decal process lends itself well to such designs. The handpainted motifs are more varied, but they also are predominantly floral. The underglaze designs are mostly oriental. Some of these are elaborate floral and geometric patterns and others are pictorials.

Wegars and Carley (1982:10) indicate that irridescent luster was very popular in the 1920's, although it was available earlier. There are examples of luster items in the Neville House material. They associate banded design found on their whitewares with the post-1920 period. Banding is found in the Neville House material,also. It is not clear whether our porcelain patterns adhere to this idea of dating or not.

The Sears and Roebuck catalogues of the period 1893-1908 list all the various vessel types found on this site as being available in various combinations. They also give an idea of when various products were popular. They added Haviland China in the fall 1896-7 edition. "Decalcomania" is first described in Spring 1902. Elite pottery is first seen in Spring 1906, as are Japanese and Hotel china. Since catalogues only list items that are already popular, these items would all have been available earlier. The catalogues serve as a barometer of their popularity.

Overall, the collection of vessel types and decorative techniques seem to reflect basic household collections of the type popular during the last half of the 19th and first portion of the 20th centuries.

WHITEWARE AND SEMI-VITREOUS CERAMICS

by

John Eddins

Introduction

Those ceramics referred to as whiteware and semi-vitreous ware are often grouped together under the heading of "refined white earthenware". They are linked because of general similiarities in appearance and because of the chronology of their development and popularity. The whitewares were developed gradually out of pearlware in the second and third decades of the nineteenth century. By 1840 they had achieved the status of "... the common but respectable tableware in the markets supplied by the British ceramic industry." (Lueger 1981:121)

Whitewares were differentiated from pearlware and creamware in the early 19th century by the use of alkaline rather than lead glazes, and by variations and diminuition of the bluish casts in the paste and glaze. It has been noted that early whitewares are not always easily distinguishable from late pearlware (Goring 1980:12). This, however, is not true in the Neville House assemblage, where vessel form, coloration, and decoration separated one from the other. Such observations correlate well with the general post-1850 time range.

A range of hard paste, semi-vitrified opaque bodied wares were added to the porous, non-vitreous whiteware in the mid-nineteenth century. These wares can generally be characterized as opaque, white, dense, homogenous, sometimes partly vitrified fabrics often with a faint cast of blue or cream (Lueger 1981:121). They have been referred to by a number of non-specific and overlapping terms such as "ironstone", "stone china", "semi-porcelain", "semi-vitrified china", etc. (Ibid:120). Because of the difficulties in defining and recognizing many of these different manifestations of a semi-vitrified white earthenware, the Neville House research team chose to list them under one heading: semi-vitreous ware. A description of the whiteware and semi-vitreous patterns recovered from the Neville House midden follows.

TRANSFER PRINT

Pattern: 2 **Paste:** Whiteware.
No. of Specimens: 203 **Figure:** 2.
Decorative Technique: Blue Transfer Print-Underglaze; Polychrome Handpainting and Freehand Gilding, Overglaze.
Description: The blank is plain. The applied decoration includes floral and geometric elements. The motif elements and arrangment are essentially the same on cups, saucers, and plates. A transfer print band encircles the exterior rim of vessels and the interior rims of cups. This band featured a background composed of narrowly separated, parallel, vertical lines. Overlying the background are uniformly placed quatre-foil in the form of squat crosses embellished with dots or tick marks centered in each limb. This band is bordered above and below by a gold line. A different transfer-print found on the body of cups and saucers and on the rim body of plates. The background of this band is a series of parallel flutes. A chain of flower garlands hung in swags about the band overlies the background. The flowers are crudely handpainted in red, yellow, pink and green. Below this band, a narrow dagger and dot configuration overlain with a gold line encircles the vessel.
Associated Maker's Marks, Figure: 74C.
Vessel(s) Represented: 14 cups, 4 saucers, 4 dessert plates.
Comments: N/A.

Pattern: 4 **Paste:** Whiteware.
No. of Specimens: 75 **Figure:** 4.
Decorative Technique: Blue Transfer Print - Underglaze; Polychrome Decal and Freehand Gilding - Overglaze.
Description: The blank is plain. The motif includes geometric and floral elements. This pattern combines use of decal, transfer print, and hand painted gold trim decorated essentially the same way on all forms. The rims are adorned by a blue transfer-print band that is diapered with diamond and triangular shapes over a blue stripple mark background. The diamonds contain quatre-foil figures. The band is bordered handpainted thin gold lines. The inner rim of cups exhibits a modified dot-and-dagger transfer print. Vessel bodies (on the saucer face and on cup interior and exterior) display large sprays of flowers. The spray is formed from a large, centrally-placed, rose-like flower flanked laterally by smaller flowers of varied size, shape, and color. The colors include red, orange, pink, purple, blue, yellow, and green. Below their spray, the modified dot and dagger blue transfer print with a superimposed thin gold line terminates the decoration.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 2 cups (1 maybe a creamer) - 2 large saucers.
Comments: N/A.

Pattern: 6 **Paste:** Whiteware.
No. of Specimens: 71 **Figure:** 97B.
Decorative Technique: Blue Transfer Print - Underglaze; Polychrome.

Handpainting - Overglaze.
Description: The vessel blanks are plain. The applied decoration motif on cups is pictoral while on other vessels it is floral and geometric. The theme is oriental. The pattern combines blue transfer print and polychrome handpainting. Plates and saucers are decorated only about the rim and on the body surface directly adjacent to the rim. A handpainted red-orange line encircles the rim edge. The rim and rim/body surface display a blue transfer print consisting of two alternating sections. One section contains scroll-like foliage elements with a stipple background near the rim edge. Below this is a cluster containing two flowers, three leaves, and laterally extending tendrils, one side supporting berries, the other side leaves. The alternate section consists of a chain of scrills or scrolls that dip down into the body and back to the rim thus forming a semicircle. The ground within the semi-circle is a matrix of lines intersecting at small circles. Overlying this matrix centrally is a leaf-like medallion. Green, red-orange, and a luster-like tan color are handpainted over various portions of these two sections. A modified fret design underlines the semi-circle section. A band of red-orange is handpainted about the rim edge and medially on the backs of handles on cups. The cup is decorated with a pictoral scene in blue transfer print. Elements in the scene include several trees, an oriental figure, a pagoda roof, and a wooden fence. Green, red-orange, and a lusta-like tan are handpainted over varied elements of the transfer print.
Associated Maker's Marks, Figure: 97B.
Vessel(s) Represented: 2 cups, 2 saucers, 2 small plates.
Comments: N/A.

Pattern: 8 **Paste:** Whiteware.
No. of Specimens: 14 **Figure:** 8.
Decorative Technique: Monochrome Transfer Print - Underglaze.
Description: The blank is slightly flared out at the rim and has at least two ridges encircling the vessel body. The motif is floral. Blue to blue-green transfer print elements are superimposed over a shiny, enamel-white glaze. The rim is circled by a sequence of scroll or scrill elements overlying a dark blue background. Clusters of flowers, leaves and tendrils with interweaving scrill or scroll elements are placed variously about the vessel body.
Associated Maker's Marks, Figure: 99.
Vessel(s) Represented: 1 pitcher.
Comments: This ware may be an example of staniferous faience. The glaze is very shiny and enamel-like.

Pattern: 9 **Paste:** Whiteware.
No. of Specimens: 130 **Figure:** 9.
Decorative Technique: Monochrome Transfer Print - Underglaze.
Description: The blank is plain. The motif is composed of essentially floral elements in a dark blue transfer print. Bordering the rim just in from the rim edge, is a line of alternating horizontal scrills and circlets. The major design element is placed adjacent to this line and extends down across the rim and into the well in a continuous

decoration. The design consists of clusters of flowers, leaves, and leaf-like scrolls over a dark blue background which descend in alternating large and small clumps down across the rim and just into the well. The clumps are connected by a small strip of scroll and dark blue ground. Twigs or tendrils with attached flowers and foliage extend out from the clumps onto the rim and well, free of the dark blue background.
Associated Maker's Marks, Figure: 78.
Vessel(s) Represented: 4 plates.
Comments: One of the plate blanks exhibited a difference in the configuration of the underside.

Pattern: 10 **Paste:** Whiteware.
No. of Specimens: 65 **Figure:** 10.
Decorative Technique: Monochrome Transfer Print - Underglaze.
Description: Vessel blanks are plain. The applied decoration is composed of floral elements in a gray-blue transfer print, overglaze. The decoration consists of isolated sprigs and branches supporting associated leaves, flowers, and occasional berry or seed clusters. These branches and twigs extend from the rim edge, across the rim, and down into the well on plate forms, and from rim down into the body on cup or bowl forms.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 3 small plates, 1 mug, 1 saucer.
Comments: N/A.

Pattern: 11 **Paste:** Whiteware.
No. of Specimens: 27 **Figure:** 11.
Decorative Technique: Monochrome Transfer Print - Underglaze; Tinted Glaze on Rim.
Description: The vessel blanks have fine-line embossing about the rim border consisting of leaf and scrill medallion-like areas connected by a wavy line whose peaks are topped by dots. Bounding these elements from the rest of the vessel are two parallel, broadly waving lines. The transfer print is dark blue-black and has both floral and geometric elements. About the rim edge and rim boundary, a scalloped band of dark stippled transfer ground is speckled by tiny 6-pointed stars. On the rim border and upper half of the rim body are scattered 5 petaled flowers and small clusters of 5 diamonds flanked by scroll forms superimposed on a dark stipple background. Extending down from the background across the lower half of the body of the rim and into the well are thin tendrils supporting leaves and assorted 5 - petaled flowers. A blue wash tints the glaze on the interior and exterior surfaces of the rim.
Associated Maker's Marks, Figure: 57A.
Vessel(s) Represented: 1 plate.
Comments: N/A.

Pattern: 12 **Paste:** Whiteware.
No. of Specimens 37 **Figure:** 12.
Decorative Technique: Monochrome Transfer Print - Underglaze; Freehand

Pattern: 75 Paste: Whiteware.
No. of Specimens: 24 Figure: 75.
Decorative Technique: Monochrome Decal - Underglaze; Monochrome Handpainting and Wash - Overglaze.
Description: The blank is plain. A wash of light orange to gold occurs along the rim edge and onto the rim overlying some portions of the decal decorations. The main designs are applied in brown transfer print. A large section of checkerboard patterning encircles the vessel, extending from the rim down onto the body. At intervals within the checkerboard are placed long narrow rectangles. Within the rectangle, crosshatching provides a dark background for a long, white, horizontal bar intersected at a 90^{o} angle by short, vertical white bars (forming a "football threads" design). Below the checkerboard pattern is placed a band of shield shape poly gons, filled with cross hatching, and occasionally accented with the wash of light orange to gold. Below the polygon forms, a line of diamond shapes, laid end to end with long axis along the horizontal, and tresfoil elements above and below their junctures, encircles the vessel. A smaller version of the same designs occurs on the interior surface of the rim.
Associated Maker's Marks, Figure: 178.
Vessel(s) Represented: 1 bowl.
Comments: N/A.

POLYCHROME DECAL

Pattern: 5 Paste: Whiteware.
No. of Specimens: 54 Figure: 5.
Decorative Technique: Handpainting and Polychrome Decal - Overglaze.
Description: The blank is the Homer Laughlin "Yellowstone Shape" (1918), a parallelogram with no embossing. The motif consists of floral elements. A thin black line is handpainted on the rim edge. Scattered about the rim and well face are various size branches with stylized round leaves and flowers composed of 5 round petals. The leaves are colored yellow, green, and blue while the flowers are colored reddish-orange and purple.
Associated Maker's Marks, Figure: 24A.
Vessel(s) Represented: 1 bowl and 2 small plates.
Comments: N/A.

Pattern: 13 Paste: Whiteware.
No. of Specimens: 517 Figure: 13.
Decorative Technique: Monochrome Handpainting and Polychrome Decal - Overglaze.
Description: This sample may represent 2 or more different manufacturers using the same decals and overall decorative motif. There are 7 slightly differing saucer/small plate blanks and 3 different cup blanks in the sample. The saucer blanks are distinguished by the configurations of the foot ring and of the embossed lines about the base. One cup blank (W) has an embossed swag and slight scalloping in the lower 1/3 of the body. This cup form exhibits the type A blue bird decal and is trimmed with a handpainted

Vessel(s) Represented: 1 plate: rim diamter is 17.5 cm, base diameter is 11 cm.
Comments: N/A.

Pattern: 68 **Paste:** Whiteware.
No. of Specimens: 27 **Figure:** N/A.
Decorative Technique: Monochrome Decal and Handpainting with Gold Line Accent to Embossed Elements.
Description: Blanks feature scalloped rim edge. The "jam pot" blank has very slight embossing of floral and scroll elements on the exterior body. Green decals are applied on the rim, rim/body juncture, and body of the jam pot and extend from the rim into the body of butter pats and dessert plates. The decals consist of large 5 petal flowers and smaller 7 petal flowers with associated leaves, tendrils and leaflets. The large flowers occur both clustered and singly. On the jam pot, freehand gold trim forming flowers, leaves, and modified scroll work accents very vague embossing.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: Dessert plates, butter pats and a jam pot.
Comments: N/A.

Pattern: 69 **Paste:** Whiteware.
No. of Specimens: 1 **Figure:** N/A.
Decorative Technique: Monochrome Decal and Polychrome Handpainting - Overglaze.
Description: The blank exhibits a scalloped rim edge and fluting across the rim. The applied decoration consists of a reddish brown decal with splashes of pink and brown handpainted wash. The design represents a small spray of bunched daisy or black-eyed susan like flowers with varied leaves and tendrils. Decals are placed on both interior and exterior body surfaces.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 serving dish.
Comments: N/A.

Pattern: 72 **Paste:** Whiteware.
No. of Specimens: 11 **Figure:** N/A.
Decorative Technique: Polychrome Handpainting, Monochrome Decal, and Gold Line Figures and Accent to Embossing - Overglaze.
Description: Gold speckle and solid handpainting about the rim edge and rim border on embossed scrills and scrill-like flutes. A brown decal with handpainted accent is placed in the vessel well at the rim/body juncture. The decal depicts an open rose with laterally extending tendrils containing 5 petal flowers and leaves. The five petal flowers are handpainted blue, the roses with pink, and the leaves nearest the roses with blue-green.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 platter and 1 small bowl.
Comments: N/A.

Decorative Technique: Monochrome Decal-Underglaze and Freehand Guilding-Overglaze.
Description: Plate blanks exhibit a scalloped rim edge. Bowl blanks also exhibit the scalloped rim edge and fluting that extends from the rim into the body. The applied decoration is a blue transfer print in floral motif, underglaze. Gold flecking is sprinkled about rims and randomly on body interiors. Transfer elements include isolated springs containing several flowers of various shapes and sizes and small leaves that extend down from the rim and into the body. Occasionally clusters of thick stems and large blossoms over a background of smaller twigs and flowers are found on rims and bodies.
Associated Maker's Marks, Figure: $55B_3$.
Vessel(s) Represented: 1 plate and 2 bowls.
Comments: N/A.

Pattern: 24 **Paste:** Whiteware.
No. of Specimens: 1 **Figure:** 24.
Decorative Technique: Hand painted trim on monochrome decal - overglaze.
Description: The vessel blank exhibits a scalloping of the rim edge. The decoration is floral and consists of a brown monochrome decal which presents a multi-branched twig with leaves and two closed rose buds. The leaves and blossoms are colored with a wash of yellow-green and pink, respectively.
Associated Maker's Marks, Figure: 25.
Vessel(s) Represented: 1 serving dish.
Comments: N/A.

Pattern: 38 **Paste:** Whiteware.
No. of Specimens: 26 **Figure:** 38.
Decorative Technique: Monochrome Decal and Gold Line Trim - Overglaze.
Description: The blank is plain. The motif is floral, consisting of leafy branches, twigs, and five petal flowers that cluster about the rim and rim/body juncture and extend down in isolated twigs into the vessel body. The decal is light and dark green.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 2 cups and 1 saucer.
Comments: N/A.

Pattern: 39 **Paste:** Whiteware.
No. of Specimens: 2 **Figure:** 39.
Decorative Technique: Monochrome Decal, Polychrome Handpainting, and Gold Line Trim - Overglaze.
Description: The blank exhibits a scalloped rim edge. Motif is floral. Applied decoration consists of brown decal segments representing large, seven petal, daisy-like flowers, small yellow multi-petal flowers, and large leaves, all associated in clusters with small tendrils and fern like sprigs extending out laterally. The decals are placed randomly over the vessel rim and well. Washes of red, yellow and blue are used to accentuate the flowers. Gold line trim is placed on the rim border.
Associated Maker's Marks, Figure: N/A.

Pattern: 109 Paste: Whiteware.
No. of Specimens: 17 Figure: N/A.
Decorative Technique: Monochrome Transfer Print - Underglaze.
Description: Vessel blank has a scalloped rim edge. Blue transfer print occurs on rim and extends down into the well. Floral and geometric motif consists of stipple shaded areas demarcated by wide scrolls and leaf formations located on upper 1/2 of rim. Nondescript branches with leaves and flowers extend down into lower rim and partially into the well. Occasional isolated branches also occur on lower rim.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: Unknown.
Comments: N/A.

Pattern: 123 Paste: Whiteware.
No. of Specimens: 37 Figure: N/A.
Decorative Technique: Monochrome Transfer Print - Underglaze.
Description: Blanks are plain. Reddish brown transfer design extends from the rim onto the body of the lid. It is placed on the body of the vessels. Elements in the decal consist of 2 or more twined vines supporting leaves and nuts or berries. The major design configuration presents these vines enclosed in a castellated bordering at the rim/body juncture of the lid and on the body just below the rim on the vessels. Other fragments have portions of these vines without a castellated bordering.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 lid, 1 chamber pot and 1 smaller vessel.
Comments: N/A.

MONOCHROME DECAL

Pattern: 3 Paste: Whiteware.
No. of Specimens: 51 Figure: 3.
Decorative Technique: Monochrome Decal, Monochrome Handpainting and Freehand Gilding - Overglaze.
Description: The blank is plain. The motif consists of floral elements. The applied decoration consists of isolated sprigs placed randomly over the rims and bodies. The sprigs are composed of central stem, subsidiary stems with leaves, and variously placed rose bud-like flowers. The decal is dark brown and exhibits cross-hatching for shading. A very light wash of brown to reddish-pink is brushed over leaves and buds. One of the platters (the biggest and thickest) may have been square or rectangular. Another seems to have been oval. The specimens have a gold line along the rim edge.
Associated Maker's Marks, Figure: 10C.
Vessel(s) Represented: 3 platters and 1 small serving dish.
Comments: N/A.

Pattern: 17 Paste: Whiteware.
No. of Specimens: 50 Figure: 17.

Pattern: 101 **Paste:** Whiteware.
No. of Specimens: 85 **Figure:** 101.
Decorative Technique: Monochrome Decal, Poly chrome Handpainting, and Gold Line Trim - Overglaze.
Description: Gold band trim encircles the rim border and rim edge. A double band (one wide and one thin line) of gold trim occurs on the lower rim on plates and on the body of cup-forms. Above the double gold band is a line of single small 5-petal flowers and double large roses with leaves all connected by a vine that runs between them. Below the double gold band (in the well on plate vessels and on body of cups) are isolated roses with associated leaves. These elements are all done in red-brown decal with handpainted colors. Leaves are painted green, yellow and turquoise green. Five-petal flowers are blue and plain with yellow-gold centers. Roses are painted a dark red.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 2 plates, 1 butterpat and 1 cup.
Comments: N/A.

Pattern: 102 **Paste:** Whiteware.
No. of Specimens: 56 **Figure:** N/A.
Decorative Technique: Monochrome Transfer Print - Underglaze.
Description: Tureen blank has embossed elements on rim/body juncture area. Pitcher blank features a scalloped rim edge, fluting running from rim into the body and embossed scrills on the body. The applied decoration is a brown transfer print. The design consists of large scale floral elements covering large areas of the body and extending down into the rims on some vessels. The depiction includes morning glory vines with open and closed blooms and tendrils draped about a thick stemmed plant with large open face flowers and two types of pepper like pods. The design is realistic/naturalistic.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 lid, 1 tureen and 1 pitcher or gravy boat.
Comments: N/A.

Pattern: 108 **Paste:** Whiteware.
No. of Specimens: 5 **Figure:** N/A.
Decorative Technique: Monochrome Transfer Print - Underglaze; Gold Accent to Transfer Figures - Overglaze.
Description: Vessel blank is plain. Thin gilding is applied as accent to some of the scroll elements of the transfer print. The green transfer print has 2 distinct sections. Extending across the upper 1/3 of the rim and the rim edge are thin scrolling bands that join at regularly spaced axe-head shaped medallions. Medallion interiors are filled with 4 daisy like half flowers and numerous scrills. Scat ered across the lower 1/2 of the rim and extending down into the plate well are clusters of 3 daisy-like flowers framed by leaves and laterally extending tendrils that support single blooms and associated leaves.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 plate.
Comments: N/A.

Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 lid and 1 serving dish.
Comments: N/A.

Pattern: 98 Paste: Whiteware.
No. of Specimens: 18 Figure: N/A.
Decorative Technique: Monochrome Transfer Print - Underglaze; Splatter Gild-Overglaze.
Description: The vessel blank has a fluted rim edge and scalloping that extends from the rim into the body. Occasional embossed scroll elements occur on the rim and on the body. The transfer print is blue and somewhat flown giving the whole vessel face a blue tint. The print depicts numerous large flower blossoms and leaves densely arranged on the interior of the vessel extending from the rim into the body.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 decorative bowl.
Comments: N/A.

Pattern: 99 Paste: Whiteware.
No. of Specimens: 48 Figure: 99.
Decorative Technique: Monochrome Transfer Print and Handpainted (Sponged)-Underglaze.
Description: A slightly raised embossed oval forms the border for the transfer-print pictoral on the vessel body. A band of densely speckled blue (sponge or transfer applied?) encircles the vessel rim. The speckled blue also covers the embossed oval on the body and forms a border for the transfer print pictoral. The blue transfer print presents a scene suggesting a river side dock or seaport. It contains a large windmill and house on the near shore, numerous buildings on a far shore, and a keel boat and several sailing vessels in the intervening water.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 pitcher.
Comments: N/A.

Pattern: 100 Paste: Whiteware.
No. of Specimens: 98 Figure: 100.
Decorative Technique: Monochrome Transfer Print - Underglaze; Polychrome Handpainting and Hold Line Trim - Overglaze.
Description: The lid blank has shallow scalloping along the rim edge and embossed scrill work along the rim. The accompanying serving dish or tureen has embossed scrill work and fluting on the lower half of the body. The second serving dish has shallow scalloping along the rim edge and fluting along the rim. Gold line trim encircles the vessel rims. At the rim/body juncture.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 bowl, 1 lid, 1 tureen, 1 deep platter serving dish and 1 cup?
Comments: N/A.

alternating semi-circles and darts, divided into arched segments like inverted festoons which terminate in six petal flowers. Extending across the rim below this is a background field of blue stipple which is bordered by scrolls, flowers, and foliage at the rim/body juncture. Cup fragments have this rim decoration on both interior and exterior surfaces. On cup exteriors, isolated flower and leaf elements appear on the stipple ground. On the body portions of cups and saucers are flowers of assorted sizes and shapes. Saucer well fragments present elements of a pictoral, with a colonaded and domed building framed by trees.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 cup, 1 saucer.
Comments: N/A.

Pattern: 92 **Paste:** Whiteware.
No. of Specimens: 7 **Figure:** N/A.
Decorative Technique: Monochrome Transfer Print - Underglaze; Tinted Glaze.
Description: An embossed line encircles the vessel body just below the rim and just above the body base juncture. The light blue transfer print decoration runs from rim to base. The design presents a city-scape with assorted tall buildings in the background and trees and shrubbery in the foreground. The glaze seems to be tinted a light blue.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 pitcher.
Comments: N/A.

Pattern: 95 **Paste:** Whiteware.
No. of Specimens: 8 **Figure:** 95.
Decorative Technique: Monochrome Transfer Print - Underglaze.
Description: Available body fragments of the blank or plain. The applied decoration is blue transfer print and occurs on both the interior and exterior of the vessel. The design consists of a pictoral with an isolated floral element border in the foreground. The pictoral is an oriental scene that includes pagodas, assorted tree forms, and elements which may represent ocean waves. Several running figures in oriental dress also appear.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 unidentifiable.
Comments: N/A.

Pattern: 96 **Paste:** Whiteware.
No. of Specimens: 13 **Figure:** N/A.
Decorative Technique: Monachrome Transfer Print - Underglaze.
Description: The lid blank is plain. The vessel blank has a scalloped rim edge and carries embossed scrillwork on the rim and body. The blurred or somewhat flown blue transfer print extends from the vessel rim down into the body. The design depicts a mass of leafy wildflowers and weeds with assorted blossom, stem, and leaf forms in a realistic or naturalistic style.

Comments: N/A.

Pattern: 87 Paste: Whiteware.
No. of Specimens: 3 Figure: N/A.
Decorative Technique: Monochrome Transfer Print - Underglaze.
Description: The blank has a polygonal shape and slightly raised molded divisions between rim segments. The blue transfer print covers the rim face and extends slightly down into the well. The decoration consists of segments of vermicule design (ie., irregular worn like trails constructed from a chain of circles) superimposed over a background of parallel horizontal lines. This central design is bounded at the rim border by a chain of circles in which every other circle is capped by a chevron. It is bounded at its lower edge by a chain of opposing semi-circles that features dot and dart projections suspended from its lower half.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 plate.
Comments: N/A.

Pattern: 89 Paste: Whiteware.
No. of Specimens: 10 Figure: N/A.
Decorative Technique: Monochrome Transfer Print - Underglaze.
Description: The blank is plain. The applied decoration is blue transfr print. The design on the rim consists of two parallel bands of dart elements pointing toward the interior of the vessel. The design on the well face depicts flowers with stems and leaves of various sizes and shapes, placed randomly, singly, and in bunches.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 small plate.
Comments: N/A.

Pattern: 90 Paste: Whiteware.
No. of Specimens: 5 Figure: N/A.
Decorative Technique: Monochrome Transfer Print - Underglaze.
Description: The rim edge of the blank is scalloped. A band formed by two parallel lines separated by a dotted line, encircling the rim near the rim border, is embossed on the blank. A blue transfer print is applied to the rim and extends down into the well. The design consists of assorted flower, leaf, and scroll elements. The sample is too fragmentary to determine patterning.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 decorative plate.
Comments: N/A.

Pattern: 91 Paste: Whiteware.
No. of Specimens: 5 Figure: N/A.
Decorative Technique: Monochrome Transfer & Print - Underglaze.
Description: The blank is plain. Applied decoration is in blue transfer print. Rim borders are encircled by a transfer print line. Just below and adjacent to this is a line composed of contiguous

Vessel(s) Represented: 1 bowl.
Comments: N/A.

Pattern: 74 Paste: Whiteware.
No. of Specimens: 3 Figure: N/A.
Decorative Technique: Monochrome Transfer Print - Underglaze.
Description: The blank has a scalloped rim edge. The applied decoration is a blue transfer print depicting runners with leaves. The decoration is found on rim fragments.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 plate.
Comments: N/A.

Pattern: 82 Paste: Whiteware.
No. of Specimens: 22 Figure: N/A.
Decorative Technique: Monochrome Transfer and Gold Line Trim - Overglaze.
Description: The blank is plain. Applied decoration is light blue transfer print. The rim is encircled by a three section band. The upper section is a dotted line; the middle section is a blank or white line; the lower section consists of a line of half daisies. Decoration on the body consists of a large gold line triangle with incurvate sides, the interior of which is divided into a field of diamond shapes, each containing a quatre-foil.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 creamer.
Comments: N/A.

Pattern: 85 Paste: Whiteware.
No. of Specimens: 12 Figure: N/A.
Decorative Technique: Monochrome Handpainting - Underglaze; Tinted Glaze.
Description: The blank is plain. The rim is decorated with handpainted representations of flowers with sinuous stems and leaves in blue. The glaze also appears tinted blue over the vessel. In addition, the handpainting elements appear to have flown into the glaze surrounding them.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 plate.
Comments: N/A.

Pattern: 86 Paste: Whiteware.
No. of Specimens: 7 Figure: 86.
Decorative Technique: Monochrome Transfer Print - Underglaze.
Description: The blank is plain. Applied decoration is a green transfer print. The design on the rim represents wood planking nailed together at joints. The well face design appears to be a log cabin fireplace with various utensils.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 plate.

over a dark gray background. The plate well is decorated with a pictoral which includes a naturalistic representation of trees and vegetation in the foreground, mountains in the middle distance, and a cloudy horizon in the background.
Associated Maker's Marks, Figure: 167.
Vessel(s) Represented: 1 plate.
Comments: N/A.

Pattern: 56 **Paste:** Whiteware.
No. of Specimens: 146 **Figure:** 56.
Decorative Technique: Monochrome Transfer Print - Underglaze.
Description: The blanks are plain. Applied decoration is in blue transfer print. A line encircles the vessel at the rim border. At the rim/body juncture some specimens exhibit a band consisting of parallel lines enclosing stylized leaf and flower foams. On the body of the rim between this band and the rim border line are variously spaced depictions of sprigs, blossoms, onion-like forms, and other print or vegetable forms. On the serving dish and saucer these elements extend into the well body. The serving dish base face and plate wells feature a floral motif that consists of numerous flowers of varied type attached to sprigs and profuse foliage.
Associated Maker's Marks, Figure: 9.
Vessel(s) Represented: 2 oval serving dishes, 2 saucers, 1 cup and 1 soup plate.
Comments: N/A.

Pattern: 58 **Paste:** Whiteware.
No. of Specimens: 65 **Figure:** 58.
Decorative Technique: Monochrome Transfer Print - Underglaze.
Description: The blanks are polygonal and feature molded rim section dividers. Applied decoration is a light blue transfer print. The rim is covered by alternating dotted and dashed lines that are arranged parallel to the rim edge. Flower sprigs consisting of one bloom and several associated leaves are superimposed over this background. Swags of flowers encircle the vessel, extending down from the shoulder into the well. The well face itself is decorated with a pictoral which presens a classical style building with a central square dome surrounded by trees and shrubbery.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 plate.
Comments: N/A.

Pattern: 65 **Paste:** Whiteware.
No. of Specimens: 19 **Figure:** N/A.
Decorative Technique: Monochrome Transfer Print - Underglaze.
Description: The blank is plain. Applied decoration is a light in blue transfer print that extends from the rim edge down across the body. The design is floral and consists of a very "noisy" pattern of small leaflets on crowded thin branches with occasional flowers of variable forms. All elements are constructed from dotted lines.
Associated Maker's Marks, Figure: N/A.

Pattern: 52 Paste: Whiteware.
No. of Specimens: 16 Figure: 52.
Decorative Technique: Monochrome Transfer Print and Polychrome Handpainting - Underglaze; Handpainted Gold Line Trim - Overglaze.
Description: The blank carries embossed elements that extend from rim down across the body. These include stylized leaves and scrolls. These elements are covered with a yellow wash and accented with gold outlining. A blue green transfer print of dandelion-like flowers and leaves is applied randomly to the body and handpainted with red, green, yellow, and brown wash. A band of gold encircles the vessel at the body/base juncture.
Associated Maker's Marks, Figure: 193.
Vessel(s) Represented: 1 jardinere.
Comments: N/A.

Pattern: 53 Paste: Whiteware.
No. of Specimens: 66 Figure: 53.
Decorative Technique: Monochrome Transfer Print - Underglaze; Gold Line Trim - Overglaze.
Description: The blank is plain. All decoration is placed in the outer third of the rim and consists of green transfer print. Two parallel lines enclose a dotted line and encircle the vessel at the rim border. Adjacent to this toward the center a space is left for a band of gold trim. Adjacent to this toward the center is a motif consisting of a modified dot and dagger that encircles the vessel. The rim edge is accented with a gold line trim, overglaze.
Associated Maker's Marks, Figure: 2.
Vessel(s) Represented: 1 plate, 2 bowls.
Comments: N/A.

Pattern: 54 Paste: Whiteware.
No. of Specimens: 7 Figure: 54.
Decorative Technique: Monochrome Transfer Print - Underglaze.
Description: Body portion of blank is plain. Decoration is in blue transfer print. Interior face of base exhibits an indeterminate floral motif bordered by a "dot and dagger" like design encircling the body/base juncture. The body exterior is decorated with various floral elements, the most frequently occuring being a small six petal flower. The transfer print on the exterior is rather fuzzy in places.
Associated Maker's Marks, Figure: 189.
Vessel(s) Represented: 2 small bowls.
Comments: N/A.

Pattern: 55 Paste: Whiteware.
No. of Specimens: 14 Figure: 55.
Decorative Technique: Monochrome Transfer Print - Underglaze.
Description: The blank is too fragmentary to determine structural decoration. Applied decoration consists of a dark gray transfer print. The rim features scrolls and stylized three petal flowers superimposed

vessel.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 bowl.
Comments: N/A.

Pattern: 48 **Paste:** Whiteware.
No. of Specimens: 14 **Figure:** 48.
Decorative Technique: Monochrome Transfer Print - Underglaze; Handpainted Gold Trim - Overglaze.
Description: The blank is plain. The dark blue transfer print includes floral and geometric elements in blue and white over a dark blue background. The major element is a solid clustered mass of grotesque flowers (like spent roses) with associated leaves and twigs that covers the vessel from rim to mid body on interior and exterior surfaces and also the interior face of the base. In some portions along the rim, a series of inverted trianguloid elements (somewhat heart shaped because of the curve of their bases) are superimposed on the dark background.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 serving dish.
Comments: N/A.

Pattern: 50 **Paste:** Whiteware.
No. of Specimens: 12 **Figure:** 50.
Decorative Technique: Monochrome Transfer Print - Underglaze.
Description: The blank is incomplete. Decoration consists of a light blue transfer print. Motif elements include a pictoral located on well face bordered by a trim of daisy-like flowers interspersed with leaves. The central scene involves buildings and trees. Sample is too fragmentary for further determination of theme.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 plate or soup plate and unidentifiables.
Comments: N/A.

Pattern: 51 **Paste:** Whiteware.
No. of Specimens: 21 **Figure:** 51.
Decorative Technique: Monochrome Transfer Print - Underglaze; Tinted Glaze.
Description: The rim of the blank features embossed section dividers. The decoration is applied in dark blue transfer print. A blue tint is apparent for the glaze on both surfaces of the vessel. The motifs include floral, pictoral and geometric elements. The rim border and the rim/well area are encircled by bands featuring a "T" pattern variation of fretting. The body of the rim is decorated with pictorals of oriental scenes which include small houses with upturned roof edges palm trees, variously placed tree peony blossoms and leaves, and oriental medallions. The central scene in the well contains an orinetal structure, palm trees, elements that may be waves or mountains, and randomly placed cherry blossom-like sprigs.
Associated Maker's Marks, Figure: 187.
Vessel(s) Represented: 1 plate.
Comments: N/A.

Vessel(s) Represented: 3 butter pats, rim 8 cm.
Comments: The transfer print on many of the fragments is extremely smeared, achieving a "flow blue" appearance. This particular pattern is a sample of the "Fairy Villas" pattern produced by an unknown manufacturer.

Pattern: 40 Paste: Whiteware.
No. of Specimens: 11 Figure: 40.
Decorative Technique: Monochrome Transfer Print and Polychrome Handpainting - Underglaze.
Description: The blank is plain. The decorative motifs include floral and pictoral elements. The rim is covered by a scene in black transfer print depicting rabbits running and standing in a setting of stylized daisy-like flowers and wisps of grass. Parts of the flowers are handpainted with a pea-green color. A broad swath of bright yellow covers the lower third of the body of the rim and appears to represent grass. The rabbit and flower figures are large and fill almost the entire width of the rim. The rim is bounded by handpainted red trim lines. The well face is ornamented with handpainted blue and red leaves, blue tendrils, and green eight-point stars.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 plate, 26 cm rim.
Comments: The figures are somewhat realistic but very crude.

Pattern: 42 Paste: Whiteware.
No. of Specimens: 38 Figure: N/A.
Decorative Technique: Monochrome Transfer Print - Overglaze; Tinted Glaze.
Description: The vessel blanks are polygonal and feature embossed partitions that divide the rim into segments. The decoration includes floral and geometric elements. The rim border and upper half of the rim are covered with a band composed of closely spaced horizontal parallel lines. Superimposed on these lines are chevrons with an horizontal axis. The band is broken at regular intervals by two types of medallions. One is a small medallion with central cross. The other has central scroll and lance head elements superimposed on a background of small circles enclosed in cross hatching. Floral sprays extend from the lower half of the rim down onto the well face. The well face also exhibits randomly placed large flowers and grape clusters. The glaze is tinted blue.
Associated Maker's Marks, Figure: 53A.
Vessel(s) Represented: 1 platter, 1 small plate.
Comments: N/A.

Pattern: 43 Paste: Whiteware.
No. of Specimens: 5 Figure: N/A.
Decorative Technique: Monochrome Transfer Print - Underglaze.
Description: The blank is plain. The decoration consists of a purple transfer print depicting densely packed but distinct sprigs bearing leaves and clusters of two to six berries. The decoration is found on both the interior and exterior of the rim and body portions of the

Gilding.
Description: Plate blanks are plain. The soup plate blank has a broadly scalloped rim edge. Decoration includes floral, geometric, and bonding elements in a blue transfer print, underglaze. The rim border carries a negative dotted band, the dots standing out in a blue hatched background. This band is bordered on each side by a thin line parallel to the band. The innermost of these lines shows traces of a gold band trim. A similar band and line arrangement is present in the lower third of the rim body. Covering the upper two thirds of the rim body, and thus bordered by the two band complexes is a modified chain guilloche design consisting of evenly spaced oval medallions with a central quatre-foil shape connected by scrolls.
Associated Maker's Marks, Figure: 61A.
Vessel(s) Represented: 6 plates, 1 soup plate.
Comments: N/A.

Pattern: 28 Paste: Whiteware.
No. of Specimens: 59 Figure: 28.
Decorative Technique: Monochrome Transfer Print-Underglaze; Tinted Glaze.
Description: The plate blanks exhibit a widely scalloped rim edge and a leaf-like medallion embossed on the body of the rim below the low points of the scallops. Bowl blanks display scrill work embossed about the rim. The ware has a blue-tinted glaze, possibly caused by a "running" of the transfer print. The transfer is blue and contains floral and geometric elements. Flowers, tendrils, and scrolls are superimposed on a stipple background around the rim border/in body of rim region. At regular intervals, a long, narrow medallion, formed from centrally placed flowers over a hatched background bordered by scrolls, extends down from this continuous rim decoration across the rim and onto the well face. Isolated flowers are scattered over the body of the rim and in the well. The plate well center features a large medallion composed of dark background, scrollwork borders, and symmetrically placed, stylized flowers.
Associated Maker's Marks, Figure: 76.
Vessel(s) Represented: 2 plates, 2 bowls.
Comments: N/A.

Pattern: 32 Paste: Whiteware.
No. of Specimens: 11 Figure: 32.
Decorative Technique: Monochrome Transfer Print - Underglaze; Tinted Glaze.
Description: The vessel blanks exhibit scalloping of the rim edge and occasional areas of embossed scrillings on the rim. Decoration in blue transfer print with floral, geometric, and pictoral elements. A band bordered by scrolls and containing parallel vertical line (harp string) hatching encircles the rim. Single and clustered flowers are placed around the rim/body juncture. The well face is adorned with a pictoral that includes an oriental boat, one or more buildings on the shore in the background, and border elements consisting of trees, flowers and columns.
Associated Maker's Marks, Figure: 73.

blue line about the inner rim border. The other two cup forms are thick and thin walled variants of a plain cup without embossing. Decal motifs include 2 different generalized blue bird forms. Blue lines are handpainted about rim borders, rim bodies and bodies of saucers, cups, and plates. Placement of these decals and of handpainted blue lines varies from blank to blank. One blue bird form (A) appears in a number of sizes and presents the view from above of a bird with wings extended and head turned to expose only the left profile. The other form (B) consists of a bird seen in full body profile with its two wings sticking straight up from the back to form a V-shape. The body of the bird is arched with the head raised toward the tail.
Associated Maker's Marks, Figure: 31B.
Vessel(s) Represented: 8 cups, 2 cups, 5 cups, 2 plates, 14 saucers of 7 forms, 1 lid and 2 serving dishes.
Comments: All the specimens of this "pattern" represent a rather low quality, utilitarian dinnerware set. Perhaps the differences in detail of blank and decoration resulted from breakage and replacement over time.

Pattern: 14 **Paste:** Whiteware.
No. of Specimens: 61 **Figure:** 14.
Decorative Technique: Polychrome Decal and Handpainted Gold Liner - Overglaze.
Description: The blank has slight indentations evenly and widely spaced about the rim edge. The motif is floral. A thick gold line encircles the vessels, covering part of the rim edge and rim border. The decal elements occur in a chain about the vessel interior on the rim border and extending into the rim/body area. The chain consists of a circlet of rose bunches composed of small bouquets. Each bouquet holds 3 roses with surrounding leaves tightly bundled in a triangular mass and connected to evenly spaced adjacent bundles by a thin trail of leaf green dots. The foliage is yellow green and the roses are 2 shades of pink.
Associated Maker's Marks, Figure: 28B.
Vessel(s) Represented: 5 small bowls.
Comments: N/A.

Pattern: 16 **Paste:** Whiteware.
No. of Specimens: 5 **Figure:** 16.
Decorative Technique: Polychrome Decal - Overglaze.
Description: The blank exhibits very faint feather edge embossing on the rim border and a widely scalloped rim edge. Rectangular sections filled with an embossed trellis design are evenly spaced about the body of the rim. The decoration motif is floral. The polychrome decal depicts a large blossom (perhaps a post-mature rose) surrounded by leaves and flanked on each side by one or two tendrils that extend out and bear smaller leaves and buds. The colors on the decal include red, pink, yellow, and green on the flowers and blue, green, and black on tendrils and leaves. These decal units are placed on smooth body of rim segments between the embossed trellis segments.
Associated Maker's Marks, Figure: 173.
Vessel(s) Represented: 1 small plate and 1 bowl.

Comments: N/A.

Pattern: 18 Paste: Whiteware.
No. of Specimens: 46 Figure: 18.
Decorative Technique: Polychrome Decal and Freehand Gilding - Overglaze.
Description: Blanks are characterized by broadly scalloped rim edge and an embossed line on the rim border that parallels the rim edge and turns down into scrills on the rim body just below each scallop. A gold line encircles the rim border. The decal motif is floral and occurs on all rims and on the well face centers of some vessels. The decal on the rims consists of inverted swags of roses with leaf trim that encircle the rim in the upper third of the rim body. The roses at the low points of the swags are twice as large as those in the arched positions. The center of the well face on the layer plater has a circlet of roses with leaf trim surrounding a central rose. On two miscellaneous pieces, probably butter pats, there is no well center decoration, and the roses about the rim are placed in evenly spaced groups of three.
Associated Maker's Marks, Figure: 4C.
Vessel(s) Represented: plates and butter pats.
Comments: N/A.

Pattern: 20 Paste: Whiteware.
No. of Specimens: 117 Figure: 20.
Decorative Technique: Polychrome Decal and Freehand Gold Trim Overglaze.
Description: The blanks are plain. The motif is floral. The decal is a modified "Hyacinth" conventionalized border that represents hyacinth or tulip-like shapes placed end to end (as used by Wedgewood and others on jasperware). The flowers are short, stubby and have three petals. They are colored yellowish-green and are complemented by two small red dots that border the center petal of each flower. The rim edge is decorated with a gold line. One bowl from features a gold line circling the interior of the body as well.
Associated Maker's Marks, Figure: $9A_2$.
Vessel(s) Represented: 1 plate: rim diameter is 25 cm; 3 small plate: rim diameter is 17 cm; 3 large bowls: rim diameter is 14 cm; 2 small bowls: rim diameter is 8.5 cm; 1 serving dish; and 1 cup: rim diameter is 6.5 cm.
Comments: N/A.

Pattern: 23 Paste: Whiteware.
No. of Specimens: 4 Figure: 23.
Decorative Technique: Polychrome Decal and Handpainted Edge Line - Overglaze.
Description: The vessel blank is plain. Motifs include floral, banded and geometric elements. Just above the midline of the body, a chain of light blue scroll forms encircles the vessel. A background about 2 cm thick, of imbricated, scale-like tongues formed by dotted lines and bordered above by a thin brown hand painted line is located above the

scrolls. Attaching to the scroll 'chain' and extending down into the lower half of the body are flowers, clustered and single, of varying sizes and colors, with attached foliage trim. The flowers are colored pink, blue, orange, maroon and yellow. The leaves are green. A thin handpainted line encircles the rim edge and extends down the sides of the handle.
Associated Maker's Marks, Figure: 32A.
Vessel(s) Represented: 1 creamer.
Comments: N/A.

Pattern: 26 **Paste:** Whiteware.
No. of Specimens: 74 **Figure:** 26.
Decorative Technique: Colored Paste; Polychrome Decal and Line Edge Trim - Overglaze.
Description: Vessel blanks have scroll-work embossed about the rim border. The motif of the applied decoration is principally floral. Segments of polychrome decal representing naturalistic sprigs of various flowers with associated stems and foliage are placed randomly on the body of the rim and the vessel body. Colors include various shadings of blue, green, yellow and brownish-red. The blank is made from a pink colored paste. A silver line trim is present on the rim borders of plates and on the handles, exterior rim edges and interior rim borders of cups.
Associated Maker's Marks, Figure: 22C.
Vessel(s) Represented: 2 plates, 2 saucers and 4 cups.
Comments: N/A.

Pattern: 30 **Paste:** Whiteware.
No. of Specimens: 9 **Figure:** 30.
Decorative Technique: Polychrome Decal and Gold Line Trim - Overglaze.
Description: The saucer blank is slightly scrolled at the rim edge. The motif consists of naturalistic human and object figures. The polychrome decals are placed randomly about the vessels and include little pictures of a hobby horse, a pestle and mortar, a pail with a rope handle, a baby wrapped in swaddling, a crying child, and a xylophone. Colors are shades of red, blue, green, brown, orange, and flesh tone.
Associated Maker's Marks, Figure: 21.
Vessel(s) Represented: 2 saucers and 1 cup.
Comments: N/A.

Pattern: 31 **Paste:** Whiteware.
No. of Specimens: 2 **Figure:** 31.
Decorative Technique: Polycrhrome Decal and Gild Line Trim - Overglaze.
Description: The blank is plain. The motif is floral. Polychrome decal segments are evenly spaced below the rim and just above the shulder of the body. The decal represents a cluster of three stylized pink roses over a blue background, bordered by sinuous scrill-like twigs that extend out laterally and bear white and green daisy-like flowers. Gold line trim encircles the rim edge and the vessel body

just above the shoulder.
Associated Maker's Marks, Figure: 23D.
Vessel(s) Represented: 1 creamer.
Comments: N/A.

Pattern: 33 **Paste:** Whiteware.
No. of Specimens: 12 **Figure:** 33.
Decorative Technique: Polychrome Decal and Gold Line Trim - Overglaze.
Description: The saucer blank exhibits rim edge scalloping and embossed scrilling on the rim. Applied decoration consists of polychrome decal with floral and animal figure elements. The major element is a short, plump blue bird with yellow chest feathers and beak depicted on a branch cluster that bears green twigs and leaves and pink and yellow five petal flowers. The birds are seen from above and the front with wings 'spread-eagle' and head turned to present either right or left profile. Gold line trim is placed on the rim border.
Associated Maker's Marks, Figure: $29A_{2-3}$.
Vessel(s) Represented: 1 serving dish, 1 saucer, 1 cup, 1 bowl and unidentifiables.
Comments: N/A.

Pattern: 41 **Paste:** Whiteware.
No. of Specimens: 3 **Figure:** 41.
Decorative Technique: Polychrome Decal and Handpainted Line Trim - Overglaze.
Description: The blank is plain. The motif is pictoral. The scene includes several small two-masted sloops on a body of water. A church or public building surrounded by trees occupies the shore in the background. The decal colors include purple, blue, yellow and brown. The scene is very naturalistic.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: Unidentifiable.
Comments: N/A.

Pattern: 44 **Paste:** Whiteware.
No. of Specimens: 72 **Figure:** 44.
Decorative Technique: Polychrome Decal and Monochrome Handpainting - Overglaze.
Description: The vessel blanks have a scalloped edge. The general motif is oriental and contains floral, geometric, pictoral, and isolated figure elements. Rim edges are handpainted in reddish-brown. Just below this trim a decal band encircles the vessel. The band is outlined in black and contains white "K" like forms in groups of five separated by sets of three black boxes outlined in yellow. Below this band a series of decal figures are repeated about the vessel. The figures consist of a complex of black rectangles within and adjacent to other rectangles, all outlined in yellow. Stylized floral elements including yellow-green flowers, light green stems, and reddish orange leaves are superimposed over the sets of rectangles. Body fragments are decorated with parts of various scenes. One scene depicts a bird, colored blue, green, and red orange, in flight in the foreground with

green slashes representing other birds in the distance. A second scene involves a blue green vase standing next to berry covered vines handpainted in blue and red. A third scene presents flamingos (green or reddish brown, with light yellow legs and necks, black wings and blue tails) standing or bending on green capped cliffs. A fourth scene consists of blue capped cliffs with associated vines with green leaves and large pink flowers. Some of the body/vase fragments have trim similar to that in the upper half of the rims.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 ewer, 1 basin and unidentifiables.
Comments: N/A.

Pattern: 45 **Paste:** Whiteware.
No. of Specimens: 26 **Figure:** 45.
Decorative Technique: Polychrome Decal and Stenciled Gold - Overglaze.
Description: The blank has a scalloped edge. Decorations include stencil gold and polychrome decal. The rim is trimmed with sparse arrangements of stencil gold curling twigs supporting leaves and occasional flowers and berries. The plate well is covered by a large decal depicting blackberries and peaches with stems and leaves. Colors in the decal include reddish orange, green, blue, and black. Stenciled in gold below the decal are the words "Compliments _____ _____ Gen'l Merchandise Bridgeville, Pa."
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 small commemorative plate.
Comments: N/A.

Pattern: 57 **Paste:** Whiteware.
No. of Specimens: 51 **Figure:** N/A.
Decorative Technique: Polychrome Decal and Gold Line Trim - Overglaze.
Description: The blank exhibits a scalloped rim edge. A gold line trim encircles the rim edge. A polychrome decal encircles the vessel face just above the rim/body juncture. The design consists of a chain or series of green shamrock or clover-like leaf sets separated by red brown seed or blossom clusters and linked together by thin and sinuous green stems or tendrils.
Associated Maker's Marks, Figure: 171.
Vessel(s) Represented: 2 bowls.
Comments: N/A.

Pattern: 59 **Paste:** Whiteware.
No. of Specimens: 18 **Figure:** N/A.
Decorative Technique: Polychrome Decal - Overglaze.
Description: Platter blank exhibits a scalloped rim edged and embossed scrilling along the rim. Bowl blank features fluting and embossed scrilling along the lower half of the body exterior. Applied decoration consists of decals with red, pink, dark green, and light green elements that extend from the rim down into the body. The design depicts paired and single roses, surrounded by leaves, some with tendrils extending out laterally and terminating in smaller blossoms.
Associated Maker's Marks, Figure: N/A.

Vessel(s) Represented: A platter and bowl.
Comments: N/A.

Pattern: 60 Paste: Whiteware.
No. of Specimens: 9 Figure: N/A.
Decorative Technique: Polychrome Decal - Overglaze.
Description: Blank is plain. The applied decoration is polychrome and consists of pastel red and purple flowers of varied forms connected by long stems or twigs that bear evergreen - like needles colored in a pastel green. The decal extends from the rim into the body.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 saucer.
Comments: N/A.

Pattern: 62 Paste: Semi-Vitreous.
No. of Specimens: 6 Figure: N/A.
Decorative Technique: Polychrome Decal-Overglaze.
Description: Sample is too fragmentary to determine nature of blank. The decal applied to the body exterior consists of a large zynia or aster bloom, orange with a yellow center, surrounded by varied foliage which includes fern-like branches and grass. Other elements in the design may represent a rock or cliff top (see pattern 44).
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 small dish.
Comments: N/A.

Pattern: 63 Paste: Whiteware.
No. of Specimens: 1 Figure: N/A.
Decorative Technique: Polychrome Decal - Overglaze.
Description: The rim edge of the blank features a staggered scallop and the lower body has embossed scrilling and fluting. The applied decoration consists of decals of various sized rose bods, partially open, placed on the interior body. Colors include pinkish red and yellow.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 serving dish or basin.
Comments: N/A.

Pattern: 64 Paste: Whiteware.
No. of Specimens: 14 Figure: N/A.
Decorative Technique: Polychrome Decal, Monochrome Handpainting, and Gold Line Trim - Overglaze.
Description: The blanks are plain. The rim is covered with a handpainted wash of purple lustre. Rim edge is trimmed with a gold line. Decals of chrysanthimum-like flowers in shades of purple, brown, and yellow with faded gray-green and red stems and leaves extend from interior body onto base face. Small, five petal white flowers are used as background fill.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 thin walled circular serving dish and 1 thick

walled oblong serving dish.
Comments: N/A.

Pattern: 66 Paste: Whiteware.
No. of Specimens: 10 Figure: N/A.
Decorative Technique: Polychrome Decal-Overglaze.
Description: The saucer and plate form blanks have a scalloped rim edge. The applied decoration consists of polychrome decals placed on body of rim section of the plate forms and exterior body portions of the cup. The decals represent clusters of soft pastel pink roses and buds with blue green and green leaves, some with parallel hatching.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 small plate, 1 saucer and 1 cup.
Comments: N/A.

Pattern: 67 Paste: Whiteware.
No. of Specimens: 22 Figure: N/A.
Decorative Technique: Polychrome Decal and Gold Line Trim - Overglaze.
Description: The blanks have scalloped rim edges and embossed scrill work medallions on the rim. Gold line trim encircles the vessel at the rim edge/border juncture. Applied decoration consists of decals placed on body of rim and well face. The decal depicts a cluster of fruit blossoms with associated stems and leaves. Colors include pale reds, greens, blue greens, and yellows. Shading and texture are represented in some of the leaves and blossoms by distinct parallel line hatching.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 2 plates.
Comments: N/A.

Pattern: 93 Paste: Whiteware.
No. of Specimens: 7 Figure: N/A.
Decorative Technique: Polychrome Decal of Polychrome Handpainting - Underglaze.
Description: Design is floral depicting stalks of wheat and various green leaf and stem elements associated with red, purple, yellow, and brown flower parts and occasional handpainted blue, five petal flowers with green stems. No definite organization can be determined from the fragments available.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 plate.
Comments: N/A.

Pattern: 103 Paste: Whiteware.
No. of Specimens: 20 Figure: N/A.
Decorative Technique: Polychrome Decal and Gold Line Trim - Overglaze.
Description: Vessel blanks feature scalloping along the rim edge and embossed scrilling on rims and bodies. The applied decoration consists of a polychrome decal situated on the rim with extensions entering the body. Fine gold line trim encircles the vessels at the rim edge/border juncture. Decal motif depicts a band or chain of densely packed

daisy-like flowers and thin foliage. The daises have white petals, occasionally wih a reddish shading, a yellow center, and foliage that ranges from yellow-green to turquoise. Randomly placed stems with associated foliage and flowers, extend down from the rim into the body portion of the vessels. Numerous individual flowers with short pieces of stem and leaflets appear to be falling down into the body from the band on the rim.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 large serving dish, 1 large lid and 1 creamer.
Comments: N/A.

Pattern: 104 **Paste:** Whiteware.
No. of Specimens: 93 **Figure:** 104.
Decorative Technique: Polychrome Decal and Fold Line Trim - Overglaze.
Description: Vessel blanks are plain. Applied decoration includes a floral motif polychrome decal situated on the rim. Gold line trim encircles the rim border. The decal design is composed of star-shaped 5 petal blue flowers with red star-shaped centers. Flowers are separated from each other by yellow-green leaf forms. The motif is rather stylized. Some fragments appear to have isolated flower elements and paired flowers without associated foliage.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 5 plates.
Comments: N/A.

Pattern: 107 **Paste:** Whiteware.
No. of Specimens: 4 **Figure:** N/A.
Decorative Technique: Polychrome Decal - Overglaze.
Description: Vessel blank is plain. Decal appears on the rim of saucer fragment and on the body of cup fragment. The motif consists of clumps of straw flower with associated leaves and laterally extending tendrils. Flower colors include purple, orange, reddish brown, and yellow. Leaves are green.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 cup and 1 saucer.
Comments: N/A.

Pattern: 110 **Paste:** Whiteware.
No. of Specimens: 11 **Figure:** N/A.
Decorative Technique: Polychrome Decal, Monochrome Handpainting, and Gold Line Trim - Overglaze.
Description: Vessel blank is plain. Handpainted blue line trim encircles the exterior rim border. Gold line trim encircles interior rim. The decal motif consists of an oval or medallion containing 2 pink roses and associated green leaflets over a blue background. The medallion perimeter is bordered by small yellow spheres with a centered dot. A blue boat tops the medallion. From each side of the medallion, green and yellow scrolled stem and leaf elements extend out laterally and divide into two lobes, each containing a 4 petal open-faced flower. Adjacent to the end lobe, a tendril supports a morning glory, rose bloom, and a few leaves.

Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 2 cups.
Comments: N/A.

Pattern: 111 **Paste:** Whiteware.
No. of Specimens: 37 **Figure:** N/A.
Decorative Technique: Polychrome Decal and Gold Line Trim - Overglaze.
Description: Cup blank is ribbed on the exterior. Plate blank is polygonal and features depressions that separate the rim into equal sections. Plate forms have gold line trim encircling the rim edge/border and rim/well juncture. Cup forms feature gold line trim about the exterior rim edge and about the interior lower rim. Decal is placed on the rim and extends into body areas of vessels. The motif is floral and consists of a central, pink, chrysanthemum-like flower. To the right, left, and directly below this flower are 3 ovals with black interior and yellow perimeters. A white and green, open-faced, multi-petal flower is superimposed on the black ground in each of these ovals. Extending out from this composite of elements are random tendrils with associated leaves.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 2 cups, 1 saucer, 1 plate and 1 bowl.
Comments: N/A.

Pattern: 113 **Paste:** Whiteware.
No. of Specimens: 11 **Figure:** N/A.
Decorative Technique: Polychrome Decal and Gold Line Trim - Overglaze.
Description: Vessel blanks are plain. Gold line trim encircles the cup exterior in the mid-body and the body/cup depression juncture of the saucer form. The central decal figure consists of an upper blue background and lower yellow background articulated in a sinuous, ying-yang like manner at a border consisting of 2 to 3 roses with foliage, scroll elements, and occasional smaller flowers. This figure is bordered on the sides and top by scroll forms and on the bottom by a band consisting of inverted castellations. These figures are placed in the upper 1/4 of vessels extending from the rim border into the body.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 cup and 1 saucer.
Comments: N/A.

Pattern: 114 **Paste:** Whiteware.
No. of Specimens: 39 **Figure:** N/A.
Decorative Technique: Polychrome Decal and Gold Line Trim - Overglaze.
Description: Vessel blanks are plain. Gold line trim encircles the rim border. Decal elements are placed in the upper 1/3 of the rim. The main motif of the applied decoration consists of a series of alternating short and long rectangular spaces outlined and connected by a continuous yellow line, accented by a fine black line. The short rectangular boxes or spaces have a yellow background underlying a black diamond outlined in white and bracketed on both sides by two scroll elements. Centered within the diamond is a red rose with green leaves. The long rectangular boxes feature a white background outlined with a

fine light blue line. Superimposed on the white is a line of flowers which includes 2 central roses and 2 lateral blue, open-faced, 6 petal flowers with foliage.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 3 plates.
Comments: N/A.

Pattern: 116 **Paste:** Whiteware.
No. of Specimens: 11 **Figure:** N/A.
Decorative Technique: Polychrome Decal and Gold Line Trim - Overglaze.
Description: The vessel blanks are plain. Gold band trim encircles the rim border on the lid and on the dish and encircles the body of the dish at the shoulder. The decal elements are placed on the rim/body juncture of the lid and on the dish body just above the shoulder. The decal motif is floral and geometric. It consists of a thick stemmed vine which circles the vessel. The vine supports red-shaded roses, red and tan 5 petal, open face flowers, small clusters of blue buds, and associated greenery. The vine rests partly on a background of herring bone or chevron columns, that are aligned parallel and adjacent to each other and perpendicular to the rim and the vine.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 serving dish and 1 lid.
Comments: N/A.

Pattern: 117 **Paste:** Whiteware.
No. of Specimens: 8 **Figure:** N/A.
Decorative Technique: Polychrome Decal and Gold Line Trim - Overglaze.
Description: The blank is plain. Gold line trim encircles the vessel at the rim border. The decal extends from just below the rim border. across the rim, and onto the vessel body. The decal consists of a cream colored background bounded on the top by a thin green line and on the bottom by a thin green line filled with brown dots. Semi-circles extend into the upper body from this lower green line. The upper 1/2 of the band features swag formations of pink roses with associated green leaves hanging down from a brown line.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 cup.
Comments: N/A.

Pattern: 118 **Paste:** Whiteware.
No. of Specimens: 40 **Figure:** 118.
Decorative Technique: Polychrome Decal and Gold Line Trim - Overglaze.
Description: Cup blanks feature embossments on the handle and fluting about the lower 1/3 of the cup body. The saucer blank has a scalloped edge and an embossed line about the rim border. Gold line trim encircles the rim edge on both vessel forms. The decal elements extend across the rim and over the upper 2/3 of the body. The motif consists of red and white flower festoons with hanging tendrils of yellow-green leaves. Festoons are separated from each other by a sprig with 4 leaves. The upper 1/2 of this applied decoration is superimposed over a pale yellow background.

Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 3 cups and 1 saucer or plate.
Comments: N/A.

Pattern: 120 **Paste:** Whiteware.
No. of Specimens: 43 **Figure:** N/A.
Decorative Technique: Polychrome Decal and Gold Band Trim - Overglaze.
Description: Vessel blank is plain. Gold band trim encircles the rim border. The decal element consist of green floral scrills laid overlapping like a chain about the vessel rim. Every other scrill terminates in a thistle-like blossom characterized by a yellow pod and red flowers.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 plate and 1 soup plate.
Comments: N/A.

Pattern: 121 **Paste:** Whiteware.
No. of Specimens: 10 **Figure:** N/A.
Decorative Technique: Polychrome Decal - Overglaze.
Description: Vessel blanks have scalloped rim edge and an incised line encircling the vessel at mid-rim. The floral motif decal consists of a vine supporting 4 flowers: 2 small red flowers packed together, 1 large yellow flower central to the configuration, and 1 medium sized red flower. All have assorted leaf and stem elements. The design has an oriental tone.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 2 bowls.
Comments: N/A.

Pattern: 122 **Paste:** Whiteware.
No. of Specimens: 2 **Figure:** N/A.
Decorative Technique: Polychrome Decal and Handpainted Line Trim - Overglaze.
Description: Vessel blank is plain. Exterior rim border and interior rim/body juncture are encircled by a green line. The exterior rim features a band consisting of light brown tongue like elements separated by spaces with centered black dots, all superimposed on a tan background. The body exterior is decorated with branches supporting purple and orange flowers, leaves and 1 or 2 pieces of orange colored peach like fruit. Smaller sprigs linked to a flower and leaves are scattered between these larger configurations.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 bowl or large cup.
Comments: N/A.

MONOCHROME HANDPAINTING

Pattern: 81 **Paste:** Whiteware.
No. of Specimens: 14 **Figure:** N/A.
Decorative Technique: Monochrome Handpainting and Stencil Gold

Overglaze.
Description: Blank is plain. Applied decoration consists of handpainted maroon bands and a superimposed gilded design. The design consists of two encircling rim near rim edge on plate and one such band on the body of the cup fragment. The upper band is three times as wide as the lower band. Superimposed over these bands is a series of gold chevrons, pointing downward. Between each set of chevrons a tresfoil element is suspended by dotted gold lines.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 plate and 1 cup or creamer.
Comments: N/A.

Pattern: 87 Paste: Whiteware.
No. of Specimens: 43 Figure: N/A.
Decorative Technique: Monochrome Handpainting - Underglaze.
Description: The blank is plain. A band of blue encircles the exterior rim border and interior mid-rim. The decoration on the body portion of the vessel(s) is a simplistic floral design consisting of stems, leaves, and single and clustered spheres possibly representing berries or flowers. The stems tend to run horizontally about the vessel.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: N/A.
Comments: N/A.

Pattern: 128 Paste: Whiteware.
No. of Specimens: 4 Figure: 128.
Decorative Technique: Monochrome Handpainting - Underglaze.
Description: Vessel blank rim has striations perpendicular to the edge, commonly referred to as shell-edged. The rim edge is also scalloped. Handpainted blue is applied to the rim and rim edge. This ware has a decoration commonly applied to blue shell-edged pearlware. The glaze is tinted blue.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 plate and 1 small plate or saucer.
Comments: The paste of this ware is denser and whiter than earlier pearlwares. If it is not a whiteware with a common pearlware decoration it is an example of the late transitional phases between pearlwares and whitewares.

Pattern: 135 Paste: Whiteware.
No. of Specimens: 4 Figure: N/A.
Decorative Technique: Monochrome Handpainting and Gold Line and Splatter Trim-Overglaze.
Description: Vessel blank has embossment on the body but figure is not recognizable. The vessel surface is covered with a solid color-light blue, either handpainted or dip applied, over the glaze. Gold line trim encircles the rim. Gold speckle or splatter trim appears on the rim and body.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: Unidentifiable.
Comments: N/A.

Pattern: 140 Paste: Whiteware.
No. of Specimens: 19 Figure: 140.
Decorative Technique: Monochrome Handpainting - Underglaze.
Description: Vessel blank features parallel striations about rim and rim border at an angle to the edge. Applied decoration consists of handpainted blue, brushed over these striations with bold strokes in imitation of the blue shell-edged style of pearlware.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 platter or plate.
Comments: N/A.

Pattern: 141 Paste: Whiteware.
No. of Specimens: 1 Figure: N/A.
Decorative Technique: Monochrome Edge Painted - Overglaze.
Description: Vessel blank fragment features parallel striations molded into rim and rim border. Solid green is handpainted over these striations, with brush strokes in what is referred to as green shell-edged decoration.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: Unidentifiable.
Comments: N/A.

Pattern: 143 Paste: Whiteware.
No. of Specimens: 3 Figure: N/A.
Decorative Technique: Monochrome Handpainting - Overglaze.
Description: Vessel blank is plain. Applied decoration consists of circles of green dots which enclose one central green dot. These configurations occur randomly on both interior and exterior rim and body.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 unidentifiable.
Comments: N/A.

Pattern: 144 Paste: Whiteware.
No. of Specimens: 6 Figure: N/A.
Decorative Technique: Monochrome Edge Painting - Underglaze; Stencil Gold Figural Trim - Overglaze.
Description: The vessel blank has a scalloped rim edge and embossed scrilling along the rim border. Rim border and edge are painted solid blue. Stencil figures in gold of swag-like roped or vine with associated leaves loop about the rim. The applied decoration is accentuated by a clear glaze over a white biscuit.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 plate.
Comments: N/A.

Pattern: 152 Paste: Whiteware.
No. of Specimens: 8 Figure: N/A.

Decorative Technique: Monochrome Handpainting - Underglaze.
Description: The blank is characterized by scalloping about the edge, embossed micro-fluting perpendicular to the rim edge about the rim-border, and evenly placed, stylized flower and scrill embossment. A blue line to handpainted about the rim edge.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 bowl.
Comments: N/A.

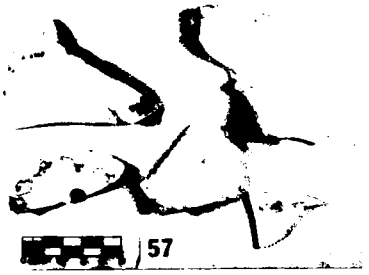
Pattern: 156 **Paste:** Whiteware.
No. of Specimens: 88 **Figure:** N/A.
Decorative Technique: Monochrome Handpainting and Gilding - Overglaze.
Description: Blanks have scalloped rim edge and embossed reverse fluting that extends from the upper body into the rim. Handles are molded into representations of lions. Two thin lines of gold encircle the vessel in the rim and handpainted gold accenting is added to the embossments. The handles, rim and upper 1/4 of the body are handpainted a solid pale green. The rest of the vessel features a white glaze.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 decorative bowl, 1 basin, 1 pitcher and unidentifiables.
Comments: N/A.

Pattern: 183 **Paste:** Whiteware.
No. of Specimens: 1 **Figure:** N/A.
Decorative Technique: Monochrome Handpainting - Underglaze.
Description: The blank features embossed striations perpendicular to the rim along the rim. Handpainted green is applied to this embossing to produce a "shell-edged" effect about the rim.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: N/A.
Comments: N/A.

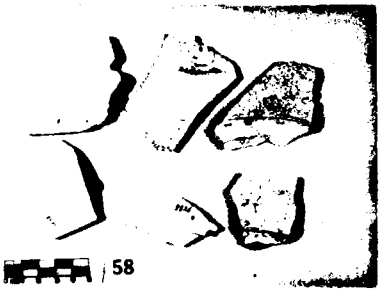
POLYCHROME HANDPAINTING

Pattern: 35 **Paste:** Whiteware.
No. of Specimens: 71 **Figure:** 35.
Decorative Technique: Polychrome Handpainting - Overglaze.
Description: The blank is plain. The motif is floral. Decoration consists of simplistic red roses and assorted yellow and blue four and five petal flowers. These are attached to green stems and leaves that encircle the vessel at the rim/body and in the center of the well face. A handpainted blue line is found on the rim border.
Associated Maker's Marks, Figure: 97A.
Vessel(s) Represented: 4 plates.
Comments: The floral elements are very simplistic and variable.

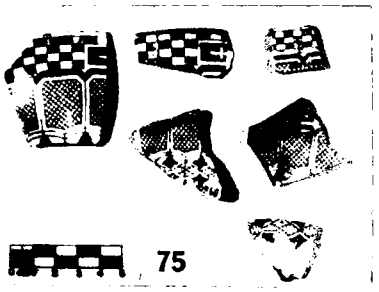
Pattern: 61 **Paste:** Whiteware.

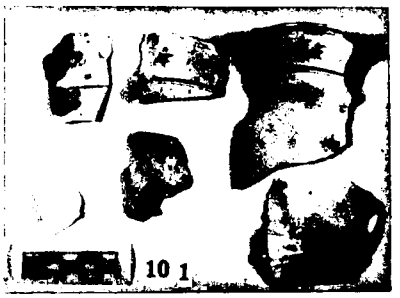

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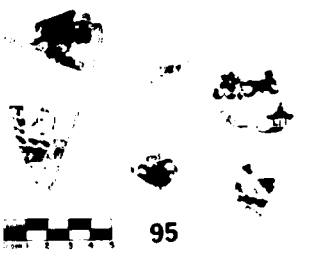

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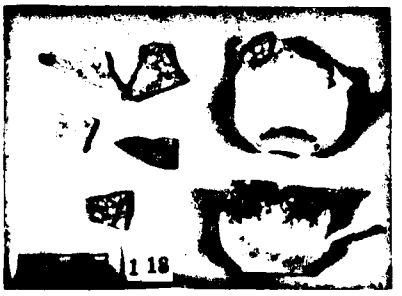

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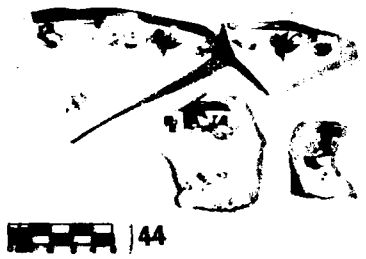

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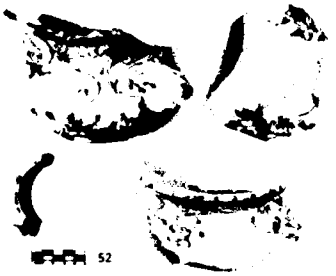

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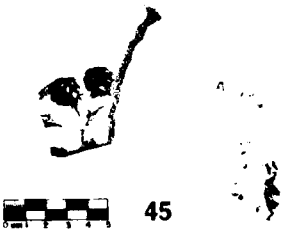

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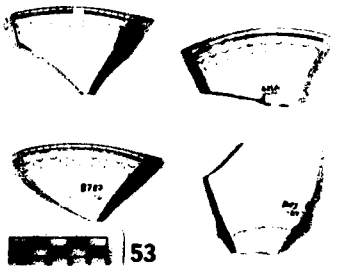
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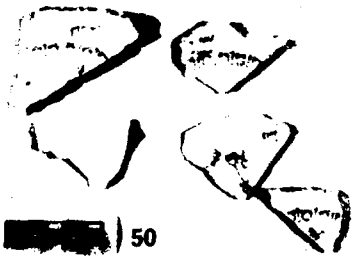
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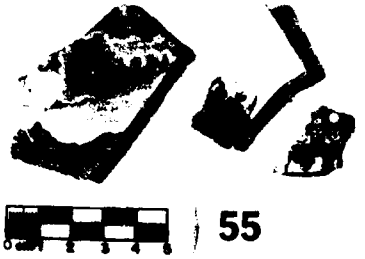
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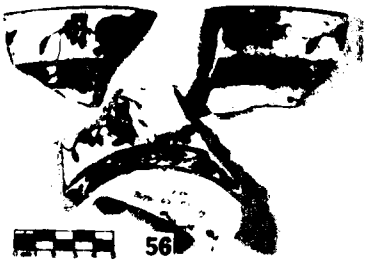
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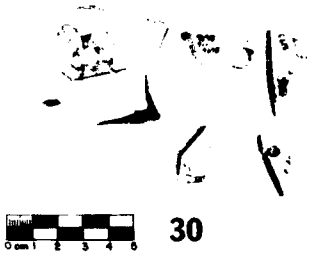
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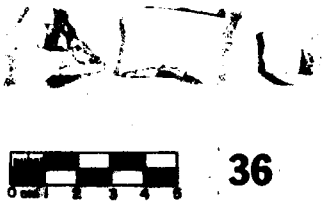
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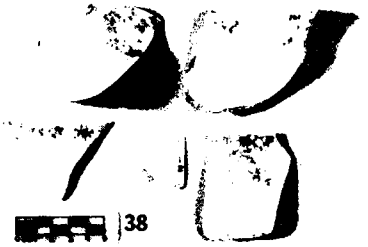
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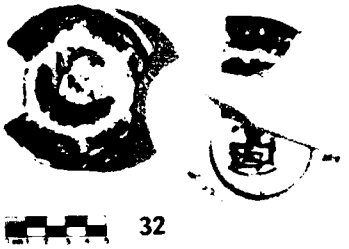
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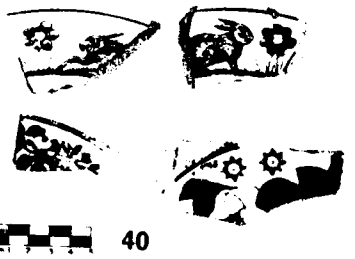
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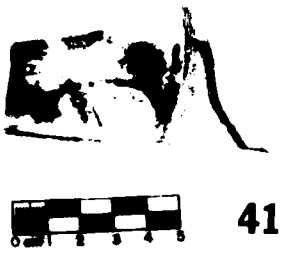
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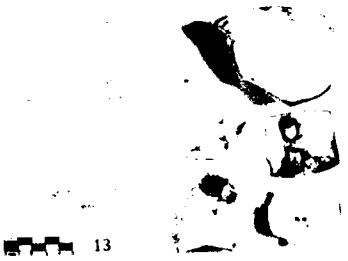
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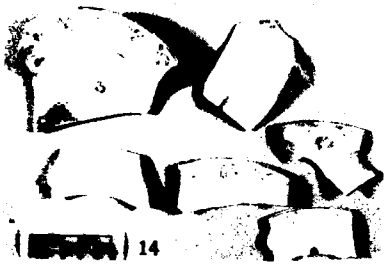
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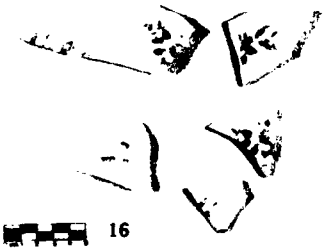
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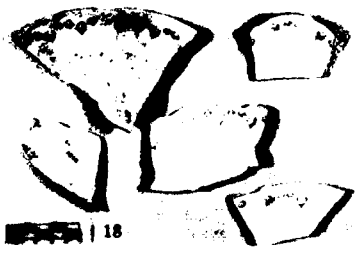
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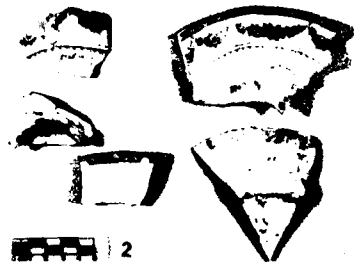
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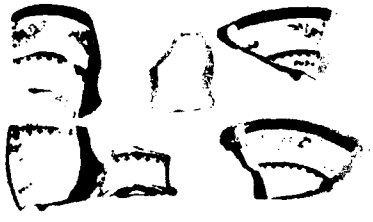
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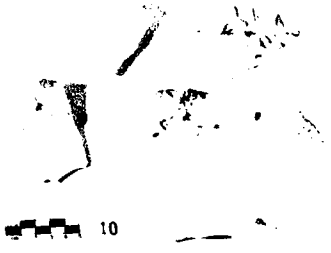
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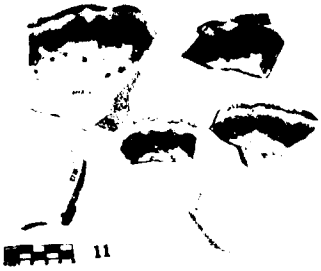
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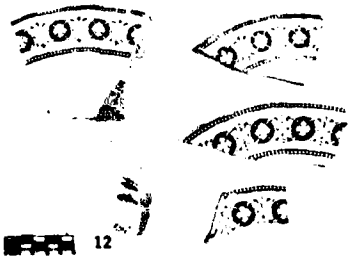
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12

No. of Specimens: 6 **Figure:** N/A.
Decorative Technique: Tinted Slip Banding - Underglaze.
Description: The blank is plain. The decoration is very similar to pattern 149. However, the central band is narrower and is bordered by four thin bands or lines, two above and two below.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 mixing bowl.
Comments: N/A.

SPRIGGING

Pattern: 127 **Paste:** Whiteware.
No. of Specimens: 3 **Figure:** N/A.
Decorative Technique: Sprigging - Underglaze.
Description: Vessel blanks are plain. Applied decoration consists of sprigged grape clusters, found in blue tinted paste, placed in a regular spacing about the mid-body of the vessel.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 bowl and 1 plate.
Comments: N/A.

MISCELLANEOUS

Pattern: 160, 168, 172, 174, 176, 179 **Paste:** Whiteware.
No. of Specimens: 363 **Figure:** N/A.
Decorative Technique:
160 Miscellaneous Decal.
168 Miscellaneous Gilded Only.
172 Miscellaneous Transfer Print.
174 Miscellaneous Handpainted.
176 Miscellaneous Hndpainted and Decal.
179 Miscellaneous Tinted Glaze.
Description: These patterns consist of assorted fragments that could not be joined with any other specimens as recognizable patterns. They were grouped together according to major decorative technique.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: Unidentifiable.
Comments: N/A.

Description: Vessel blank is plain. Exterior rim is entirely covered by gold band. Exterior body is solid color, dark green. Interior body is solid white.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 bowl.
Comments: N/A.

Pattern: 153 **Paste:** Whiteware.
No. of Specimens: 26 **Figure:** N/A.
Decorative Technique: Polychrome Tinted Glaze.
Description: An embossed band representing a circlet of faintly discernable flowers and leaves encirlces the vessel body just below the rim. A second embossed band encircles the vessel at the body/base juncture and serves as the ground for embossed tree figures which extend from the band up into the body. A dark blue tinted glaze (or possibly a very thick, flat, paint) covers all of the vessel except for the embossed elements. The upper embossed band is accented with evenly spaced red dots (either tinted glaze or handpainted).
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 small jardiniere or crock.
Comments: N/A.

SLIP BANDING

Pattern: 142 **Paste:** Whiteware.
No. of Specimens: 32 **Figure:** 142.
Decorative Technique: Tinted Slip Banding and Polychrome Handpainting - Underglaze.
Description: Vessel blanks are plain. Tinted brown slip twin-bands encircle the rim and base. The major decorative element on bodies is a worm-like swirl or trail of blue, tan and white. On one vessel these are superimpossed over a light blue background, on the other over a blue-grey background.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 2 bowls.
Comments: N/A.

Pattern: 149 **Paste:** Whiteware.
No. of Specimens: 28 **Figure:** N/A.
Decorative Technique: Tinted Slip Banding - Underglaze.
Description: The blank is plain. The applied decoration consists of blue tinted slip bands that encircle the vessel on the upper third of the body, just below the rim/body juncture. Two thin blue bands border a central large band.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 2 mixing bowls.
Comments: N/A.

Pattern: 150 **Paste:** Whiteware.

Vessel(s) Represented: 1 unidentifiable vessel.
Comments: N/A.

Pattern: 133 Paste: Whiteware.
No. of Specimens: 6 Figure: N/A.
Decorative Technique: Polychrome Tinted Glaze over Embossed Figures.
Description: The vessel blank features a scalloped rim edge and embossed figures of flowers, leaves and stems on the rim and body. A tinted glaze including pink, yellow, brown and green is applied over the embossments.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 creamer.
Comments: N/A.

Pattern: 134 Paste: Whiteware.
No. of Specimens: 3 Figure: N/A.
Decorative Technique: Polychrome Tinted Glaze.
Description: Available fragments of vessel blanks are plain. Applied decoration consists of a tinted glaze streaked with colors including browns, blues, greens and tans.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 unidentifiable vessel.
Comments: N/A.

Pattern: 138 Paste: Whiteware.
No. of Specimens: 6 Figure: N/A.
Decorative Technique: Monochrome Tinted Glaze.
Description: The vessel blank is plain. Applied decoration consists of a bright yellow tinted glaze.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 small bowl or cup.
Comments: N/A.

Pattern: 139 Paste: Whiteware.
No. of Specimens: 18 Figure: N/A.
Decorative Technique: Monochrome Tinted Glaze; Gold Line and Spatter Trim - Overglaze.
Description: Vessel blank features a scalloped rim and a columnar base. Vessel is colored with a blue tinted glaze. Gold line trim is placed on rim and rim edge. Spatter gilding is present on rim edge and body.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 decorative piece.
Comments: N/A.

Pattern: 145 Paste: Whiteware.
No. of Specimens: 5 Figure: N/A.
Decorative Technique: Polychrome Tinted Glaze; Gold Band Trim - Overglaze.

Pattern: 164 Paste: Whiteware.
No. of Specimens: 48 Figure: N/A.
Decorative Technique: Handpainted Gilding - overglaze.
Description: The blank is plain. Applied decoration consists of freehand gold bands about the rim and base and on the vessel body just below midline.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 saucer, 1 lid, 1 small bowl, 1 gravy boat and 1 creamer.
Comments: N/A.

Pattern: 165 Paste: Whiteware.
No. of Specimens: 26 Figure: N/A.
Decorative Technique: Handpainted Gilding - Overglaze.
Description: Vessel blank is polygonal. Plate rim is divided into sections by an embossed depression. A gold line encircles the vessel at rim border and about the rim just above the rim-well juncture.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 2 plates.
Comments: N/A.

Pattern: 166 Paste: Whiteware.
No. of Specimens: 10 Figure: N/A.
Decorative Technique: Handpainted Gilding - Overglaze.
Description: The blank is plain. A double gold line encircles the rim border. The lateral-most line is six times as wide as the inner line.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 plate.
Comments: N/A.

Pattern: 170 Paste: Whiteware.
No. of Specimens: 8 Figure: N/A.
Decorative Technique: Handpainted Gilding - Overglaze.
Description: The blank features simplistic embossed scrill and leaf forms on the rim. These embossments are outlined with gold. A gold line encircles the vessel at the rim border.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 chamber pot.
Comments: N/A.

TINTED GLAZE

Pattern: 132 Paste: Whiteware.
No. of Specimens: 7 Figure: N/A.
Decorative Technique: Monochrome Tinted Glaze; Solid Color Gold Areas.
Description: Vessel blank is plain. Glaze tinted black. Remmants of solid handpainted gold are found on large areas of lid, rim and rim/body juncture.
Associated Maker's Marks, Figure: N/A.

Pattern: 80 Paste: Whiteware.
No. of Specimens: 12 Figure: N/A.
Decorative Technique: Handpainted Line Trim, Handpainted Gold Line Trim, Pre-worked Gold Foil - Overglaze.
Description: The blank is plain. Applied decoration is a band consisting of a number of elements that covers an area from the rim edge down into the body of the vessel interior. A section of shiny gold extends from the rim edge to mid rim where it merges with a section of matt gold. Below the matt gold, two shiny gold lines enclose a blue line on the interior upper body. Shiny gold figures are placed along the matt gold section of the band and depict sets of scroll-like brackets bordering a diamond with a horizontal long axis and separated from adjacent bracket sets by tear drop shapes.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 bowl.
Comments: N/A.

Pattern: 83 Paste: Whiteware.
No. of Specimens: 14 Figure: N/A.
Decorative Technique: Etched Gold Foil and Freehand Gold Line Trim - Overglaze.
Description: The blank is plain. A shiny gold band encircles the rim border. A mott gold design depicting a sinuous vine with leaflets is etched into the band. A thin, handpainted, shiny gold line encircles the exterior of the body.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 gravy boat.
Comments: N/A.

Pattern: 159 Paste: Whiteware.
No. of Specimens: 25 Figure: N/A.
Decorative Technique: Gold Line Trim - Overglaze.
Description: The blank is plain. Applied decoration consists of three thin parallel gold lines encircling the rim of cup and saucer.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 cup and 1 saucer.
Comments: N/A.

Pattern: 163 Paste: Whiteware.
No. of Specimens: 1 Figure: N/A.
Decorative Technique: Handpainted Gilding - Overglaze.
Description: The blank is plain. Gold scrills are repeated in a series about the vessel body. Above the scrills, a gold line encircles the body, just below the rim.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: N/A.
Comments: N/A.

Description: The vessel blanks are plain. The blue stencil decoration consists of bands and the outlines of flowers. Bands, single and double, encircle vessel rims. Stylized flowers of various sizes, with associated leaves and stems are scattered on vessel bodies.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 rolling pin, 1 flat plate and 1 cannister.
Comments: N/A.

GILDING ONLY

Pattern: 77 **Paste:** Whiteware.
No. of Specimens: 5 **Figure:** N/A.
Decorative Technique: Stencil and Handpainted Gold Line Trim - Overglaze.
Description: Stencil and handpainted gold line. A line encircles the rim border. Below this line, a band is composed of tresfoil elements alternating with diamond or dart shapes. At intervals within this band are medallions formed from scrills and imbricated tongues. There is also a gold line encircling the vessel below the rim/body juncture on the interior surface.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 bowl or serving dish.
Comments: N/A.

Pattern: 78 **Paste:** Whiteware.
No. of Specimens: 40 **Figure:** N/A.
Decorative Technique: Handpainted Gold Line Trim - Overglaze.
Description: The blank has a scalloped rim and floating lines that extends from the rim onto the body of the vessel. Applied decoration is in gold line trim only. Two parallel tines, the upper-thick and the lower-thin encircle the rim. From the lower line, triangular protrusions point down and center over a figure consisting of an X, the angles of which enclose a large dot. The lower line also has leaf-like elements that extend down centered over a daisy-like flower with long thin petals and a stem made from solid ovals of decreasing size.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 creamer or sugar bowl and 1 small plate.
Comments: N/A.

Pattern: 79 **Paste:** Whiteware.
No. of Specimens: 15 **Figure:** N/A.
Decorative Technique: Gold Stencil - Overglaze.
Description: The blank is plain. The decoration consists of a band of solid, equilateral triangles, laid end to end in a chain, just below the rim border. On the body of the rim below this is a band composed from a chain of slightly concave sided triangles from which hang key like elements.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 plate.
Comments: N/A.

Decorative Technique: Polychrome Handpainting - Overglaze.
Description: The blank features embossed tulip forms that fill almost the entire length of the vessel. These figures are handpainted with orange, red, and yellow on the blooms and green on stems and leaves.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 2 pitchers and unidentifiable vessels.
Comments: N/A.

Pattern: 182 Paste: Whiteware.
No. of Specimens: 3 Figure: N/A.
Decorative Technique: Polychrome Handpainting - Underglaze.
Description: Applied decoration consists of speckled green, tan, and white colors possibly denoting unidentified forms of fruit.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: N/A.
Comments: N/A.

STENCIL PAINTING

Pattern: 36 Paste: Whiteware.
No. of Specimens: 3 Figure: 36.
Decorative Technique: Stencil Paint - Overglaze.
Description: The sample is very small and fragmentary. The motif is geometric. It consists of a band of yellow green about the body/base ron and two green parallel lines enclosing yellow green and yellow triangular shapes that encircles the body. Green diamonds are located on the body adjacent to these parallel green lines.
Associated Maker's Marks, Figure: 28C.
Vessel(s) Represented: 1 creamer or sugar bowl.
Comments: N/A.

Pattern: 112 Paste: Whiteware.
No. of Specimens: 14 Figure: N/A.
Decorative Technique: Polychrome Stencil and Monochrome Handpainting - Overglaze.
Description: Vessel blank is plain except for embossed elements on handle. Handpainted green line trim encircles the rim border and the lower vessel body about 1/4 the distance above the base. The main decorative element consists of vase shapes in outline form evenly spaced about the vessel, each figure extending over the upper 3/4 of the pitcher. Each vase shape rises from a flat base and is topped by a square element containing a stylized green "A" superimposed on a purple background.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 pitcher.
Comments: N/A.

Pattern: 119 Paste: Whiteware.
No. of Specimens: 77 Figure: 119.
Decorative Technique: Monochrome Stencil - Underglaze.

Comments: N/A.

Pattern: 131 Paste: Whiteware.
No. of Specimens: 4 Figure: N/A.
Decorative Technique: Polychrome Handpainting - Overglaze.
Description: Vessel blank is plain. Blue line trim encircles the rim/body juncture of the vessel. Handpainted decoration on the body consists of very stylized blue and orange flowers with brown stems and green leaves.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 creamer.
Comments: N/A.

Pattern: 136 Paste: Whiteware.
No. of Specimens: 31 Figure: 136
Decorative Technique: Polychrome handpainted wash underglaze.
Description: Vessel blank features a scalloped rim edge, a turned basket weave and edge design embossed on the rim, and leaf elements embossed on the body. Vessel interior is handpainted with a magenta wash. Rim is a light brown. Vessel body is yellow with wash of green and brown over the leaf elements.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: Unidentifiable.
Comments: N/A.

Pattern: 137 Paste: Whiteware.
No. of Specimens: 4 Figure: N/A.
Decorative Technique: Polychrome Handpainting - Overglaze.
Description: Blank portions represented by available body fragments are plain. Applied decoration consists of swirled yellow and red splashes of color superimposed on a green to blue green background.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 unidentifiable.
Comments: N/A.

Pattern: 146 Paste: Whiteware.
No. of Specimens: 10 Figure: N/A.
Decorative Technique: Polychrome Handpainting - Underglaze.
Description: The vessel blank is plain. A wide green band encircles the rim of the vessel. A thin black band lies just below the green band. The remainder of the vessel features a clear glaze over a white biscuit with no applied decoration. The inner rim of the vessel has no glazing.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 bowl or serving dish.
Comments: N/A.

Pattern: 180 Paste: Whiteware.
No. of Specimens: 122 Figure: N/A.

No. of Specimens: 25 Figure: N/A.
Decorative Technique: Polychrome Handpainting.
Description: Embossed scrolled leaf forms on the blank body. Large leaves, stems, and other floral elements are applied with decal and hand painting and attached to the embossed floral elements. Decal is brown. Hand painted colors are brown, green, and yellow.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 2 unidentifiable.
Comments: N/A.

Pattern: 126 Paste: Whiteware.
No. of Specimens: 3 Figure: N/A.
Decorative Technique: Polychrome Handpainting and Gold Figure - Overglaze.
Description: The specimens are too fragmentary to determine structural decoration of the blank. Applied decoration on the rims cannot be determined. Body decoration consists of handpainted purple cherries with green or gold stems, green leaves, gold speckle clusters, and other indeterminate elements.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 unidentifiable.
Comments: N/A.

Pattern: 129 Paste: Whiteware.
No. of Specimens: 61 Figure: N/A.
Decorative Technique: Polychrome Handpainting and Gold Figural Accent - Overglaze.
Description: Vessel blanks are plain. Entire vessel surface is covered with various background colors, some of which were applied with cloth patches that left a textile design. Recognizable elements in the design include assorted flowers with associated leaves, stems, thorns, berry clusters, and grass blades. Colors for these elements and the background include: green, yellow, brown, red, light blue, and dark blue. Some have a flat and others a lustre finish.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: Unidentifiable small vessels.
Comments: N/A.

Pattern: 130 Paste: Whiteware.
No. of Specimens: 30 Figure: N/A.
Decorative Technique: Polychrome solid color, gold line trim and accent - overglaze.
Description: Vessel blank is characterized by a scalloped rim and embossed scrill elements on the rim and body. Gold line trim appears on the rim and foot of the vessel and gold scrilling accents the scrill embossments on the body. The upper body and rim of the vessel are solid green. The lower body and base are decorated with patches of red. The interior glazing of the vessel is characterized by a spotty yellow tinting.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 unidentifiable vessel.



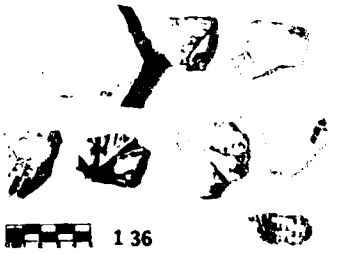
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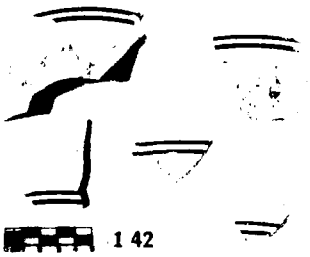
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SEMI - VITREOUS CERAMICS

MONOCHROME HANDPAINTING

Pattern: 49 **Paste:** Semi-vitreous.
No. of Specimens: 10 **Figure:** N/A.
Decorative Technique: Tinted glaze, monomchrome handpainting underglaze and gold trim handpainting overglaze.
Description: The blank is polgonal with a raised rib encircling the body just above the base. The major elements are large and simplistic gladiola-like flowers handpainted in blue underglaze. The rim border and the raised rib are accented with handpainted blue lines underglaze. A blue tinted glaze is applied on the interior and exterior. Gold line trim is also applied to the raised rib, overglaze.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 cannister.
Comments: N/A.

Pattern: 147 **Paste:** Semi-vitreous.
No. of Specimens: 44 **Figure:** N/A.
Decorative Technique: Monochrome handpainting overglaze.
Description: The blank is characterized by a least three embossed bands which encircle the vessel. Handpainted green is applied to these bands and the handles edges.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 large mug.
Comments: N/A.

Pattern: 158 **Paste:** Semi-vitreous.
No. of Specimens: 45 **Figure:** N/A.
Decorative Technique: Monochrome handpainting and gold line trim overglaze.
Description: The vessel blanks are plain. Applied decoration consists of a gold band bordered by thin black lines which encircles the rim exterior of the cups. Vessels have a white glaze.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 2 cups; and 1 saucer.
Comments: N/A.

POLYCHROME HANDPAINTING

Pattern: 46 **Paste:** Semi-vitreous.
No. of Specimens: 77 **Figure:** 46.
Decorative Technique: Polychrome handpainting overglaze.
Description: The blank has tulip shapes with long stems and two large blade-like leaves embossed on the body, evenly spaced about the vessel.

Each embossed flower, stem and leaves unit extends from the base to just below the rim. Rim is encircled by handpainted green line. Flowers are painted yellow, stems and leaves are painted green.
Associated Maker's Marks, Figure: 37B.
Vessel(s) Represented: 1 pitcher.
Comments: N/A.

Pattern: 47 **Paste:** Semi-vitreous.
No. of Specimens: 28 **Figure:** 47.
Decorative Technique: Polychrome handpainting overglaze.
Description: The blank is plain except for some embossing on the handle. The motif is floral. Large, dark to light blue, tulip-like flowers with dark green stems and leaves sprout from the vessel body/base region and run up the side of the vessel. Rim edge and rim/body region are trimmed with green lines. The handle is decorated with three green dashes running vertically up each side.
Associated Maker's Marks, Figure: 32B
Vessel(s) Represented: 1 pitcher.
Comments: N/A.

Pattern: 148 **Paste:** Semi-vitreous.
No. of Specimens: 51 **Figure:** 148.
Decorative Technique: Polychrome handpainting overglaze.
Description: The blank is plain. A red line encircles the rim border. The central decoative motif is a "primative" or "child-like" depiction of flowers. The flowers include a blue multi-petal daisy-like flower with green stem and leaves and a large red tulip-like flower bloom.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 bowl.
Comments: N/A.

TRANSFER

Pattern: 29 **Paste:** Semi-vitreous.
No. of Specimens: 25 **Figure:** 29.
Decorative Technique: Monochrome transfer print underglaze.
Description: The cup blank exhibits symmetrically placed bows with connecting sways of ribbon embossed on the lower third of the vessel body. The saucer blank features a similar embossing along the rim. The blue transfer print consists of a large and gaudy bloom enclosed by ornate scroll like swirls intended to represent leaves and stems. Smaller buds attach to this scroll work by slender stems.
Associated Maker's Marks, Figure: 56.
Vessel(s) Represented: 2 cups; and 2 saucers.
Comments: This transfer print is refered to as "Poppy".

Pattern: 34 **Paste:** Semi-vitreous.

No. of Specimens: 1 Figure: 34.
Decorative Technique: Monochrome transfer print underglaze.
Description: The blank exhibits a scalloped rim edge and embossed scrolling which extends from the rim onto the body. The transfer print is red. Two parallel lines encircle the rim border forming a hollow bar. Looped from this bar is a thin line that forms a chain of semi-circles topped by small ovals. A ribbon-like element is looped over and around the bar and hangs in sways. The ribbon is bordered by dotted lines.
Associated Maker's Marks, Figure: 55B.
Vessel(s) Represented: 1 saucer.
Comments: N/A.

Pattern: 84 Paste: Semi-vitreous.
No. of Specimens: 2 Figure: N/A.
Decorative Technique: Monochrome transfer print underglaze, tinted glaze.
Description: The sample is too fragmentary to identify the nature of the pictorial depicted by the dark blue transfer print. The exterior vessel glaze is either tinted blue or the transfer print has flown.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: Possible cannister fragment.
Comments: N/A.

Pattern: 88 Paste: Semi-vitreous.
No. of Specimens: 14 Figure: N/A.
Decorative Technique: Monochrome transfer print underglaze.
Description: The blank features a scalloped rim edge, fluting on the rim and embossed scrolling on the body. Applied decoration is blue transfer print. The transfer print on the rim consists of closely spaced vertical lines. Varied floral elements extend down from the rim-wide band of vertical lines onto the body. These elements include flowers, leaves and stems and leaf like scrolls.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 gravy boat.
Comments: N/A.

Pattern: 115 Paste: Semi-vitreous.
No. of Specimens: 4 Figure: N/A.
Decorative Technique: Monochrome transfer print underglaze and polychrome handpainting overglaze.
Description: Specimens are too fragmentary to reveal the nature of any structural decoration of the vessel blank. Gold banding is applied about the perphery of transfer and handpainted decoration on the vessel handle. The back of the handle is covered with a dark green transfer background. Superimposed over the background are evenly spaced clusters of peaches or apricots with leaves outlined in green transfer and colored in with washes of yellow and red. These clusters are connected to each other by oblong shapes bearing "X's". Body fragments have blotches of green background, bordered by yellow bands. Superimposed on the backgrounds are fruit clusters connected to each other

by elements that seem to depict swags of cloth. Other elements of applied decoration on the body fragments are not intelligible.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 unidentifiable.
Comments: N/A.

Pattern: 228 **Paste:** Semi-vitreous.
No. of Specimens: 25 **Figure:** N/A.
Decorative Technique: Overglaze handpainting, transfer print underglaze and freehand gilding.
Description: The edge and base are gilded. Single flowers in yellows and lavanders with stems and leaves are scattered sparsely over the body. Some vining leaves and flowers are found at the fullest part of the body. Flower types are not determinable from this sample.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 ewer: base diameter is 15.0 cm; 1 chamber pot: rim diameter is 22.0 cm, base diameter is 14.0 cm; and 5 fragments of unknown.
Comments: N/A.

Pattern: 229 **Paste:** Semi-vitreous.
No. of Specimens: 56 **Figure:** 229.
Decorative Technique: Overglaze handpainting, transfer print underglaze and freehand gilding.
Description: The edge is gold spattered. The design is a brown transfer with lavander and green paint added. The body of the larger vessels have a bouquet of violets with abundant foliage. The leaves are painted as are portions of the flowers. The smaller vessels and lids have scattered violets that are reasonably realistic examples of field violets.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 2 lids: 1 has a rim diameter that is 13.0 cm, base diameter is 11.0 cm; and the other has a rim diameter that is 25.0 cm; base diameter is 19.0 cm; 1 ewer; and 51 unknown fragments.
Comments: The sample is a toilet set. Portions of both large and small vessels are present, but the exact pieces represented were not determined. Although this pattern is broadly scattered over the site, no examples were found West of W135 and the largest number of specimens per square (9) was found in N5 W100.

Pattern: 331 **Paste:** Semi-vitreous.
No. of Specimens: 62 **Figure:** 331.
Decorative Technique: Overglaze handpainting, transfer print underglaze and freehand gilding.
Description: The edges have gold scroll and leaf work. The body designs are executed in brown transfer outlines and filled with handpainting. The interior of the basin has single yellow and purples pansies with arching leaves and 2 lateral buds alternating with single pink roses with arching leaves and lateral buds. Where these arches join, are hanging pendant clusters of 5-petal flowers and buds or

berries. The exterior has single pansies. There is a gold line around the base.
Associated Maker's Marks, Figure: 62.
Vessel(s) Represented: 1 basin: rim diameter is 38.0 cm, base diameter is 19.0 cm; 1 ewer: base diameter is 15.0 cm; and 1 unknown.
Comments: Although there are no actual concentrations, this pattern was found only between W115 and W135, in the main dump area.

Pattern: 402 **Paste:** Semi-vitreous.
No. of Specimens: 11 **Figure:** N/A.
Decorative Technique: Overglaze handpainting, transfer print underglaze and freehand gilding.
Description: The pattern was indistinct. It consisted of a brown transfer of some large flowers and leaves, painted blue and green respectively. The lid has squared sides with rounded corners.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 lid; 1 pitcher; and 8 unknown fragments.
Comments: Probably part of a toilet set.

MONOCHROME DECAL

Pattern: 15 **Paste:** Semi-vitreous.
No. of Specimens: 217 **Figure:** 15.
Decorative Technique: Polychrome handpainting to accentuate blank embossing and monochrome decal.
Description: Plate blank exhibits a scalloping of the rim edge which produces large and small lobes. Plate rims and the bodies of the lid and tureen exhibit an embossed scalloping, handpainted with a light blue wash, that represents a fluttering ribbon or cloud. The monochrome brown decal elements consist of a bunch of daisy like flowers painted yellow and blue that issue from a large scrolled leaf sheaf or cornucopia form handpainted pink. Several sizes and varieties of these figures are place randomly over the piece.
Associated Maker's Marks, Figure: $61A_2$.
Vessel(s) Represented: 6 large plates; 2 small plates; 4 soup plates; 1 tureen; and 1 lid.
Comments: N/A.

Pattern: 19 **Paste:** Semi-vitreous.
No. of Specimens: 5 **Figure:** 19.
Decorative Technique: Polychrome handpainting, monochrome decal and gold fine trim overglaze.
Description: Plank exhibits scalloped edges and embossed scrolling along the upper third of the rim body. The applied decoration is floral. It consists of a light brown decal with light blue, pink and green wash randomly placed over the rim and extending down into the well. The decals are composed of tendrils supporting green leaves and one or two blue and pink five petal flowers. The rim edge is trimmed with a thick gold line.
Associated Maker's Marks, Figure: 11A.

Vessel(s) Represented: 1 serving platter.
Comments: N/A.

Pattern: 21 **Paste:** Semi-vitreous.
No. of Specimens: 3 **Figure:** 21.
Decorative Technique: Monochrome decal and polychrome handpainting overglaze.
Description: The vessel blank exhibits fluted edge and occassional scrolling that extends from the rim border down the body. Applied decoration consists of a brown decal, floral motif, with hand-painted embellishment in yellow, green and red. The decals represent scattered sprigs of rose with flowers, twigs, tendrills and leaves arranged randomly about the interior of the dish, centered about midway up the body wall.
Associated Maker's Marks, Figure: 10B.
Vessel(s) Represented: 1 serving dish.
Comments: N/A.

Pattern: 25 **Paste:** Semi-vitreous.
No. of Specimens: 3 **Figure:** 25.
Decorative Technique: Monochrome decal underglaze and a tinted glaze.
Description: The specimens are too small to determine the nature of the blank. Specimens include small portions of the lower body, base/body, footring, and the base of an unidenified vessel(s). The decoration appears to be a blue tinted glaze over a blue or black transfer print. A thick band bordered by small bands encircles the vessel in the body/base region. Above and below this is a stipple ground. The central band is filled with a vermicule or squiggly line motif.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 unidentifiable.
Comments: N/A.

Pattern: 37 **Paste:** Semi-vitreous.
No. of Specimens: 22 **Figure:** 37.
Decorative Technique: Monochrome decal and gold line trim overglaze.
Description: The blank exhibits a wide neck and fluting down the body. The decoration consists of a yellowish green decal representing grape or berry vines with leaves and fruit folding in a tangled mass along the sides of the body.
Associated Maker's Marks, Figure: $60A_2$.
Vessel(s) Represented: 1 pitcher.
Comments: N/A.

Pattern: 70 **Paste:** Semi-vitreous.
No. of Specimens: 8 **Figure:** N/A.
Decorative Technique: Monochrome decal and polychrome handpainted accent overglaze.
Description: Blank is plain. Black decal of stems, leaves and buds with red, yellow and blue handpainted accents placed variably on leaves

or buds extends from the rim down onto the rim/well juncture area.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 creamer or sugar bowl; and 1 small plate.
Comments: N/A.

Pattern: 71 **Paste:** Semi-vitreous.
No. of Specimens: 34 **Figure:** N/A.
Decorative Technique: Monochrome decal, polychrome handpainting and gold line trim overglaze.
Description: Blank exhibits scalloped rim edges and embossing on body and rim. A band of gold encircles vessels at the rim border. Applied decoration consists of brown decals representing carnation or marigold-like flowes and another flower form, occuring singly or in clusters, with associated stems and foliage. Green, blue and yellow washes are handpainted over various portions of the decals. Decals are situated on body exteriors, sometimes extending up onto rims.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 chamber pot; 2 lids; and a minimum of 1 unidentifiable.
Comments: N/A.

Pattern: 73 **Paste:** Semi-vitreous.
No. of Specimens: 10 **Figure:** N/A.
Decorative Technique: Monochrome decal overglaze.
Description: The blank is oblong and features a scalloped rim and fluting body. The blank is constricted just below the rim and again above the basal rim. The applied decoration is a light turquoise decal. The design depicts runners of flowers climbing up the vessel body from each side of small clusters of flowers located near the body/base juncture. The runners bears five petal flowers and small leaves. The runners associated with each flower cluster form rough semi-circular shapes.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 serving dish.
Comments: N/A.

Pattern: 106 **Paste:** Semi-vitreous.
No. of Specimens: 5 **Figure:** 106.
Decorative Technique: Monochrome decal, polychrome handpainting and gold trim overglaze.
Description: Vessel blank is plain. Motif of applied decoration has floral and geometric elements. A dark green decal band or line coils about a center gold line in upper 1/3 of rim body. Below this, individual roses of varying size with dark green decal outline, handpainted red blooms and yellow-green leaves are scattered evenly throughout the rest of the rim body.
Associated Maker's Marks, Figure: 71B.
Vessel(s) Represented: 1 plate.
Comments: N/A.

Pattern: 154 **Paste:** Semi-vitreous.
No. of Specimens: 154 **Figure:** N/A.
Decorative Technique: Monochrome decal, polychrome handpainting overglaze.
Description: The blanks feature a scalloped rim and swirl or scroll embossments on the rim and body. Gold line trim encircles the vessels on the rim edge and gold accenting is added to the embossments on the body and rim. A tan decal outlining flower clusters is placed over a solid yellow-green wash background. The flowers are developed with handpainted purple and orange flower petals, green leaves and gold outline trim.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 chamber pot; and 1 lid.
Comments: N/A.

Pattern: 230 **Paste:** Semi-vitreous.
No. of Specimens: 75 **Figure:** 230.
Decorative Technique: Overglaze decal and freehand gilding.
Description: The rims and handles are gold spattered. The body design consists of bouquets of African violets, some hanging ribbons tying them into the bouquets. The size of bouquets varies with the size of the vessel. Some smaller vessels have trailing leaves with only a few violets. The bases have a scalloped effect.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 2 chamber pot lids: 1 has a rim diameter of 19.0 cm and base diameter of 16.0 cm, and the other has a rim diameter of 24.0 cm and base diameter of 18.0 cm; a minimum of 1 chamber pot; a minmum of 1 ewer: base diameter is 9.0 cm; 1 soapdish: rim diameter is 13.0 cm, base diameter is 8.0 cm; 1 small pitcher or mug: rim diameter is 8.0 cm; and a minimum of 1 unidentifiable.
Comments: This pattern is not found west of W130. N0 W95 has15 specimens and N5 W95 has 13 found thoughout the F21 in each.

Pattern: 245 **Paste:** Semi-vitreous.
No. of Specimens: 4 **Figure:** 245.
Decorative Technique: Overglaze handpainting, decal and freehand gilding.
Description: A fairly angular form, the blank presents a 1 cm band of vertical side, on which the primary decoration is located. This consists of handpainted gold colored bands on either side of a darker decaled lines that surround a pale blue band that has an alternating rose and leaf motif. This band is broken by cartouches with a trio of roses and leaves. The body is cream colored.
Associated Maker's Marks, Figure: 22B.
Vessel(s) Represented: 1 creamer.
Comments: Not a true porcelain. Mark says "vitreous", which was a ware produced in Ohio to imitate European china.

Pattern: 264 **Paste:** Semi-vitreous.
No. of Specimens: 6 **Figure:** N/A.
Decorative Technique: Handpainting and monochrome decal overglaze.

Description: The design is present on both the interior and exterior surfaces. Groups of three roses are executed in a red decal filled with pink paint. Groupings of motifs is not clear from this sample.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 cup: base diameter is 4.0 cm; 1 saucer fragment.
Comments: N/A.

Pattern: 297 **Paste:** Semi-vitreous.
No. of Specimens: 4 **Figure:** N/A.
Decorative Technique: Overglaze decal.
Description: The rim is plain. There is a bouquet of tiny 4-petal flowers near the base. No color remains.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: A minimum of 1 bowl: rim diameter is 22.0 cm, base diameter is 12.0 cm.
Comments: 3 of the 4 fragments are from the same FC and probably represent a single dumping incident. The was a surface find.

Pattern: 332 **Paste:** Semi-vitreous.
No. of Specimens: 28 **Figure:** 332.
Decorative Technique: Monochrome decal with handpainted accent and freehand gilding overglaze.
Description: Embossed scrolling extends from the rim down into vessel neck. Seperate embossed scrolling begins at body/neck junction and forms boundries for oval cartouches or panels on main body. Freehand gilding accents the scrolling. Brown decals of stems, leaves and 5-petal flowers are placed on neck and body of vessel. Purple, yellow, green and orange handpainting accents the flowers and leaves.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 vase.
Comments: N/A.

POLYCHROME DECAL

Pattern: 1 **Paste:** Semi-vitreous.
No. of Specimens: 102 **Figure:** 1.
Decorative Technique: Polychrome decal and monochrome handpainting overglaze.
Description: The blank is plain. The motif includes geometric and floral elements. A major element is a Greek-key or fret band filled with an "eye of partridge" or dots-in-circle background. Cups display the fret band about the interior rim. The exterior cup rim is encircles by a thin dark green handpainted line. The cup body is decorated with an oriental floral design. One side of the cup exhibits a sprig of three peony blossoms mixed with daisy-like blossoms, the other side features the same blossoms supported by a thick tree-like trunk. Colors include brown and light green stems and leaves, blue-green leaves, pink tree peony blossoms and dark blue daisy-like blossoms. Cup handles are accented with handpainted dark green thin

lines. The saucers feature a handpainted, thin dark green line about the rim. A fret band encircles the rim just below the green line and another encircles the cup depression. Sprigs of peony blossoms are variably placed on the saucer body. The dessert plate exhibits a motif configuration similar to that of the saucer. The plate rim is decorated with an encircling thin green line close to the rim edge, a fret band just below this line, another fret band encircling the plate well and a central profusion of tree peony and daisy-like blossoms sprigs.
Associated Maker's Marks, Figure: $55B_2$.
Vessel(s) Represented: 6 cups; 6 saucers; and 1 dessert plate.
Comments: N/A.

Pattern: 7 **Paste:** Semi-vitreous.
No. of Specimens: 12 **Figure:** 7.
Decorative Technique: Polychrome decal and handpainted gold trim overglaze.
Description: The blank is plain. The applied decoration consists of geometric elements only. The rim edge is trimmed with a freehand gold line. A decal band encircles the vessel rim, adjacent to the rim edge. The band consists of a "Greek-key" fret design in black superimposed on a tan background and bordered on its inner edge by two black lines, one a dotted line, the other wavy. The body portion of the vessels appears to be plain.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 2 bowls.
Comments: N/A.

Pattern: 27 **Paste:** Semi-vitreous.
No. of Specimens: 7 **Figure:** 27.
Decorative Technique: Polychrome decal overglaze.
Description: The vessel blank exhibits scalloping along the edge and flutes which extend from the rim across the body to the base. Applied decoration includes floral and fruit elements in an overglaze decal. The decal represents a band of purple flowers and fruit colored various shades of red, orange and yellow, over a background of tightly packed green foliage. This band circles the vessel body adjacent to the rim.
Associated Maker's Marks, Figure: 48.
Vessel(s) Represented: 1 serving dish.
Comments: N/A.

Pattern: 62 **Paste:** Semi-vitreous.
No. of Specimens: 6 **Figure:** N/A.
Decorative Technique: Polychrome decal overglaze.
Description: Sample is too fragmentary to determine nature of blank. The decal applied to the body exterior consists of a large zynia or aster bloom, orange with a yellow center, surrounded by varied foliage which includes fern-like branches and grass. Other elements in the design may represent a rock or cliff top (see pattern 44 Whiteware).
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 small dish,

Comments: N/A.

Pattern: 76 Paste: Semi-vitreous.
No. of Specimens: 7 Figure: N/A.
Decorative Technique: Polychrome decal and gold line trim overglaze.
Description: The blank is plain. Gold line trim is placed on rim border and mid-rim of exterior and on mid-rim of interior. The decal extends from the rim border into the body. The design consists of shield shapes in green containing five bunched quadalateral shapes in orange. Each shield is flanked by sprigs of laurel leaf and connected to the next shield by a thin line of green.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 cup.
Comments: N/A.

Pattern: 105 Paste: Semi-vitreous.
No. of Specimens: 2 Figure: N/A.
Decorative Technique: Polychrome decal and gold line trim overglaze.
Description: Vessel blank is plain. Applied decoration includes a floral motif decal extending across from the body/rim juncture. A double gold line trim encircles the exterior rim border and a single gold line encircles the exterior rim center on the interior. The decal design consists of turquoise leaf like scrolls linked by draped swags of yellow roses with turquoise leaves. Handle has gold accent trim.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 cup.
Comments: N/A.

Pattern: 124 Paste: Semi-vitreous.
No. of Specimens: 28 Figure: 124.
Decorative Technique: Polychrome decal, monochrome handpainting, gold line trim and gold scroll overglaze.
Description: One vessel blank features fluting on the lower 1/2 of the body, the other blanks are plain. Gold line trim is present about the foot of one vessel and about the rim edge of the lid. A thick green band bordered by gold line trim encircles one vessel at the rim border and the other vessel at the shoulder. Light and dark green floral scroll elements encircle both vessels and lid on the body surfaces. Suspended from this circlet is a swag of red to pink roses.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 lid; and 2 serving dishes.
Comments: N/A.

Pattern: 125 Paste: Semi-vitreous.
No. of Specimens: 41 Figure: N/A.
Decorative Technique: Polychrome decal and gold line trim overglaze.
Description: The vessel blank is plain. Gold line trim appears about the rim border, the rim/body juncture and the body/base juncture. The applied decoration consists of a clutter of assorted elements, each of which occurs in various sizes. These include: swags of red roses with

green leaves; gold, orange and green floral scroll elements; 3 petal flowers with red to pink petals and green leaves; medallions containing a central cluster of aster like flowers and outlined by a double line, one green, one green and white alternating segments. There are other assorted odd elements.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 large unidentifiable vessel.
Comments: N/A.

Pattern: 181 **Paste:** Semi-vitreous.
No. of Specimens: 2 **Figure:** N/A.
Decorative Technique: Polychrome decal overglaze.
Description: The blank is plain. Applied decoration consists of star like blue flowers featuring red star like centers. The flowers are attached to long slender green leaves.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 2 bowls.
Comments: N/A.

TINTED SLIP

Pattern: 157 **Paste:** Semi-vitreous.
No. of Specimens: 3 **Figure:** N/A.
Decorative Technique: Monochrome handpainting and polychrome tinted slip overglaze.
Description: The blank is plain. Handpainted brown and tinted slip in pink, purple, green, yellow, blue, blue-green and red are used to produce simplistic butterflies on the vessel base and chevron designs on the body.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 butterpat.
Comments: N/A.

Pattern: 151 **Paste:** Semi-vitreous.
No. of Specimens: 2 **Figure:** N/A.
Decorative Technique: Polychrome handpainting and tinted slip overglaze.
Description: Available fragments of the blank are plain. The applied decoration consists of an oriental pictoral of a human figure running. The major colors are reds, pale blues, tans and browns. A tan tinted slip is applied as basis for portions of the pictorial and gold trim accents some of the slip and handpainted elements.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 unidentifiable.
Comments: N/A.

GILDED ONLY

Pattern: 161 **Paste:** Semi-vitreous.
No. of Specimens: 14 **Figure:** N/A.
Decorative Technique: Handpainted gilding overglaze.
Description: The blank is plain. Applied decoration consists of gold speckling about the rim.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 large unidentifiable vessel; and 1 small unidentifiable vessel.
Comments: N/A.

Pattern: 162 **Paste:** Semi-vitreous.
No. of Specimens: 9 **Figure:** N/A.
Decorative Technique: Hnadpainting gilding overglaze.
Description: Vessel blank features embossed scrilling about the rim that extends down into the body. The rim edge is scalloped. Gold speckling is applied to the rim and rim edge.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: 1 pitcher; 1 lid; and 1 unidentifiable vessel.
Comments: N/A.

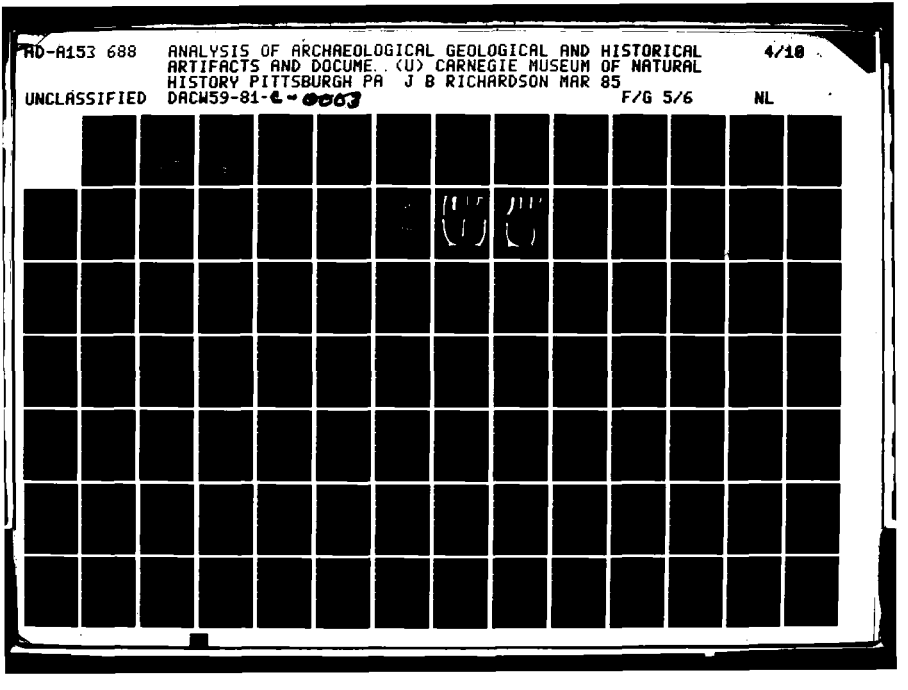
MISCELLANEOUS

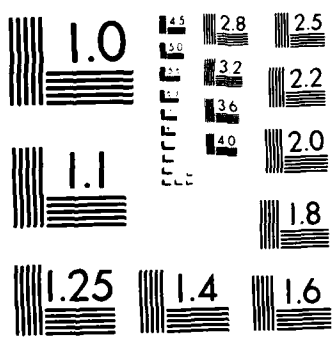
Pattern: 169,171,173,175,177,178 **Paste:** Semi-vitreous.
No. of Specimens: 127 **Figure:** N/A.
Decorative Technique: 169 Miscellaneous gilding only.
171 Miscellaneous decal.
173 Miscellaneous gilded handles.
175 Miscellaneous tinted glaze.
177 Miscellaneous decal and handpainted.
178 Miscellaneous handpainted.
Description: These patterns designations consists of assorted fragments that could not be joined as recognizable patterns. They were grouped according to major decorative technique.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented: N/A.
Comments: N/A.

Pattern: 505 **Paste:** Semi-vitreous.
No. of Specimens: 60 **Figure:** N/A.
Decorative Technique: Miscellaneous decorative techniques.
Description: This category includes all semi-vitreous fragments not assignable to the above patterns.
Associated Maker's Marks, Figure: N/A.
Vessel(s) Represented:N/A.
Comments:N/A.

AD-A153 688 ANALYSIS OF ARCHAEOLOGICAL GEOLOGICAL AND HISTORICAL ARTIFACTS AND DOCUME..(U) CARNEGIE MUSEUM OF NATURAL HISTORY PITTSBURGH PA J B RICHARDSON MAR 85 4/10

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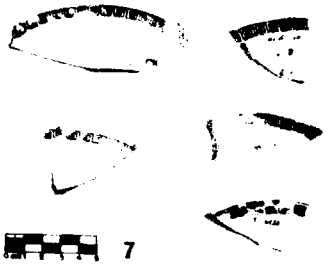


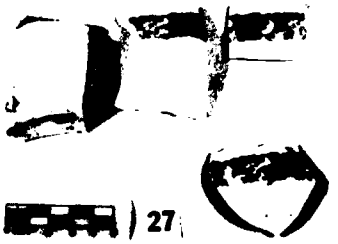


MICROCOPY RESOLUTION TEST CHART
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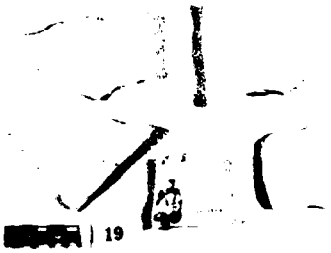

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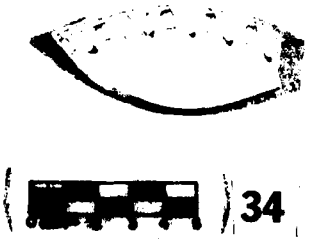

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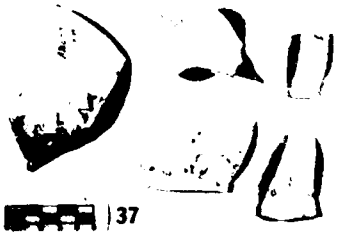

15

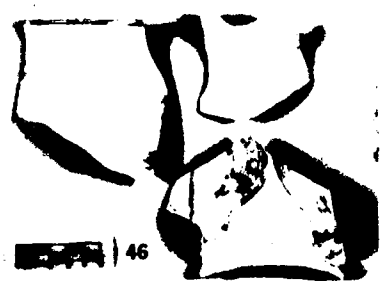

29


19

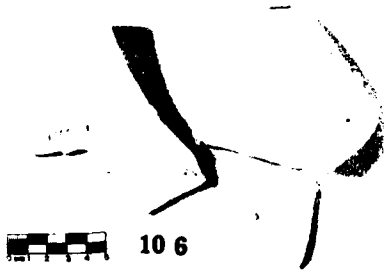

34


21

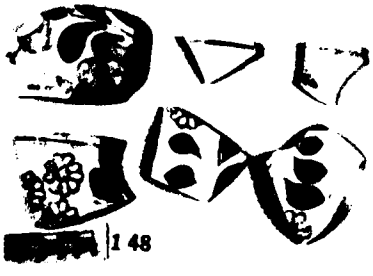

37


46


47


10 6


1 24


1 48

CONCLUSIONS

Ceramic material recovered from the Neville House midden totaled 33,271 artifacts. Categories of the ceramics (decorated porcelain, whiteware, semi-vitreous ware, and yellowware) were selected for detailed analysis because of the potential for derivation of information on chronology and socio-economic status and behavior. This subset consisted of 11,453 artifacts (vessel fragments) or roughly 10% of the total site assemblage. The analysis of decorated porcelain has been discussed in an earlier section (Strattan, this report). This secton will consider the analysis of the decorated whiteware and semi-vitreous ware and also make reference to the decorated porcelain.

There were 4,864 fragments of decorated whiteware, comprising 141 patterns. This represents 15% of the ceramic class and a little less than 4% of the site assemblage. Fifty patterns of semi-vitreous ware (1,527 fragments) were also deposited in the midden. These add up to 4.5% of the ceramic class and 1.2% of the site artifactual total.

The decorated ceramics can be classified according to function (see Table 1). In general the proportions of functions of all three ware categories are similiar. Whiteware was selected for use as tableware (72%) and relatively less often as teaware, decorative objects, or sanitary ware (13%). Statistics on vessel shape support such an evaluation. In the breakdown of the whiteware, 31% of the fragments are plates, 10% cups, 9% bowls, and 8% saucers. Forty-five percent of the porcelain fragments were designated teaware and only 44% tableware. The porcelain shapes would support this as well. Only 18% were categorized as plates, 12% saucers, 22% cups, and 5% bowls. The relative proportions of functions in each ware category remained the same over the life of the midden (see Table 2, which lists function percents per date blocks computed for the combined wares).

Decorative techniques and motifs as discussed in the introduction to ceramics tended to occur in the same proportions in all three decorated ware types (Tables 3 and 4). Handpainting, decals, handpainting and decals together, transfer printing, banding, and plain (in descending order) were the more popular decorative techniques on the wares. Floral elements were by far the most prevalent motif, followed by floral and geometric elements, floral and human/animal elements, banding, and solid color motifs.

Certain of these decorative techniques and motifs correlated with certain of the functions assigned to specific patterns and this cut across ware distribution. Fifty-six percent of handpainting occurred on tableware and 25% on teaware. Twenty-five percent of all transfer printing was found on tableware. In addition, all wares with transfer printing originated in Europe. Decals were found only on tableware (54.5%) and teaware (45.5%). Colored or tinted paste were utilized only on kitchenware and vanity/sanitary ware. The relative proportions of decorative techniques remained constant over the use-life of the site. Table 5 gives the percentages of the major decorative techniques per date block.

The fact that percentages of decorative techniques and motifs remained relatively the same across wares and over time either results from the homogeniety of the site, the preferences of site occupants, or the stability and general applicability of these techniques and motifs. However, limitations in the method for determining the date ranges and percentages in date blocks may be contributing to this homogeneity. More detailed differentiation of decorative technique and motif by short term date ranges was a goal of the analysis. However, the concentration and mixing of artifacts in the site, the latter due to pre-excavation looting, made it impossible to use within-site provenience as a means of narrowing the date range applied to any particular artifact. The use of maker's mark dates and company dates has limitations and the broad time ranges ascribed to patterns and their associated decorative techniques and motifs results from this. As similiar research is done on 19th century sites, increasingly narrowing date range brackets will hopefully be applied to the local and regional use of ceramic wares, patterns, decorative techniques, and motifs.

TABLE 1

Functions of Decorated Ceramics (in percentages)

Function	Pastes Combined	Whiteware	Semi-vitreous	Porcelain
Kitchenware	5	8	8	2
Tableware	55	72	56	44
Teaware	32	13	20	45
Decorative	5	3	2	6
Sanitary	4	4	7	2

TABLE

Functions of Decorated Ceramics (combi[illegible]) by Date Blocks* (percentages)

Function	1870's	1880's	1890's	1900's	1910's	1920's	1930's	1940's
Kitchenware	6	3	6	5	5	6	4	6
Tableware	65	70	57	55	53	54	54	51
Teaware	18	21	31	34	36	35	40	40
Decorative	6	3	1	1	1	1	2	3
Sanitary	6	3	4	5	4	4	0	0

*Percents per date block derived from cumulative potential date range curves as discussed in Site Analysis section.

TABLE 3

Percentages of Major Decorative Techniques and Motifs on All Decorated Ceramics

Function	Rim Decorative Technique	Body Decorative Technique
Handpainting	24	27
Decal	20	18
Handpainting and Decal	8	11
Transfer	8	8
Gilding only	13	--
Plain	6	11
Tinted Glaze	6	--
Stencil Point	3	--
	Rim Motif	**Body Motif**
Floral	33	40
Banded	13	--
Floral and Geometric	10	17
Solid Color	6	--
Assorted	--	18
Floral and Human/Animal	--	11
Floral and Solid Color	--	8

TABLE 4

Percentages of Major Decorative Techniques and Motifs

	Whiteware		Semi-vitreous	
Rim Decorative Technique	Handpainted	21%	Handpainted	14%
	Transfer	21%	Transfer	10%
	Decal	16%	Decal	18%
	Plain	6%	Plain	10%
	Banded	11%	Gilding only	16%
	Tinted glaze	4%	Handpainted and transfer	6%
	Handpainted and decal	11%		

	Transfer	20%	Transfer	10%
	Handpainted	14%	Handpainted	14%
Body	Decal	14%	Decal	24%
Decorative	Plain	8%	Plain	10%
Technique	Floral and human/ animal	10%	Handpainted and decal	20%
	Banded	6%		
	Floral	28%	Floral	24%
	Floral and geometric	12%	Assorted	12%
Rim	Banded	9%	Banded	20%
Motif	Edge painted	7%	Floral and geometric	10%
	Geometric	6%		
	Solid color	6%		
	Floral	35%	Floral	48%
Body	Pictoral	5%	Pictoral	6%
Motif	Floral and geometric	6%	Assorted	14%
	Solid color	6%		

TABLE 5

Major Rim Decorative Techniques (all wares) per Time Block (percentages)

Year	Handpainted	Transfer	Decal
1870-79	24	12	18
1880-89	27	6	36
1890-99	25	10	30
1900-09	27	9	30
1910-19	28	9	32
1920-29	29	10	29
1930-39	22	12	34
1940-45	23	14	34

THE YELLOW AND ROCKINGHAM WARE ARTIFACTS

by

Robert Fryman

Introduction

The yellow and Rockingham earthernware artifacts constitute the allest category of the total ceramic class from the Neville House cavation. A total of 829 yellow and Rockingham fragments were covered during the excavation of which yellow ware accounted for .6% of the total ceramic class with the remaining 2.4% being composed Rockingham ware fragments. The vast majority of the artifacts signed to this category were confined to Stratum F16 which accounted r 63.2% of the total yellow and Rockingham fragments.

The yellow ware and Rockingham ware category dates to the latter rt of the nineteenth to early twentieth century, approximately tween 1880 to 1920, based upon attributes discernable from the tifacts. These include glaze composition, biscuit or clay body, thod of manufacture and decorative techniques. Only seven sherds, nstituting the remains of one vessel, exhibit differences in glaze d body composition that suggest a date between 1840 and 1870. With e exception of these seven fragments the range of dates indicated by e yellow and Rockingham wares correlates with the chronological data ailable from the white earthenware and porcelain categories of the ville House ceramic class (see contributed papers by Casselberry, lins, and Stratton, this volume).

Method of Analysis and Vessel Reconstruction

Preliminary analysis of the yellow and Rockingham wares was lertaken during the initial cleaning and cataloging of the materials which time the ceramics were separated into the gross divisions of llow ware and Rockingham ware. Subsequent analyses were designed to fine the initial classification and to provide data on the minimum nber of vessels present, vessel form or function and method of nufacture. All sherds were separated into a hierarchy of analytical oupings based upon visibly shared attributes. These attributes cluded 1) vessel form which included the variables of wall thickness d rim and basal configuration, 2) method of manufacture, 3) type of scuit body, and 4) mode of decoration. Chemical analysis of the aze and biscuit body was conducted on a representative sample of the ramics for comparison with the glaze and body data obtained from the terials recovered from the Sprucevale Pottery (33CO63), a d-nineteenth century industrial pottery near East Liverpool, Ohio.

Reconstrution of the vessels represented in the assemblage was lertaken once the separation of the sherds into the analytical oupings was completed. Despite the difficulties in the storage of

restored vessels, reconstruction of the ware provided a more urate means of determining the minimum number of vessels present as l as the range in stylistic forms. Vessel reconstruction provided ther data concerning the utilitarian nature of the assemblage and onological information available from the subtleies of vessel ucture and manufacture.

During the reconstruction phase of the analysis the vessels were sely examined for defects occurring as a result of the manufacturing cess. The degree of quality control represented by the ware vided data as to the relative purchase price of the ceramics. relation of the quality of the yellow and Rockingham wares with the te earthenwares and porcelain provided information regarding the luence of the Neville House occupants during the period represented the artifactual remains.

A final aspect of the analysis involved the examination of the e for evidence of wear patterns. Determination of wear patterns on ceramics was complicated by the striations and wear produced by ural processes prior to recovery. As a result the examination for ge patterns provided the least amount of data regarding the Neville se yellow and Rockingham wares.

Description of Ware

The descriptions of the yellow and Rockingham wares are given low. The fragments under study were divided according to a hierarchy analytical groupings varied or ware sub-categories (Roman numeral), sel form group, decoration (subgroup), and minor structural or orative variations (variety). A three place alpha-numeric signation such as IA-2-1 which refers to Group IIA, Subgroup 2, iety 1 or the 3 banded white and brown is used to clarify the ures following the descriptions.

SUBCATEGORY I: DECORATED YELLOW WARE

GROUP I.A: BOWLS/NAPPIES

SUBGROUP 1: WHITE BANDED

IETY 1: 3 Banded White Figure: 3
cription: Variety 1 consists of three narrow white slip bands
ying in width from 0.24 cm to 0.33 cm. The rim is straight and
in. The vessel walls curve slightly towards the base forming a deep
l. The configuration of the base is not known.
ber of Vessel(s): 2
meter: Vessel I 15 cm
Vessel II 16 cm
Width: 1.10 cm to 1.16 cm
y Thickness: 1.11 cm to 1.16 cm
e Thickness: N/A
ments: The remains constitute two nested bowls or nappies. The
e of decoration was quite common in to the early twentieth century.

IETY 2: 3 Banded White Figure: 3
cription: Variety 2 is very similar to Variety 1 except in width
the bands and configuration of the rim. The rim is excurvate and
t on the superior border. The decoration begins 0.93 cm below the
. The vessel walls are straight curving slightly towards the base.
slip bands vary in width from 0.52 cm to 0.55 cm.
ber of Vessel(s): 1
meter: 22 cm
Width: 1.0 cm
y Thickness: 0.41 cm
e Thickness: N/A
ments: N/A

iety 3: 3 Banded White Figures: 1, 2, and 3
cription: Variety 3 is defined on the basis of a white slip
oration which consists of three bands of differing widths. The
tral band is the widest. The width of the first and third bands
ge between 0.26 cm and 0.35 cm. While the central band measures
ween 1.15 cm to 1.64 cm. The rim configuration is similar to
iety 2 and exhibits traces of overglaze white paint on the superior
der of the rim. The bands are situated 1.19 cm below the rim and
underglaze. The vessels are covered with a clear glaze.
ber of Vessel(s): 4
meter: Vessel I 24 cm
Vessel II 23 cm
Vessel III 19 cm
Vessel IV 17 cm
Width: 1.0 cm to 1.11 cm
y Thickness: 0.64 cm to 0.74 cm
e Thickness: N/A
ments: The larger diameter vessels appear to belong to the same set
nested bowls. The smaller diameter vessels appear to belong to a
arate set based on differences in the finish of the rim.

ETY 4: 2 Banded White Figures: 2 and 3
ription: Variety 4 is defined by the presence of two white
rglaze slip bands of which the upper most band is wider. The upper
ranges in width from 0.59 cm to 0.56 cm. The lower bands measure
cm to 0.36 cm in width. The rims are excurvate and slightly
ex on the superior border. The walls of the vessel curve slightly
rds the base. The base is slightly concave with a thick rounded
. The vessels are covered by a clear glaze.
er of Vessel(s): 2
eter: Vessel I 16 cm
Vessel II 16 cm
Width: 0.64 cm to 0.67 cm
Thickness: 0.52 cm to 0.63 cm
Thickness: 0.65 cm (one specimen only)
ents: The two vessels may belong to the same set of nested bowls.
rim configuration represented is similar to Variety 3.

ETY 5: 2 Banded White Figures: 2 and 3
ription: Variety 5 is characterized by the presence of two narrow
e underglaze slip bands. The bands range in width from 0.16 cm to
cm. The rim is plain and slightly convex on the superior border.
slip bands begin 1.24 cm below the rim. The walls curve gradually
rds the base. The vessels are covered by a clear glaze.
er of Vessel(s): 2
eter: Vessel I 14 cm
Vessel II N/A
Width: 0.49 cm (one specimen only)
Thickness: 0.35 cm to 0.50 cm
Thickness: N/A
ents: Only one rim fragment is present. The determination of two
els was based on differences in the absorption rate of the
nents and differences in the degree of curvature of the body
is.

ETY 6: 1 Banded White Figure: 3
ription: Variety 6 is characterized by a single white underglaze
band measuring 1.2 cm to 1.12 cm in width. The rim is very plain
straight. The vessel walls curves very slightly towards the base.
basal foot is clearly defined and rounded in configuration. The
el is covered by a thin clear glaze.
er of Vessel(s): 1
eter: 12 cm
Width: 0.59 cm
Thickness: 0.55 cm
Thickness: N/A
ents: The vessel appears to be a small nappy, possibly part of a
of nested bowls.

SUBGROUP 2: WHITE AND BROWN BANDED

ETY 1: 3 Banded White and Brown Figures: 1 and 4
ription: Variety 1 is characterized by three underglaze slip

The first and third bands are brown and the central band is
The central white band is larger than the brown bands measuring
n 2.03 cm to 2.86 cm in width. The brown bands range from 0.49
0.64 cm in width. The rim is excurvate with the edges rounded.
lls of the vessel are curved slightly towards the base. The
s are covered by a clear glaze.
of Vessel(s): 4
er: Vessel I 24 cm
Vessel II N/A
Vessel III N/A
Vessel IV N/A
dth: 1.09 cm (one specimen only)
hickness: 0.49 cm to 0.64 cm
hickness: N/A
ts: The thickness of the walls and configuration of the rim
t that the vessels were part of a series of serving or mixing
Determination of the number of vessels was based on
truction.

Y 2: 13 Banded White and Brown **Figures:** 1 and 4
ption: The upper zone measures 2.75 cm in width and contains
narrow bands of which the first and eighth bands are of brown
eze. The second zone of decoration is located 1.68 cm below the
zone and is 1.53 cm in width. It contains six bands of which the
and sixth bands are brown and the remainder white. All bands are
laze. The rim is plain and slightly convex on the superior
. The walls of the vessel curve slightly towards the base. The
is covered by a thin clear glaze.
of Vessel(s): 1
er: 12 cm
dth: 0.79 cm to 0.91 cm
hickness: 0.47 cm to 0.54 cm
hickness: N/A
ts: The vessel appears not to have been part of a set but rather
le bowl. The style of decoration is quite common to vessels
ctured in the latter portion of the nineteenth century to early
eth century.

SUBGROUP 3. BROWN BANDED

Y 1: 5 Banded Brown **Figure:** 4
ption: Variety 1 is characterized by an underglaze decorative
onsisting of five brown manganeze slip bands of which the middle,
rd, is the widest. The first, second, fourth and fifth bands
e 0.2 cm to 0.23 cm in width in comparison to the third band
ranges between 0.88 cm to 1.17 cm. The walls of the vessel
t a greater curvature than any other yellow ware fragments in the
lage. The base is concave with the basal foot distinct from the
or walls of the vessel and is slightly rounded in configuration.
ms are excurvate and slightly square in appearance.
of Vessel(s): 3
er: Vessel I 12 cm

Vessel II 11 cm
Vessel III 10 cm
lth: 0.67 cm to 0.92 cm
ıickness: 0.54 cm to 0.60 cm
ıickness: 0.42 cm (one speciman only)
:s: The determination of three vessels was based on the distance
decoration to the edge of the rim, rim height and vessel
:rs. The color and texture of the biscuit body suggest a late
:ntury data.

' 2: 5 Banded Brown **Figure:** 4
)tion: Variety 2 is characterized by an underglaze decorative
)nsisting of five brown manganeze slip bands similar to Variety
: first, second, fourth fifth bands range in width from 0.19 cm
cm while the central band measures between 1.05 cm to 1.20 cm in
The rim is excurvate and is slightly tapered. A series of
;ed clover leaf designs are found directly below the rim. The
)f the vessel curve slightly towards the base. The base is
: with a well defined basal foot which is square in appearance.
;sel is covered with a clear glaze exhibiting a high degree of
.ng.
of Vessel(s): 1
:r: 11cm
lth: 0.55 cm to 0.85 cm
ıickness: 0.67 cm to 0.69 cm
ıickness: 0.60 cm (one speciman only)
The banding is of a lighter shade than that represented by
. The style of the impressed design is suggestive of a late
:nth century date.

' 3: 3 Banded Brown **Figures:** 1 and 4
)tion: Variety 3 is similar to White and Brown Banded Variety 1
;roup 2 with one wide central band flanked by two smaller bands.
ıtral band ranges in width from 1.40 cm to 1.53 cm while the
bands vary in width from 0.26 cm to 0.46 c,. The slip bands
erglaze and are found 2.78 cm below the rim. The rim is
te and very rounded in appearance. The vessel walls taper
y in thickness to a point immediately below the rim. The
are covered by a clear glaze. The configuration of the base is
resented in the fragments.
of Vessel(s): 3
r: Vessel I 19 cm
Vessel II 18 cm
Vessel III 16 cm
th: 0.78 cm to 0.80 cm
ickness: 0.45 cm to 0.54 cm
ickness: N/A
s: The vessels appear to be from the same set of nested bowls.
tial clustering of the fragments suggest that the vessels were
ed at approximately the same time.

4: 3 Banded Brown **Figure:** 4
tion: Variety 4 consists of a series of three underglaze brown
nds similar to Variety 3. The bands range in width from 0.17 cm

:
Baltimore, Maryland.
Company: 1880-1914.
Mark: 1900-1914.

pe:
Whiteware.

nd Portions
ted:
Unidentifiable fragment; base.

cription:
Black ink stamped; a banner design with the owner's name enclosed. Beneath, the abbreviation of the city of manufacture is printed.

:
The pottery was established in 1880 by John Funstall, Henry Brougham and Isaac Brougham. In 1882, C. F. Haynes and Co. purchased the business and organized the Chesapeake Pottery. Edwin Bennett, in 1887, purchased the firm. Already owning a pottery of his own, he sold the firm to his son and D. F. Haynes, thus the name changed to Haynes, Bennett and Company. When Bennett retired from the business in 1896, F. R. Haynes, sone of D. F., bought the interest and the firm became D. F. Haynes and Son. The company continued until 1914 when the American Sugar Refining Company purchased the land and closed the pottery. The firm manufactured semi-porcelain and whtieware into dinner services, toilet sets, odd sets of dishes, jardinieres and novelties (Barber 1904:148; Barber 1909:320-328; Lehner 1980:42 and 180; Cox 1949:1101 and 1132).

Correlation:
N/A.

na Company (Fig. 4a-4c)

pecimens:
A) 1.
B) 7.
C) 7.

:
Trenton, New Jersey.
Company: 1893-1929.
Mark: A-C 1893-1929.

pe:
A) Semi-porcelain.
B-C) Whiteware.

id Portions
ted:
A) 1 unidentifiable fragment: base.
B) 7 unidentifiable fragments: all bases. Of these 7, 4 join to form a total of 5 marks.
C) 7 plate fragments: 5 rim, body and base; 2 base. Of these 7, 4 join for a total of 5 marks.

cription:
A) Green-blue ink stamped. A double circle with the pottery's initials printed inside the inner circle. "MELLOR & CO." is printed around the inner circumference of the outer circle.
B) Green ink stamped. Printed in a horizontal

k Pottery (Fig. 1)

Specimens: 1.

n: Peoria, Illinois.
Company: 1888-1971
Mark: 1888-1971.

ype: Porcelain.

and Portions
nted: 1 saucer fragment: rim, body, and base.

scription: Green transfer. Wheel on top of a lock. The company's name and country of manufacture are printed on the lock. The city of manufacture is printed under the lock.

s: The company began in 1888 by C. E. Wheelock and Son. They first produced utilitary wares such as crocks and jugs in stoneware. The company became a retail firm and so began to import pieces from other countries under the Wheelock name. The owner of the business closed the factory in 1971 to pursue other interests (Lehner 1980:169,198).

l Correlation: 202.

in Bennett Pottery Company (Fig. 2)

Specimens: 3.

n: Baltimore, Maryland.
Company: 1846-1936.
Mark: 1890-1892.

ype: Whiteware.

and Portions
nted: 3 unidentifiable fragments: all bases.

scription: Brown ink stamped; a globe with a sword piercing North America. On the sword's guard, the company's initials are printed. "BONA FAMA est Melior Zona Aurea" is printed around the outside of the globe. Of these 3, 2 join to form a total of 2 marks.

s: Edwin Bennett began his pottery in 1846. He was assisted by his brother, William, until 1856 when William withdrew from the firm. During the years from 1856 until 1890, the operating name was the Edwin Bennett Pottery. In 1890, the pottery was re-organized and the name became the Edwin Bennett Pottery Company. Manufactured at various times throughout the firm's history were: porcelain, semi-porcelain, stoneware, and majolica (Barber 1904:143-146; Lehner 1980:29,179; Cox 1949:1007-8,1101,1132; Hartman 1943:110-11).

Correlation: N/A.

ke Pottery (Fig. 3)

pecimens: 1.

Comments. A brief history of the ceramic company and, when
le, an account of the manufactured products.

Internal Correlation. The arbitrary numbers assigned to the
ns of porcelain, semi-vitreous, and whiteware, indicating that a
ic pattern and a specific maker's mark are from a single vessel
roup or set of vessels.

The followin$_6$ are all the maker's marks from the Neville House
c assemblage.

nation (A, B, C, etc.). If the marks differ only by one element, as pattern name, the letter designation remains constant, but a rent sub-number is added (A1, A2, B1, etc.). Every mark is ibed and illustrated. The unidentifiable marks are minimally ibed. Only the color, the nature of the mark (i.e., decal, ssed, etc.), and an internal correlation (if present) are listed.

The gathered information for companies and manufacturers is nted in a standard descriptive format. The format is broken down eight (8) pertinent headings beginning with:

No. of Specimens. A numerical listing for the total number of s per maker's mark.

Location. The geographical location, i.e., country, region, , and/or city of the company. For the importers, if possible, the ion of the importing firm and the location of the manufacturer are .

Date. 1) Company date: the beginning and ending dates of tion for the firm. 2) Mark date: the beginning and ending dates e time that a mark was utilized by the firm.

In 1890, the McKinley Tariff Act was passed which states: "That d after the first day of March, 1891, all articles of foreign acture, such as are usually or ordinarily marked, stamped, branded beled, and all packages containing such or other imported les, shall, respectively, be plainly marked, stamped, branded or ed in legible English words, so as to indicate the country of origin; and unless so marked, stamped, branded or labeled they not be admitted to entry." (Van Patten 1979:26). The ntifiable marks were given the beginning date of 1891 if nothing he country of manufacture is stamped on a vessel. For wares from , the dating system is different. Until 1920 "Nippon" was an table stamp on imported items. Then, in 1921, the Treasury tment and Customs made revisions which stated: "...the word on' and its treatment by lexicographers of recognized standing, epartment is constrained to the conclusion that 'Nippon' is a ese word, the English equivalent of which is 'Japan'...and you are ucted that merchandise from Japan, the marking of which is ned by the provision of law, should not be released when bearing the Japanese word 'Nippon' to indicate Japan." (Van Patten 27). Thus items stamped "Japan" have a beginning date of 1921 and stamped "Nippon" have an ending date of 1921.

Paste Type. The clay body or body that the ceramic is made of Neville House Ceramic Introduction).

Shapes and Portions Represented. The vessel fragments that have aker's mark present, i.e., plate rim, cup base, etc.

Mark Description. A detailed description of the maker's mark ding the color.

CERAMIC MAKER'S MARKS

by

Deborah Casselberry

INTRODUCTION

The ceramic maker's marks category is defined as a name, gram, letter, or other device, impressed, raised, scratched, ted, printed, or stenciled on pottery, stoneware, or porcelain, cating the factory where the ware was made, its date, maker, and/or rator (Barber 1914:77). The category is represented by 991 whole ragmentary marks which is 3.1% of all ceramics and 0.8% of all facts from the Neville House trash midden.

After the initial artifact separation, the maker's marks were en down into groups of specific marks. If the mark was not lete and consisted only of fragments, an attempt was made to nstruct as many whole marks as possible. The reconstruction, in cases, was necessary before the mark could be identified. nately, two gross groupings were formed, the identified and the entified.

Within the identified group, one problem arose. Some firms i in one country manufactured their wares in another country. The s for these firms either indicated the firm's name, the location of firm's headquarters, the location of the firm's factory, or a lnation of these. In some instances, firms purchased blanks from facturers and then decorated the wares at their own factories. marks bore both the blank manufacturer's and the firm's name. It also true, in some cases, that a firm did not own its decorating ory. Most firms, however, dealt exclusively with a select number eramic manufacturers or decorators. The manufacturer and dealer i then arrange to include the dealer's name in the manufacturer's . Examples of these marks were found in the Neville House nics. These few companies were grouped into a separate category :led "Importers" and efforts were made to identify all companies lved in every aspect of manufacture.

Within the unidentifiables grouping, a problem also arose. Some s contained enough information to be identified with a specific :ry. In this case, these marks were considered identifiable and ed with the known marks of that country. These marks are at the of the identifiable sections of each respective country with all nformation that could be retrieved about them. In most instances, : is little or no information for these marks.

The maker's marks were arranged into an hierarchical system ining with identified or unidentified category; manufacturer; nent; country; region or state; and city. All companies are then abetically arranged in this regional separation. If a company is esented by more than one mark, each mark is given a separate letter

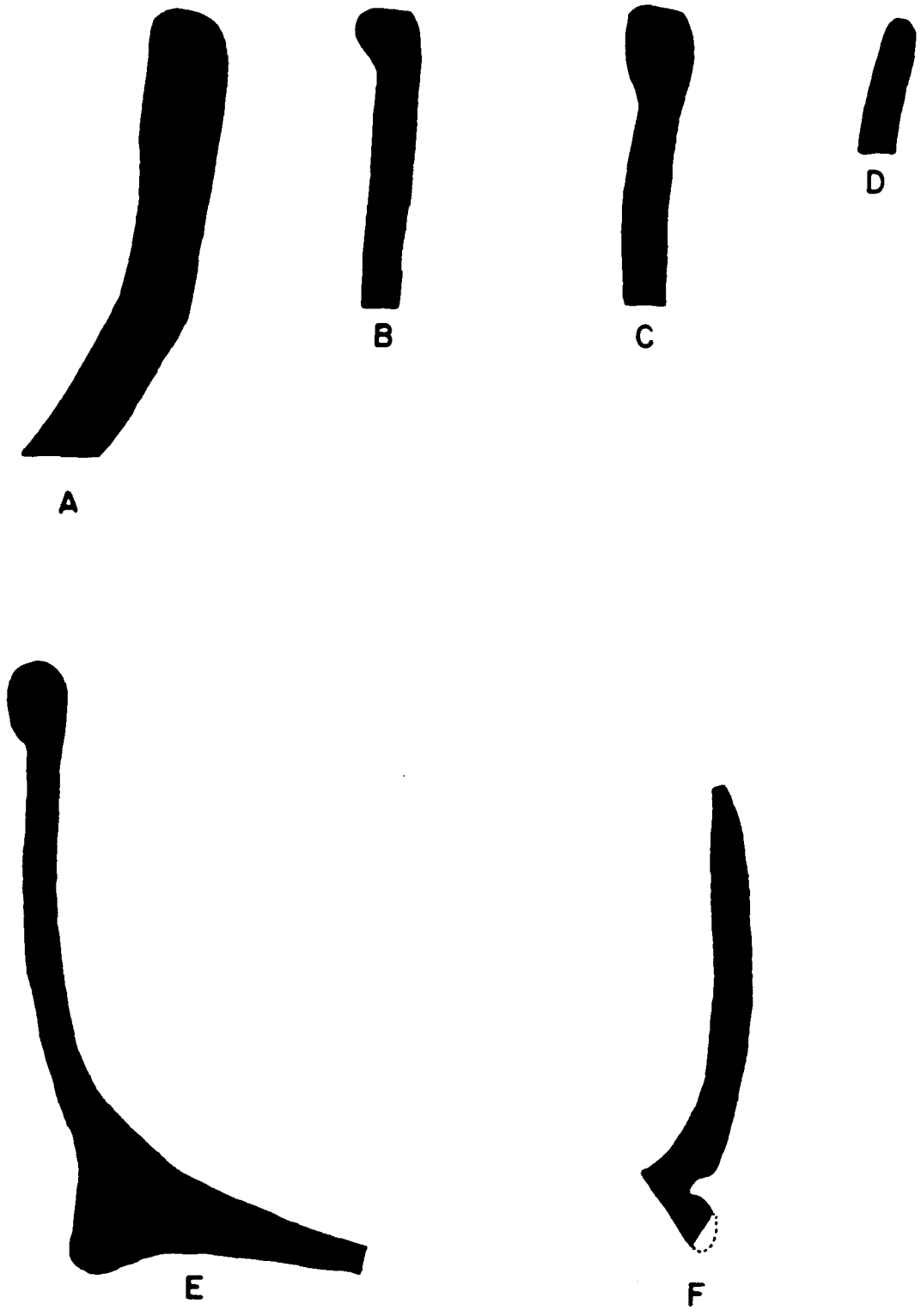


Figure 4. Rim profiles: A. white and brown banded type 2; B. white and brown banded type 1; C. brown banded type 4; D. brown banded type 5; E. brown banded type 1; F. brown banded type 3; and G. brown banded type 2.

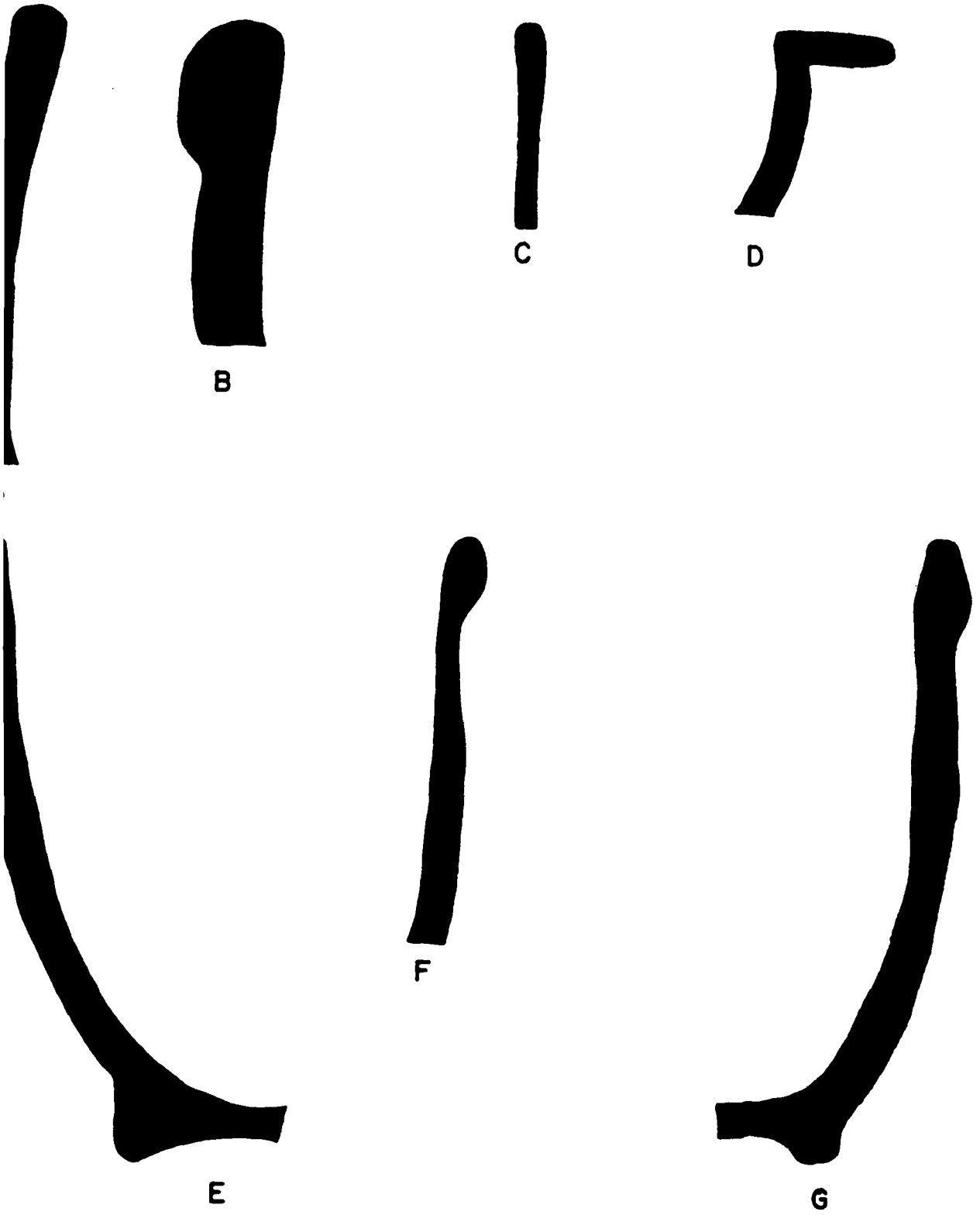


Figure 3. Rim profiles: A. white banded type 1; B. white banded type 2; C. white banded type 3; D. white banded type 5; E. white banded type 4; F. white banded type 6.



Figure 1. Photographs of yellowware vessels. Upper left, 3 banded white and brown; upper right, 3 banded brown type 3; lower left, 3 banded white type 3 and lower right, 13 banded white and brown, type 2.

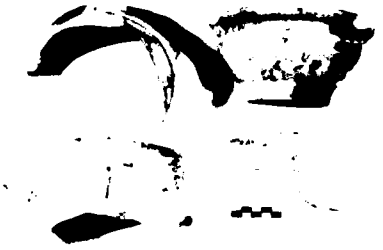


Figure 2. Photographs of yellowware vessels. Upper left, 2 banded white type 4; upper right, 2 banded white type 5; lower left and lower right, 3 banded white, type 3.

the width of the slip bands is due to the consistency of the slip and the skill of the potter in its application. Close examination of the ware indicated few flaws in either the glaze or the vessel construction and a virtual absence of any point marks. It may be inferred from this that the yellow ware vessels recovered at the Neville House were of top quality. The high quality of the yellow ware appears consistent with the economic status of the occupants and the nature of the other ceramic ware categories.

During the analysis it was noticed that the fragments which were later identified as belonging to the same set of nested bowls were recovered from the same excavated unit or the immediately adjacent units. It thus appears that on at least three occasions complete sets of bowls were discarded. A similar pattern of disposal was noted by Stratton (this report) in the porcelain materials from Neville House.

Despite the relatively small size of the yellow ware and Rockingham ware category, it was possible to demonstrate patterns regarding the quality of the ceramic items and their disposal. However, given the paucity of comparable data from sites representing a wider range of economic conditions, the patterns suggested in this paper must remain tentative.

GLAZE ANALYSIS

Glaze analysis was conducted on five fragments of yellow ware. The purpose was to see if any consistency existed in the glaze components of the assemblage and also to compare the results with the data obtained on the Sprucevale Pottery glazes which date from 1852 to 1895.

It should be noted that glaze analysis of a very small sample of yellow ware was attempted only on a very limited basis because of a lack of comparable data on glaze components from known manufacturers and because of the inconsistencies in the production of glaze by ceramic manufacturers. The only site which has had glaze analysis conducted is the Sprucevale Pottery which predates the Neville House remains by approximately 30 years. The Sprucevale Pottery analysis also indicated the inconsistency in glaze composition and production within the same pottery. The lack of uniformity is partially the result of experimentation with glazes, the number of different glaze formulas which produce the same desired finish, and the human factor involved in determining the correct consistency of the glaze during preparation. The human element is still a major factor in the differing composition of the glazes in the potteries still operative in the East Liverpool area (Beals 1981: personal communication).

The clear glaze used on the Neville House yellow ware differed among five fragments analyzed in terms of the amount and type of the glaze components. Traces of borax, silica and lead were found in the glazes. The lead content of the Neville House fragments was lower than that of the Sprucevale Pottery. Green (1979:72-5) states that during the late nineteenth century efforts to reduce the dangers of lead poisoning were undertaken by ceramic manufactures and created a trend in the reduction of the lead content in glaze formulas. The lower concentrations of lead in the Neville House fragments may reflect this trend and provides tentative support for the ranges of dates suggested by the yellow ware assemblage. However, this is not definite given the lack of comparable data.

SUMMARY AND CONCLUSION

The Neville House yellow and Rockingham wares are representativeof utilitarian kitchenwares common to the late nineteenth and early twentieth centuries. The majority of yellow ware vessels belonged to sets of nested mixing bowls. The range in decorative patterns found in these vessels is typical of the ware being offered to the public for everyday use. The popularity of these wares is evident in the various store catalogs and advertisements for the period (East Liverpool Tribune 1884, Montgomery Ward and Company 1894, Sears, Roebuck and Company 1900, 1902).

All of the vessels in this wave category, with the exception of the Rockingham teapot, were produced by jiggering. The variation in

missing the finial which was attached to the top. The spout is "S" shaped in appearance and was applied to the vessel after the body was manufactured.
Number of Vessel(s): 1
Diameter: N/A
Rim Width: 0.41 cm
Body Thickness: 0.43 cm to 0.45 cm
Base Thickness: N/A
Comments: The coloration of the biscuit body suggests a late nineteenth century date. The body of the vessel was manufactured by pressing with the spout being added later.

GROUP III.B.: TUMBLER(?)

SUBGROUP 1

VARIETY 1: **Figure:** N/A.
Description: The tumbler remains consist of only seven fragments of what appears to have been a small tumbler or cup. The rim is straight and plain and slightly convex on the superior border. The vessel is covered on both surfaces by a manganese glaze. The biscuit body is a pale yellow in color similar to the yellow ware fragments.
Number of Vessel(s): 1
Diameter: N/A
Rim Width: 0.38 cm to 0.39 cm
Body Thickness: 0.38 cm to 0.39 cm
Base Thickness: N/A
Comments: It is not possible to determine the exact nature of this speciman. It is similar to cup fragments recovered from the Sprucevale Pottery (33Co63) and also to ceramic tumblers produced in East Liverpool potteries during the late nineteenth and early twentieth centuries.

bowls. The appearance of the rim is similar to the Brown Banded Variety 1 (i.e., Group I.A., Subgroup 3).

GROUP II.B.: YELLOW WARE, UNDECORATED SAUCER

SUBGROUP 1

VARIETY: N/A **Figure:** N/A.
Description: The saucer is shallow having a diameter of 15.61 cm. The walls of the saucer join the base at an angle of 31°. The walls of the ware are 3.7 cm in width and 0.43 cm in thickness. The rim is plain and slightly convex in the superior border. The interior portion of the saucer is convex containing a central depression. The central depression measures 4.75 cm in diameter and 0.20 cm in depth. The base of the saucer is concave with a well defined foot. The body of the vessel is a deeper yellow than the other specimens in the assemblage. The saucer is covered with a clear glaze.
Number of Vessel(s): 1
Diameter: 15.61 cm
Rim Width: 0.43 cm
Body Thickness: 0.43 cm to 0.44 cm
Base Thickness: 0.43 cm to 0.45 cm
Comments: The single saucer recovered appears to be the only vessel in the yellow ware assemblage which potentially dates prior to 1870. This interpretation is based on the color of the biscuit body which is a deeper yellow than the other fragments. The shade of the biscuit body matched the color of the early yellow wares produced in East Liverpool, Ohio from 1840 to 1870 and possibly falls within those dates.

SUBCATEGORY III: ROCKINGHAM WARE

The Rockingham ware component comprises only 2.8% of the total yellow and Rockingham ware assemblage. The fragments represent only two vessels, a teapot and a tumbler(?), and appear to date after 1880 as suggested by the coloration of the biscuit body and the manganese glaze.

GROUP III.A: TEAPOT

VARIETY: 1 **FIGURE:** N/A.
Description: The teapot remains consists of spout, rim, lid and body fragments. The color of the biscuit body is a very pale yellow similar to the yellow ware fragments. The manganese glaze is applied evenly to the exterior of the vessel and exhibits a moderate amount of crazing. The interior is coated with a clear glaze except near the rim where traces of the manganese glaze is found. The rim is plain and convex on the superior border. A small shelf to support the lid is found on the interior of the rim. The shelf is located 0.97 cm below the superior border of the rim and is 0.46 cm in width. The body fragments indicate that the teapot was probably round in appearance. The lid is domed and

Comments: The biscuit body is similar to that of the decorated yellow ware bowls.

SUBCATEGORY II. UNDECORATED YELLOW WARE

Undecorated yellow ware accounted for 62.1% of the total yellow ware assemblage. Within this category the vast majority of fragments were body sherds with very few rim and basal fragments. The biscuit body of the undecorated ware was of the same consistency and pale yellow color as the decorated ware characteristic of late nineteenth century yellow ware. The exception to this was the seven fragments constituting the remains of a single tea cup saucer which exhibited greater affinities to the yellow wares from 1840 to 1860 in terms of color and body texture.

The analytical groupings were determined in the same manner as the decorated yellow ware previously described. The following provides a listing of the various styles of undecorated wares recovered.

GROUP II.A: YELLOW WARE, UNDECORATED BOWLS/NAPPIES

SUBGROUP 1

VARIETY 1: Plain Rim **Figure:** N/A.
Description: The vessels in this Variety are characterized by plain straight rims slightly convex on the superior border. The vessel walls curve slightly towards the base forming a steep walled container. Base fragments were absent.
Number of Vessel(s): 3
Diameter: Vessel I 16 cm
Vessel II 14 cm
Vessel III 14 cm
Rim Width: 1.0 cm to 1.10 cm
Body Thickness: 1.0 cm to 1.10 cm
Base Thickness: N/A
Comments: The vessels appear to be from two separate sets of bowls. The distinction between vessels II and III is made on the basis of striations left in the interior of vessel III during manufacture.

VARIETY 2: Excurvate Rim **Figure:** N/A.
Description: The vessels are defined by rims which are excurvate with the superior border slightly convex. The vessel walls curve slightly towards the base forming a steep walled container. The base is concave with a rounded, well defined foot.
Number of Vessel(s): 1
Diameter: 12 cm
Rim Width: 0.65 cm to 0.67 cm
Body Thickness: 0.51 cm to 0.53 cm
Base Thickness: N/A
Comments: The vessel appears to have been part of a set of nested

to 0.25 cm. The rim is straight and plain. The vessel walls curve slightly towards the base. The configuration of the base is not represented by the fragments. The vessel is covered with a clear glaze exhibiting very little crazing.
Number of Vessel(s): 1
Diameter: 17 cm
Rim Width: 0.35 cm to 0.41 cm
Body Thickness: 0.29 cm to 0.31 cm
Base Thickness: N/A
Comments: Traces of point marks were noticed on the rim of the vessel suggesting that this bowl may have been a "second". The vessel differs from Variety 3 in the amount of crazing apparent in the glaze. The fragments probably represent a single bowl rather than a set.

SUBGROUP 4: BLUE BANDED

VARIETY 1: 3 Banded Blue **Figure:** N/A.
Description: Variety 1 is characterized by three underglaze blue slip bands. The bands are of equal size and range from 0.16 cm to 0.19 cm in width. The rim is excurvate with well defined edges. The vessel walls curve sharply towards the base. The base is concave with a well defined foot. The foot is rounded in appearance. The biscuit body of the vessels in this type absorbed less than 3% of their weight in water classifying them as a semivitreous ware. The vessels are covered by a very thin clear glaze.
Number of Vessel(s): 2
Diameter: Vessel I 22 cm
Vessel II 20 cm
Rim Width: 0.67 cm to 0.75 cm
Body Thickness: 0.45 cm to 0.56 cm
Base Thickness: N/A
Comments: The vessels appear to belong to the same set of nested bowls. The semi-vitreous state of the biscuit body and the color of the slip bands suggest an early twentieth century date.

GROUP I.B: YELLOW WARE, DECORATED CHAMBER POT

SUBGROUP 1

VARIETY 1 **Figure:** N/A.
Description: The vessel is characterized by a board flat rim 2.10 cm in width and 0.36 cm in thickness. Two underglaze brown slip bands are located 2.50 cm below the rim and form the only decoration. The walls curve moderately towards the base forming a relatively deep vessel. The configuration of the base is not represented.
Number of Vessel(s): 1
Diameter: 20 cm
Rim Width: 2.10 cm
Rim Thickness: 0.36 cm
Body Thickness: 0.42 cm to 0.48 cm
Base Thickness: N/A

parallel linear fashion is first the pattern name, underscored by a horizontal line, and followed by the company's name.
C) Blue ink stamped. A shield with the pattern name diagonally bisecting it. "MELLOR & CO." is printed under the shield.

Comments: The Cook Pottery Company was organized in 1893 by Charles Howell Cook. The pottery was formerly Etruria Pottery, owners Ott and Brewer. The Mellor and Company mark is used because F. G. Mellor was ont of the first owners, organizers and executives of the pottery. Produced by this form were porcelain, semi-porcelain, whiteware, and hotel china made into dinner services, toilet sets, short sets of odd dishes and jardinieres. A form of Belleek and Delft ware was also produced. Sometime in the very early 30's, the company became Cook Ceramics producing electrical ceramic hardware (Barber 1904:54; Lehner 1980:45, 181; Cox 1949:1099,1126; Hartman 1943:110,111).

Internal Correlation: A-B) N/A.
C) 18.

Empire Pottery (Fig. 5)

No. of Specimens: 1.
Location: Trenton, New Jersey.
Date: Company: 1863-1918.
Mark: 1892-1918.
Paste Type: Whiteware.
Shapes and Portions Represented: 1 unidentifiable fragment: base.
Mark Description: Golden yellow ink stamped. A wreath enclosing the intertwined company's initials. The city of manufacture is printed beneath the wreath.

Comments: The firm began in 1863 under the direction of Coxon and Thompson. In 1892, Wood and Barlow purchased the factory. Upon purchasing the factory, Wood and Barlow, along with four other potteries, joined to form the Trenton Potteries Company. This joint firm existed until 1960 but the Empire Pottery disbanded in 1918. Empire manufactured porcelain, semi-porcelain, and whiteware into dinner services, tea sets, toilet sets, decorative ware, and sanitary or plumber's hardware (Barber 1904:63-4; Barber 1919:238; Lehner 1980:56,151,152,182; Cox 1949:1099,1127).

Internal Correlation: N/A.

Glasgow Pottery (Fig. 6)

No. of Specimens: 1.
Location: Trenton, New Jersey.
Date: Company: 1863-1905.
Mark: 1895-1905.
Paste Type: Whiteware.
Shape and Portions Represented: 1 unidentifiable fragment: base.
Mark Description: Impressed in clay, a partial mark. A double circle with an "M" printed in the center of the inner circle. Around the circumference of the outer circle "(PORCE)LAIN" "OPAQU(E)" is printed.
Comments: The pottery was founded by John Moses in 1863. In 1901, the ownership changed to John Moses and Sons and lasted until 1905 when the pottery closed. This firm manufactured semi-porcelain, whiteware, Rockingham, yellow ware and hotel china into dinner services, toilet sets, and short sets of odd dishes. (Barber 1904:50-2; Lehner 1980:67,185; Cox 1949:1099,1125; Hartman 1943:116-117).
Internal Correlation: N/A.

International Pottery Company (Fig. 7)

No. of Specimens: 1.
Location: Trenton, New Jersey.
Date: Company: 1879-1936.
Mark: 1879-1903.
Paste Type: Whiteware.
Shapes and Portions Represented: 1 unidentifiable fragment: base.
Mark Description: Ink stamped blue. Double circle bisected by two parallel horizontal lines. Between the first and second circle, printed around the circumference, are the names of the owners. In between the two parallel lines, the china-type is printed.
Comments: International Pottery was established by Henry Speiler in 1860. By 1868, he and his two sons were operating the firm. Edward Clark and James Carr purchased the firm and renamed it the Lincoln Pottery in 1879. Only months later, the pottery was again reorganized with new owners, Burgess and Campbell, under the original name of the Internationl pottery Company. This continued until 1903 when the name was changed to Burgess and Company. This firm manufactured semi-porcelain, hotel ware and white ware in dinner services, toilet sets, and short sets of odd dishes (Barber 1904:58-59; Lehner 1980:80-1, 186; Cox 1949:1099,1126; Hartman 1943:112-3).
Internal Correlation: N/A.

The Maddock Pottery Company (Fig. 8)

No. of Specimens: A_1) 3.
A_2) 1.
A_3) 4.

Location: Trenton, New Jersey.

Date: Company: 1893-1923.
Mark: 1893-1923.

Paste Type: A_1-A_3) Semi-porcelain.

Shape and Portions Represented:

A_1) 1 chamber pot fragment: body and base.
1 small pitcher fragment: body and base.
1 unidentifiable fragment: body and base.

A_2) 1 cup fragment: rim, body, and base.

A_3) 4 unidentifiable fragments: 2 body and base; 2 base.

Mark Description: A_1-A_3) Green ink stamped. A circle with a stylized "M" on top. "ROYAL PORCELAIN" is printed around the circle's outside. Enclosed in the circle is the company's name along with the factory's name.

Comments: The pottery opened in 1893 at the Lamberton Works in Trenton, New Jersey. The factory was owned and operated by Thomas Maddock and sons. This company manufactured porcelain, semi-porcelain, and whiteware into dinner services, toilet sets and short sets of odd dishes. Toilet sets and sanitary ceramic ware, however, were the main products of the firm. The factory closed in 1923 (Barber 1904:49; Barber 1909:228; Lehner 1980:100,101,189; Cox 1949:1099,1125; Hartman 1943:114,115).

Internal Correlation: A_1) 230.
A_2) 229.
A_3) N/A.

Mercer Pottery (Fig. 9)

No. of Specimens: A_1) 4.
A_2) 7.

Location: Trenton, New Jersey.

Date: Company: 1868-1937.
Mark: 1868-1937.

Paste Type: A_1) Semi-porcelain.
A_2) Whiteware.

Shapes and Portions Represented:

A_1) 4 unidentifiable fragments: 1 body and base; 3 base. Of these 4, 3 join to form a total of 2 marks.

A_2) 2 bowl fragments: 1 rim, body and base; 1 base. Both join to form 1 mark.
5 unidentifiable fragments: all base

fragments.

Mark Description: A_1-A_2) Brown ink stamped. A shield with material draped around the outer sides and topped by a crown. The company name is diagonally bisecting the shield. The paste type is printed beneath the shield.

Comments: Mercer Pottery was formed in 1868 by James Moses. Moses is said to be the first to manufacture semi-porcelain in the United States. The pottery produced porcelain, semi-porcelain, and whiteware into dinner services, toilet sets, short sets of odd dishes, druggist supplies and sanitary ware. Later, production switched to all sanitary and electrical ceramic items. The pottery closed in 1937 (Barber 1904:57; Lehner 1980:106,190; Cox 1949:1099,1126; Hartman 1943:116,117).

Internal Correlation: A_1) N/A.
A_2) 20.

The Willets Manufacturing Company (Fig. 10a-10c)

No. of Specimens: A) 2.
B) 2.
C) 3.

Location: Trenton, New Jersey.

Date: Company: 1879-1909.
Mark (A-C): 1894-1909.

Paste Type: A) Porcelain.
B) Semi-porcelain.
C) Whiteware.

Shapes and Portions Represented: A) 2 heart-shaped trinket box fragments: 1 rim, body and base; 1 base.
B) 1 serving dish fragment: rim, body and base. 2 unidentifiable fragments: both bases.
C) 1 plate fragment: body and base; 1 small bowl or saucer: rim, body, and base; 1 unidentifiable: base.

Mark Description: A) Brown ink stamped. A twisted snake representing the letter "W". Printed above this is the paste type and printed below is the company name.
B) Brown ink stamped. An octagonal figure with the firm's initials printed in the center of the figure. Above and below the figure is printed the paste type.
C) Impressed in the clay body. The initials of the company are intertwined with the paste type printed above and below.

Comments: This pottery began in 1879 and produced wares until 1909. The firm manufactured porcelain, semi-porcelain, whiteware, and hotel china into dinner services, tea sets, short sets of

odd dishes, and novelties. In later years of production, doorknobs, hardware trimmings and electrical ceramics were manufactured (Barber 1904:45; Barber 1909:232-5; Lehner 1980:170,198; Cox 1949:1099,1125; Hartman 1943:120-121).

Internal Correlation: A) 242.
B) 21.
C) 3.

Onondaga Pottery Company (Fig. 11a-11b)

No. of Specimens: A) 1.
B_1) 2.
B_2) 3.
B_3) 4.

Location: Syracuse, New York.

Date: Company: 1871 to present.
Mark: A) 1886-1898.
B_1-B_3) 1897 to present.

Paste Type: A) Semi-porcelain.
B_1-B_3) Porcelain.

Shapes and Portions Represented: A) 1 serving dish fragment: rim, body, and base.
B_1) 2 saucer fragments: 1 rim, body, and base; 1 base.
B_2) 3 custard cup fragments: 2 rim, body and base, 1 body and base.
B_3) 3 tureen or vegetable dish fragments: all body and base. Of these 3, 2 join to form a total of 2 marks. 1 lid fragment.

Mark Description: A) Black ink stamped. Arranged in a horizontal parallel linear fashion are the company's initials, next is the word "CHINA", and lastly the paste type.
B_1) Green ink stamped. Arranged in a parallel linear fashion are the company's initials, next is the city of manufacture, and lastly the word "CHINA" is printed.
B_2) Brown ink stamped. Identical to B_1.
B_3) Green ink stamped. Identical to B_1.

Comments: In 1871, the Onondaga Pottery was organized by business men who purchased the Empire Pottery of New York. In 1966, the pottery's name was changed to the Syracuse China Company. The Syracuse name, however, has been used in the maker's marks since 1897. This pottery manufactured porcelain, semi-porcelain, whiteware, and hotel china into dinner services, toilet sets, and short sets of odd dishes. The pottery is still in operation (Barber 1904:81; Barber 1909:333; Lehner 1980:146,147,195; Cox 1949:1100,1128; Hartman

1943:118,119).

Internal Correlation: A) 19.
B_1) 344.
B_2) N/A.
B_3) 365.

Carrollton Pottery Company (Fig. 12)

No. of Specimens: 4.
Location: Carrollton, Ohio.
Date: Company: 1903-1929.
Mark: 1903-1929.
Paste Type: Whiteware.
Shapes and Portions Represented: 4 unidentifiable fragments: all base. Of these 4, 2 join to form a total of 3 marks.
Mark Description: Green ink stamped. The company's name is printed in an arc. The word "CHINA" is printed horizontally beneath the company's name. In the half circle that is formed by these two words, the letter "H" is printed.
Comments: The company began in 1903 and manufactured semi-porcelain and whiteware. In 1929, the Carrollton Pottery merged with seven other companies under the title of the American China Corporation. In 1934, the Corporation collapsed due to the economy during the depression (Lehner 1980:40,180).
Internal Correlation: N/A.

Brockman Pottery Company (Fig. 13)

No. of Specimens: 1.
Location: Cincinnati, Ohio.
Date: Company: 1887-1912.
Mark: 1887-1912.
Paste Type: Whiteware.
Shapes and Portions Represented: 1 unidentifiable fragment: body and base.
Mark Description: Black ink stamped. English coat of arms; seated lion and unicorn with center shield and crown. "B.P. Co." is printed below the coat of arms.
Comments: The pottery was established in 1862 by Messrs. Tempest and Brockmen. In 1881, a third partner, Messr. Sampsen, became part of the company. From 1888 to 1912, the pottery was owned by C.E. Brockman only. This company manufactured porcelain, semi-porcelain, and whiteware into dinner services, toilet sets, and short sets of odd dishes (Barber 1904:118; Lehner 1980:31,179; Cox 1949:1100,1131; Hartman 1943:110,111).
Internal Correlation: N/A.

ope - Gosser China Company (Fig. 14)

o. of Specimens: 2.
ocation: Coshockton, Ohio.
ate: Company: 1903-1929.
Mark: 1903-1929.
aste Type: Whiteware.
hapes and Portions epresented: 2 unidentifiable fragments: both bases.
ark Description: Blue-green ink stamped. Arranged in a horizontal parallel linear fashion, starting with the company's name printed in an arc; followed by the word "CHINA"; and lastly a letter and number sequence, possibly a dating code.
omments: The pottery was organized in 1902 and started to manufacture wares in 1903. At first, china body decorative pieces were produced but when found unprofitable, a shift to dinnerware production was employed. This firm made porcelain, semi-porcelain, and whiteware pieces. In 1929, this company and seven other potteries merged to form the American China Corporation (Lehner 1980:122,191)..
nternal Correlation: N/A.

artwright Brothers (Fig. 15)

o. of Specimens: 2.
ocation: East Liverpool, Ohio.
ate: Company: 1864-1924.
Mark: 1880-1924.
aste Type: Whiteware.
hapes and Portions epresented: 2 unidentifiable fragments: 1 base and body; 1 base fragment. Both join to form 1 mark.
ark Description: Black ink stamped. Double medallion type design with quarter points. The name of the company is printed inside the first oval with the letters "S and G" printed on either side of the second oval.
ɔmments: In 1880, the Cartwright Pottery became the Cartwright Brothers and continued business until 1924. The pottery manufactured semi-porcelain and whiteware into dinner services and short sets of odd dishes, and jardinieres (Barber 1903:112; Lehner 1980:40,180; Gates 1982:30,32).
ıternal Correlation: N/A.

)lonial Pottery (Fig. 16)

). of Specimens: 1.

ion: East Liverpool, Ohio.
Company: 1882-1900.
Mark: 1882-1900.
Type: Whiteware.
s and Portions
sented: Sugar bowl fragment: body and base.
Description: Green ink stamped, wreath with an eagle head at top. Encircled in this wreath is the pottery's name. Hand-painted gold number are also present.
nts: Wallace and Chetwynd began this pottery in 1882. In 1900, they joined the East Liverpool Potteries Company. After 1903, when the East Liverpool Potteries Company disbanded, the Colonial Pottery began operations again under the name of the Colonial Company. The Colonial Pottery manufactured semi-porcelain, whiteware, and decorated wares (Lehner 1980:44,158,180; Gates 1982:35).
nal Correlation: N/A.

End Pottery (Fig. 17)
f Specimens: 2.
ion: East Liverpool, Ohio.
Company: 1894-1900.
Mark: 1894-1900.
Type: Whiteware.
s and Portions
sented: 2 unidentifiable fragments: both base.
Description: Black ink stamped; only a partial mark. The British Royal Coat of Arms with lion and unicorn standing, printed above is "(IRON ST)ONE CHINA".
nts: This firm began in 1894 in Ohio. It manufactured porcelain, semi-porcelain, and whiteware into a wide variety of items including dinner sets and decorative pieces. In 1900, this firm joined the East Liverpool Potteries Company which dissolved in 1903. In 1905, the firm was resurrected under new management and name, The East End China Company. In 1909, again, new management and another new name, Trienle China Company (Barber 1904:115; Lehner 1980:54,150,182; Cox 1949:1100,1130; Gates 1982:40,41).
nal Correlation: N/A.

Liverpool Pottery Company (Fig. 18)
f Specimens: 1.
ion: East Liverpool, Ohio.
Company: 1884-1903.
Mark: 1884-1903.

:e Type: Semi-porcelain.
)es and Portions
:esented: 1 unidentifiable fragment: base and body.
: Description: Black ink stamped. Printed in a parallel horizontal linear fashion are the company's initials followed by "WACO CHINA".
)ents: This company began producing pottery in 1884. East Liverpool Pottery manufactured china and decorative ware principally in semi-porcelain. It is also one of the six potteries to become part of the East Liverpool Potteries Company in 1900 (Barber 1904:114; Lehner 1980:54,182; Cox 1949:1100,1130; Gates 1982:41-43).
:rnal Correlation: N/A.

)e Pottery Company (Fig. 19)
of Specimens: 1.
)tion: East Liverpool, Ohio.
:: Company: 1881-1912.
Mark: 1896-1900.
:e Type: Whiteware.
)es and Portions
:esented: 1 unidentifiable fragment: base.
: Descriptions: Blue ink stamped, partial mark. A globe with longitudinal lines, bisecting the globe are the pottery's initials. Above, "GLOBE" is printed and below "CHINA" is printed.
)ents: The pottery began producing wares in 1881. The firm manufactured semi-porcelain, whiteware, and hotel china into dinner services and toilet sets. In 1900, Globe Pottery joined the East Liverpool Potteries Company. When the organization dissolved in 1903, the Globe Pottery continued production until 1912 (Barber 1903:113; Lehner 1980:67,185; Cox 1949:110,1130; Hartman 1943:110,111; Gates 1982:50-51).
rnal Correlation: N/A.

China (Fig. 20)
of Specimens: 1.
tion: East Liverpool, Ohio.
: Company: 1903 to present.
Mark: 1903 to present.
e Type: Semi-porcelain.
es and Portions
esented: 1 unidentifiable fragment: base.
Description: Ink stamped blue; urn-type figure with side handles. The company's name is printed in the center of the urn.
ents: The firm was organized in 1903 by Robert Hall and his son. They purchased the building that

was owned by the East Liverpool Potteries Company. The Hall Company perfected a single-firing process with a leadless glaze that became more economical. The company manufactured porcelain, semi-porcelain, and whiteware into dinner services, toilet sets, and tea sets. After 1930, the company manufactured mostly teapots (Lehner 1980:72, 73, 185; Gates 1982:56).

ıal Correlation: N/A.

: Keffer China Company (Fig. 21)

: Specimens: 3.

.on: East Liverpool, Ohio.
Company: 1908-1910.
Mark: 1908-1910.

Type: Whiteware.

; and Portions
ıented: 3 saucer fragments: 2 rim, body, and base; 1 base. All join to form 1 mark.

)escription: Green ink stamped; a double circle. Printed between the first and the second circle, around the top, are the company's initials and around the bottom are the city and state of manufacturer's initials.

ıts: In 1908, J.R. Warner and Harry Keffer purchased Serves China of East Liverpool, Ohio and renamed the firm the Warner Keffer China Company. The pottery manufactured semi-porcelain and whiteware. Warner Keffer continued operations until 1910 when it went out of business (Fryman: pers. comm.; Gate 1982:241-242).

ıal Correlation: 30.

M. Knowles China Company (Fig. 22a-22d)

Specimens: A 1.
B 2.
C 7.
D 1.

on: East Liverpool, Ohio.
Company: 1900-1963.
Mark: A) 1909.
B) 1922.
C) 1931.
D) 1901 and after.

Type: A) Semi-porcelain.
B) Semi-porcelain.
C) Whiteware (slip is pink in color)
D) Semi-porcelain.

and Portions
ented: A) 1 unidentifiable fragment: base.

B) 2 creamer fragments: both rim, body, and base. Both join to form 1 mark.
C) 1 saucer fragment: rim, body, and base. 1 plate fragment: body and base. 3 unidentifiable fragments: 1 body and base; 2 base. All join to form 1 mark.
D) 1 unidentifiable fragment: base.

Description: A) Green ink stamped. An urn with the paste type printed across the center. Beneath the urn, in a horizontal parallel linear fashion is first the founder's name, followed by "CHINA CO.", and lastly a number sequence indicating date and location of manufacture.
B) Green ink stamped. An urn with the paste type printed across the center. Beneath the urn in a horizontal parallel linear fashion is the founder's name, followed by "CHINA CO.", then a number sequence indicating date and location of manufacture, and lastly "PATEN(TED)".
C) Black ink stamped. A sailing ship. Arcing around ship is printed the company's name. Beneath the ship in a horizontal parallel linear fashion is a number sequence indicating date and location of manufacture, followed by "MAYGLOW" and lastly "ALICE ANN"; name possible representing pattern and paste type.
D) Ink stamped green. An urn with the paste type printed across the center. Fragment broken, mark incomplete.

ıts: This company was begun in 1901 by Edwin M. Knowles, son of Isaac W. Knowles who assisted the beginning of the company, Knowles, Taylor, and Knowles. The firm's office is in East Liverpool, Ohio, with a plant first in Chester, then in Newell, West Virginia. The pottery manufactured porcelain, semi-porcelain, and whiteware into dinner services, tea and coffee sets, and sets of short dishes (Barber 1904:117; Lehner 1980:85-6, 186; Cox 1949:1100, 1131; Gates 1982:99-101).

ıal Correlation: A) N/A.
B) 245.
C) 26.
D) N/A.

s, Tayler, and Knowles (K.T.K.) (Fig. 23a-23e)

Specimens: A) 2.
B) 1.
C) 3.
D) 1.
E) 1.

ı:
East Liverpool, Ohio.
Company: 1870 to 1929.
Mark: A) 1872 and after.
B) 1879 and after.
C) 1881 and after.
D-E) 1882 and after.

ʻpe:
A-E): Whiteware.

ıd Portions
ıted:
A) 2 bowl fragments: 1 body and base; 1 base fragment. Both join to form 1 mark.
B) 1 unidentifiable fragment: base.
C) 3 unidentifiable fragments: all base
D) 1 creamer fragment: rim, body, and base.
E) 1 unidentifiable fragment: base.

ɜcription:
A) Black ink stamped. A bison with the paste type and the company's initials printed beneath.
B) Black ink stamped. An eagle encircled by medallion-type design. The paste type is stamped above the medallion and the company name is stamped beneath the medallion.
C) Black ink stamped. An eagle encircled by medallion-type design. "WARRANTED" stamped above the medallion, and the company's initials are stamped beneath the medallion.
D) Green ink stamped. "K.T. & K."; "S - V"; "NA"; "...K"; all arranged in a horizontal parallel linear fashion beginning with the company's initials.
E) Green ink stamped. "S..."; "CHINA"; "V.F.K."; arranged in a horizontal parallel linear fashion beginning with the "S" line.
Gold ink stamped. "WARRANTED": "18 CARAT GOLD"; arranged in a horizontal parallel linear fashion beginning with warranted.

ı:
Isaac W. Knowles, in 1870, formed a partnership with John N. Taylor and Homer S. Knowles. Their first product as a pottery was white granite ware. In 1888, Joseph G. Lee and Willis A. Knowles joined the firm, and by 1891, a stock company was incorporated under its present name of Knowles, Taylor, and Knowles. This company produced semi-porcelain, whiteware, and hotel china (Barber 1904:108-9; Lehner 1980:86-7 and 187; Cox 1947:100F; Hartman 1943:114-5; Gates 1982:115-126).

Correlation:
A-C, E) N/A.
D) 31.

ughlin China Company (Fig. 24a-24c)

pecimens:
A) 2.
B) 2.

C) 1.

ı: East Liverpool, Ohio.
Company: 1897 to present.
Mark: A) 1908.
B) 1920.
C) 1900 and after.

ɾpe: A-C) Whiteware.

ınd Portions
ıted: A) 2 plate fragments: 1 rim, body and base; 1 base fragment.
B) 2 unidentifiable fragments: 2 bases, both join to form 1 mark.
C) 1 unidentifiable fragment: base.

ɜcription: A) Green ink stamped. Arranged in a horizontal parallel linear fashion starting with the Homer Laughlin symbol of interlocking company initials; next is the company's name; followed by "MADE IN U.S.A.", and lastly, a series of numbers and letters indicating month, year, and plant location of manufacture.
B) Green ink stamped. Arranged in a horizontal parallel linear fashion starting with the Homer Laughlin symbol of interlocking company's initials; next is the company's name; followed by the pattern or blank name; and lastly, a series of numbers and letters indicating month, year, and plant location of manufacture.
C) Green ink stamped. Arranged in a horizontal parallel linear fashion starting with the Homer Laughlin symbol of interlocking company initials; next the company's name; followed by "MADE IN U.S.A."; and lastly, a series of numbers and letters indicating month, year and plant location of manufacture.

ı: This pottery started as the Laughlin Brothers (Homer and Shakespeare) in 1874. In 1877, Homer bought out his brother and continued the business under the name Homer Laughlin. Then, in 1897, the name was changed to the Homer Laughlin China Company. The company manufactures semi-porcelain, whiteware, semi-vitreous ware, hotel china, and fiesta ware. The company is still in operation in Newell, West Virginia (Barber 1904:110-1; Lehner 1980:88-90,187; Cox 1949:1100, 1129-30; Hartman 1943:114-5; Carson: pers. comm.; Gates 1982:128-136).

Correlation: A) 5.
B) N/A.
C) N/A.

Burton, and Company (Fig. 25)

cimens: 1.
East Liverpool, Ohio.
Company: 1870-1892.
Mark: 1870-1892.

: Whiteware.

Portions

d: 1 bowl or serving dish fragment: rim, body, and base.

iption: Green ink stamped. A rectangular-like figure with one pair of opposite angles that are rounded. The entire figure is bisected by a horizontal row of small circles. Printed in the top half of the figure are the firm's initials and printed in the bottom half of the figure is the paste type. Partially around the figure are flowers and leafy plants.
One in the succession of owners of the Novelty Pottery of East Liverpool. McNicol, Burton, and Company operated the factory from 1870 until 1892, mostly manufacturing whitewares, and semi-granite (a form of semi-porcelain) (Lehner 1980:113; Gates 1982:184-5).

orrelation: 24.

ol Pottery (Fig. 26)

cimens: 2.
East Liverpool, Ohio.
Company: 1892-1960's.
Mark: 1892-1920.

: Whiteware.

Portions

d: 1 bowl fragment: body and base.
1 unidentifiable fragment: base.

iption: Black ink stamped. English lion and unicorn with a shield of stars and stripes. An eagle with spread wings is perched upon the shield. "WARRANTED" is printed above the crest. Pottery's name and location, "LIVERPOOL", is printed below crest.
One of three McNicol Potteries operating in East Liverpool. The pottery, established by John Goodwin, began as the Novelty Works in 1863. Ownership changed twice before 1870 when it was then owned by McNicol, Burton and Co. It was not until 1892 when the firm became D. E. McNicol Pottery. The firm manufactured semi-porcelain and whiteware into dinner services, toilet sets, and short sets of odd dishes. The firm moved to Clarksburg, West Virginia in 1920 and continued operations until sometime in the 1960's. At this time, the company mostly manufactured hotel china

is the country of manufacture.
C) Decal; the color is faded. A single lion, to the right, is holding a shield with a "T" printed on it; printed above the crest is "Royal Bayreuth" and printed below is the country of manufacture.
This factory was founded by a privilege granted in 1794 by Friedrick Wilhelm II, King of Prussia, after the project was approved by the royal inspector of mines and the pertinent minister. This was the first only porcelain producing factory in Bavaria serving not only royalty but also the wealthy citizens of the area. Tettau produces a wide variety of wares: dinner services, coffee, tea, and chocolate sets, toilet sets, decorative pieces, and particularly, novelty items, all of porcelain. No certain chronology of marks can be stated but a rough progression can be followed since each director of manufacturing changed the mark slightly to make it become his own personal signature. The factory is still in operation today concentrating mainly on dinner services (Rontgen 1981:42,43,487; Cushion 1980:91; Raines 1973:1-4; Schneiderhahl:n.d.).

rrelation: A) 409.
B) N/A.
C) 430.

rlander Porcelain Factory (Fig. 46)

imens: 3.
Windeschenbach, Bavaria.
Company: 1913-1928.
Mark: 1913-1928.
Porcelain.

Portions: 3 cup fragments: all body and base. Of these 3, 2 join to form a total of 2 marks.

ption: Green ink stamped; a capital "H". Printed in the upper half of the letter is "ED" and printed in the lower half of the letter is "W". Above this is a crown. Written below is the country of manufacture and below that is printed the number "88".
The Edward Haberlander Porcelain Factory began manufacturing porcelain in 1913. This firm produced only porcelain into coffee and tea services, household items, decorative pieces, gift articles, and limited and collector pieces. The pottery was in operation until 1928 when Oscar Schaller and Company purchased the business (Rontgen 1981:147-505).

Collections and Archives, Pers. Comm.).

rrelation: 363

er and Company (Fig. 44)

imens: 1.
Rehau, Bavaria.
Company: 1880 to present.
Mark: 1880 and after.
Porcelain.

Portions
: 1 unidentifiable fragment: base.

ption: Green ink stamped. Printed in a horizontal parallel linear fashion is first the pattern or blank name; followed by the firm's initials; next is a wavy line; and finally the country of manufacture.
The porcelain factory of Zeh, Scherzer and Company was begun in 1880. This factory, like most in Europe, manufactures only porcelain into coffee and tea sets, household items, decorative pieces, and gift articles. Today the company is still in operation (Rontgen 1981:292,466).

rrelation: N/A.

actory Tettau/Royally (Fig. 45a-45c)

Factory Tettau

imens: A) 2.
B) 1.
C) 2.
Tettau, Bavaria.
Company: 1794 to present.
Mark: A-C) 1885 and after.
A-C) Porcelain.

Portions
:
A) 2 saucer fragments: both rim, body and base. Both join to form 1 mark.
B) 1 unidentifiable fragment: body and base.
C) 2 small bowl fragments: both body and base. Both join to form 1 mark.

ption: A) Blue decal; the Bavarian Royal Coat of Arms. The lion on the left is holding a shield with a "P" printed on it. The lion on the right is holding a shield with a "T" printed on it. Printed above the crest is "Royal Bayreuth" and printed below is the country of manufacture.
B) Partial mark; blue decal; the Bavarian Royal Coat of Arms. The lion on the left is holding a shield with an eagle printed on it. The lion on the right is holding a shield with a "T" printed on it. Printed below this crest

(Fig. 42)

ecimens: 3.
Austria.
Company: Unknown.
Mark: 1891 and after.

e: Porcelain.

d Portions
ed: 3 plate fragments: 2 rim, body and base; 1 base. Of these 3, 2 join to form a total of 2 marks.

ription: Black ink stamped. A center diamond-shaped figure with the letter "W" printed inside. Printed above in an arc is "CARL(SBAD)" and printed below in an arc is "CHINA". Below the word China, in an arc, is printed "Made in Austria".
No information on the maker's mark or on the company could be located.

Correlation: 378.

BAVARIA

(Fig. 43)

ecimens: 7.
Kronach, Bavaria.
Company: 1897 to present.
Mark: 1901 to 1933.

e: Porcelain.

d Portions
ed: 2 cup fragments: 1 body and base; 1 base. 5 saucer fragments: 3 rim, body and base; 2 bases. Of these 5, 2 join to form a total of 4 marks.

ription: Green stamped; two crossed lines. Printed in the segments formed by the lines are: an "R" on the left side, a crown on the top center, and a "C" on the right side. Printed beneath this is the pattern name and the country of manufacture either in green or in red.
The Philip Rosenthal Porcelain Company in Kronach is a branch of the Rosenthal Company of Selb, Bavaria. Rosenthal began production in 1879 and today operates not only as a pottery but also as a glass manufacturer. In 1897, the Kronach branch was opened under the name of Bauer, Rosenthal, and Company. In 1903, the name was changed to Rosenthal and Company. The firm manufactures dinner services, household wares, decorative pieces, and gift articles all in porcelain (Rontgen 1981:137,433,480; Cushion 1980:90; Macdonald-Taylor 1968:267; Secretary of

1981:56,62,373,419; Cushion 1980:58).

l Correlation: A) 362.
B) 310.
C) 346.
D) N/A.

hina (Fig. 40)

Specimens: 22.

n: Austria.
Company: Unknown.
Mark: 1891 and after.

ype: Porcelain.

and Portions
nted: 6 cup fragments: all body and base. Of these 6, 2 join to form a total of 5 marks. 10 saucer fragments: 7 rim, body, and base; 3 body and base. Of these 10, 2 join to form a total of 9 marks. 6 plate fragments: 2 rim, body, and base; 1 body and base; 3 base. Of these 6, 2 join to form a total of 5 marks.

scription: Different pieces have different maker's marks. Marks on cups and plates: green ink stamped. A double headed eagle with spread wings. Above the heads is a crown with a ribbon flowing out of the crown's underside. Printed above the eagle is the company's name and printed below the eagle is the country of manufacture. Marks on saucers: green ink stamped. The country of manufacture printed in a horizontal line.

s: No information on the maker's mark or on the company could be located.

l Correlation: 276.

(Fig. 41)

Specimens: 2.

ı: Austria.
Company: Unknown.
Mark: 1891 and after.

/pe: Porcelain.

ınd Portions
ıted: 2 saucer fragments: both rim, body, and base.

ıcription: Green ink stamped. Country of manufacture printed in a horizontal line.

ı: No identification or information could be found on the maker's mark or on the company. The stamp is identical to the stamp on the Eagle China saucers--could be manufactured by the same company.

Correlation: 311.

A_2) 416.
B) 314.
C_1) 314.
C_2) N/A.

Zdekauer (Fig. 39a-39d)

Specimens: A) 3.
B) 5.
C) 6.
D) 2.

n: Altrohlau, Austria.
Company: 1884-1909.
Mark A-D: 1884-1909.

ype: A-D) Porcelain.

and Portions
nted: A) 3 saucer fragments: 2 rim, body and base; 1 base. All join to form 1 mark.
B) 5 saucer fragments: 1 body and base; 4 base. Of these 5, 4 join to form a total of 3 marks.
C) 6 small plate fragments: 1 rim, body, and base; 1 body and base; 4 bases. Of these 6, 2 join to form a total of 5 marks.
D) 1 cup fragment: body and base; 1 saucer fragment: base.

scription: A-B) Green ink stamped. A two-headed eagle with opened wings. In the center of the two heads is an orb. On either side of the orb are the company's initials. Printed beneath the eagle is the country of manufacture.
C) Green ink stamped. A two-headed eagle with opened wings. A crown is above the heads with a ribbon flowing out from the underside of the crown. On either side of the crown are the company's initials. Printed beneath the eagle is the country of manufacture.
D) Green ink stamped. The mark is similar to A and B. There is a slight variation in the style of the eagle.

s: The factory began producing pottery under the name of Moritz Zdekauer in 1884. The company was originally established by Benedict Hasslacher in 1813. Then, in 1823, August Nowotry and Company purchased the business and, in 1884, the factory was bought by Mr. Zdekauer. In 1909, Col. Hutschenreuther (the first name to be associated with the production of poecelain in Bavaria) purchased the factory along with other factories and named the new buisness Altrohlau Porcelain Factories. The Zdekauer firm manufactured dinner services, household wares, and decorated pieces all in porcelain (Rontgen

Products of this company are semi-porcelain, whiteware, and graniteware. In 1910, the name was changed to Wheeling Sanitary Manufacturing Firm (Barber 1904:149-50; Lehner 1980:168-9, 198; Hartman 1943:122; Cox 1949:1101,1132-3).

:nal Correlation: A) N/A.
B) 46.

AUSTRIA

:lain Factory "Victoria" Schmidt and Company (Fig. $38a_1$-$38c_2$)

)f Specimens: A_1) 2.
A_2) 1.
B) 1.
C_1) 1.
C_2) 4.

:ion: Altrohlau, Austria.

: Company: 1883-1945.

Mark: A_1-A_2) 1891-1918.
B-C_2) 1904-1918.

: Type: A_1-C_2) Porcelain.

:s and Portions :sented:

A_1) 2 cup fragments: both body and base. Both join to form 1 mark.
A_2) 1 cup fragment: base and body.
B) 1 bowl fragment: rim, body, and base.
C_1) 1 bowl fragment: rim, body, and base.
C_2) 2 cup fragments: both body and base. 2 saucer fragments: both bases.

Descriptions: A_1-A_2) Blue ink stamped, a double ellipse. In the inner ellipse is a winged female figure standing on a half circle. Printed around the inside of the outer ellipse is the factory name and city of manufacture. Printed below the ellipse is the country of manufacture.
B) Blue ink stamped, a double circle. In the inner circle is a crown. Printed around the inside of the outer circle is the factory name and country of manufacture.
C_1) Green ink stamped, a center crown with the factory name printed above and the country of manufacture below.
C_2) Blue ink stamped, very similar to C_1.

nts: The firm began in 1883 by Schmidt and Company. The company manufactured dinner services, coffee and tea sets, hotel china, and decorative pieces, all in porcelain. This firm also produced some utilitarian earthenwares. The firm closed in 1945 (Rontgen 1981:33,172,374; Hartman 1943:70,71; Cushion 1980:58).

nal Correlation: A_1) N/A.

Evert, his father, in 1867. Henry took over the business as a wholesale wine and liquor dealer in 1869 (Directory of Pittsburgh and Allegheny Cities 1867-8:140; 1869-70:145; 1885-6:302).

ıal Correlation: N/A.

:k China (Fig. 36)

f Specimens: 5.

ion: Wheeling, West Virginia.
Company: 1884-1951.
Mark: 1898-1951.

Type: Whiteware.

s and Portions
sented: 5 unidentifiable fragments: all base. Of these 5, 4 join to form a total of 3 marks.

)escription: Black ink stamped. Pottery's name is printed in an arc with the word "CHINA" printed in a horizontal line underneath.

ıts: This pottery was begun in 1884 and in 1887 it was incorporated. Porcelain and semi-porcelain tableware, toilet or sanitary ware, and hotel ware were produced. In 1951, the works were closed (Barber 1904:152; Lehner 1980:159,197; Cox 1949:1101,1133).

ıal Correlation: N/A.

ıeeling Pottery Company (Fig. 37a-37b)

f Specimens: A) 1.
B) 2.

.on: Wheeling, West Virginia.
Company: 1879-1909.
Mark A) 1879-1880.
B) 1894-1900.

Type: A) Whiteware.
B) Semi-porcelain.

s and Portions
sented: A) 1 oval serving dish fragment.
B) 2 pitcher fragments: both body and base.

)escription: A) Black ink stamped. A globe with an eagle with spread wings in front. Beneath is a banner with a center shield where the eagle is perched. Printed on the shield are arrows.
B) Brown ink stamped. A wreath with a top center bow. The wreath encloses the company's name.

ıts: The company was organized in the latter part of 1879. A second company was organized under the same management in 1887, entitled the LABelle Pottery Company. In 1889, the companies were consolidated under the firm name of the Wheeling Pottery Company.

ware, toilet sets, short sets of odd dishes, sanitary items, and spittoons. In 1959, management changed and the factory was then called the Sterling China Company (Barber 1903:127-8; Lehner 1980:165-6; Hartman 1943:122; Gates 1982:308).

ternal Correlation: N/A.

nonsburg Pottery (Fig. 34a-34b)

. of Specimens: A) 3.
B) 2.

cation: Canonsburg, Pennsylvania.

te: Company: 1901-1978.
Mark: 1901-1978.

ste Type: A-B) Whiteware.

apes and Portions presented: A) 1 saucer fragment: rim, body, and base. 2 unidentifiable fragments: both base.
B) 2 unidentifiable fragments: both base.

rk Description: A) Green ink stamped, 1 fragment. Blue ink stamped, 2 fragments. A double circle with "CHINA" printed in the inner circle and the company's name printed around the outer circle.
B) Blue ink stamped. A shield which is bisected by scrolling banner. "MADE IN" is printed on the upper shield half; and "U S A" is printed on the lower shield half. The manufacturer's name is printed on the banner and beneath the shield the pattern name is printed.

mments: The pottery was started by W. S. George in 1901. He manufactured semi-porcelain and whiteware into dinner sets, toilet sets, and short sets of odd dishes. In 1978, bankruptcy was filed and all machinery and equipment held (Lehner 1980:38,180).

ternal Correlation: N/A.

nry Evert (Fig. 35)

. of Specimens: 1.

cation: Liberty Avenue, Pittsburgh, PA.

te: Company: 1869-1885.
Mark: 1869-1885.

ste Type: Stoneware.

apes and Portions presented: Jug: body fragment.

rk Description: Stenciled letters and geometric shapes in slip; overglazed blue on grey. Mark reads: "(H)ENRY EVERT...& LIQU(ORS)...LIBERT(Y)... (P)ITTS".

mments: Henry Evert was first listed as a clerk for F.

Saxon China Company (Barber 1904:135; Lehner 1980:58,59; Cox 1949:1101,1131; Gates 1982:47-49).

ɛernal Correlation: A) N/A.
B) 13.

ɛubenville Pottery Company (Fig. 32a-32b)

. of Specimens: A) 1.
B) 1.

ɛation: Steubenville, Ohio.

ɛe: Company: 1879-1960.
Mark: 1879-1960.

ɜte Type: A) Whiteware.
B) Semi-porcelain.

ɜpes and Portions
ɔresented: A) 1 creamer fragment: body and base.
B) 1 pitcher fragment: body and base.

ɾk Description: A) Black ink stamped. Printed in an arc is the City of Manufacture. Beneath this, printed in a horizontal line, is the word "CHINA".
B) Double stamped. 1) Black ink stamped. Identical to A. 2) Gold ink stamped. A wreath topped with a crown. Printed inside the wreath is "Empire China".

ɱments: The pottery began in 1879 in Steubenville, Ohio. The firm manufactured porcelain, semi-porcelain, and whiteware into dinner services, toilet sets, and short sets of odd dishes. The factory closed in 1960 (Barber 1904:129; Barber 1909:311-313; Lehner 1980:144-145,195; Cox 1949:1101,1131; Hartman 1943:120,121).

ɛernal Correlation: A) 23.
B) 47.

llsville China Company (Fig. 33)

, of Specimens: 1.

ɛation: Wellsville, Ohio.

ɛe: Company: 1896-1959.
Mark: 1896-1959.

ɜte Type: Whiteware.

ɪpes and Portions
ɔresented: 1 unidentifiable fragment: base.

ɛk Description: Brown ink stamped. A banner with the paste type printed on it. The company's initials are printed above the banner.

ɱments: In 1896, the Wellsville China Company began operations; it was the successor of Pioneer Pottery (1885 to 1896). The pottery manufactured semi-porcelain and whiteware, and hotel china into dinner services, kitchen

No. of Specimens: 2.
Location: East Liverpool, Ohio.
Date: Company: 1896-1920s.
Mark: 1896-1920s.
Paste Type: Whiteware.
Shapes and Portions Represented: 2 unidentifiable fragments: both bases. Both join to form one mark.
Mark Description: Black ink stamped. Only a partial mark. "VIENNA" printed in an arcing fashion.
Comments: This company had a variety of owners until 1896 when it became incorporated into the Vodrey Pottery Company. This pottery produced semi-porcelain, whiteware, Rockingham, and yellow ware. Sometime in the 1920s, the pottery closed (Barber 1904:106,107; Lehner 1980:157; Cox 1949:1100,1129; Hartman 1943:120-121; Gates 1982:300).
Internal Correlation: N/A.

French China Company (Fig. 31a-31b)

No. of Specimens: A) 3.
B) 7.
Location: Sebring, Ohio.
Date: Company: 1898-1916.
Mark: 1900-1916.
Paste Type: A-B) Whiteware.
Shapes and Portions Represented: A) 3 unidentifiable fragments: all bases.
B) 2 plate fragments: 1 rim, body and base; 1 base. Both join to form 1 mark. 5 unideitifiable fragments: all base. Of these 5, 2 join to form a total of 4 marks.
Mark Description: A) Blue-green ink stamped; a stylized fleur-de-lis beneath a rectangle enclosing the name of the blank style or pattern name.
B) Blue ink stamped. A stylized fleur-de-lis with "La Francaise" bisecting it. Printed beneath is "semivitreous". Stamped in gold in a parallel linear fashion, is first the pattern name; then "design patented"; next "U.S. Pat Office"; and lastly, the Service Number.
Comments: The French China Company began operations in East Liverpool, Ohio, in 1898. In 1900, the plant relocated to Sebring, Ohio, in an expansion move. The firm produced semi-porcelain and whiteware into table wares and toilet wares. The popular "Martha Washington" shaped blank was made by this company. This firm, along with Saxon China, became part of the Sebring Manufacturing Company, 1916 to 1934, renamed the French

located in Newell, West Virginia, with the offices remaining in East Liverpool. In 1973, the firm was purchased by the Anchor Hocking Glass Company and the name of Taylor, Smith and Taylor became the Ceramic Division of Anchor Hocking. (Barber 1904:116; Lehner 1980:148-9,195; Cox 1949:1100,1131; Gates 1982:267,268,270).

Internal Correlation: A) N/A.
B) 14.
C1) 36.
C2) N/A.

The C. C. Thompson Pottery Company (Fig. 29a[1]-29a[3])

No. of Specimens: A_1) 1.
A_2) 1.
A_3) 1.

Location: East Liverpool, Ohio.

Date: Company: 1889-1938.
Mark: 1889-1938.

Paste Type: A_1-A_2) Whiteware.
A_3) Semi-porcelain.

Shapes and Portions Represented: A_1) 1 unidentifiable fragment: base.
A_2) 1 oval serving dish fragment: rim, body, and base.
A_3) 1 unidentifiable fragment: base.

Mark Description: A_1) Green ink stamped. A capital "T" bisected by a horizontal line. On the upper left portion of the bisected letter is printed "TH"; the upper right "OM"; lower left "PS" and lower right "ON". Beneath this is printed the pattern name: "GLENWOOD".
A_2) Blue ink stamped. Mark is identical to A_1 with the exception of the pattern name. The A_2 mark does not have a pattern name.
A_3) Green ink stamped. Mark is identical to A_1 with the exception of the pattern name. A_3 pattern name is "FRANCIS".

Comments: This firm was established in 1868 as C. C. Thompson and Company. In 1889, the name changed to the C. C. Thompson Pottery Company. This firm made semi-porcelain, whiteware, Rockingham, and yellow ware. Dinner services and toilet sets were only a few items that this pottery manufactured (Barber 1904:110; Lehner 1980:150,196; Cox 1949:110,1130; Hartman 1943:120,121; Gates 1982:288,294).

Internal Correlation: A_1) N/A.
A_2-A_3) 33.

Vodrey Pottery (Fig. 30)

firm without the cooperative plan. After McNicol, Daniel Cronin became president with his family owning the pottery. In 1927, the firm moved to Cumberland, West Virginia and was renamed Cronin China Company. Standard manufactured semi-porcelain, whiteware, and hotel china into dinner services, toilet wares, and other table items (Gates 1982:247,249; Stadling: pers. comm.; Lehner 1980:105-6).
*Identified after illustrations order.

Internal Correlation: N/A.

Taylor, Smith and Taylor (Fig. 28a-28c)

No. of Specimens: A) 2.
B) 3.
C1) 1.
C2) 5.

Location: East Liverpool, Ohio.

Date: Company: 1901-1973.
Mark A-C2: 1901-1973.

Paste Type: A-C2) Whiteware.

Shapes and Portions Represented:
A) 1 saucer fragment: rim, body and base. 1 unidentifiable fragment: base.
B) 3 bowl fragments: 2 rim, body, base; 1 body and base. Of these 3, 2 join to form a total of 2 marks.
C1) 1 creamer fragment: body and base.
C2) 5 unidentifiable fragments: all body and base.

Mark Description:
A) Green ink stamped. Two "T"'s join to form a "V" with a star at the point of intersection. The letter "S" is stamped over the "T"'s. Beneath is printed the paste type and below the paste type "MADE IN U.S.A." is printed.
B) Blue ink stamped. The pattern name or blank shape is printed in capital letters. The three company initials are printed above the name.
C1) Blue ink stamped. The pattern name or blank shape is printed in capital letters. The three company initials are printed above the name. Below the name, "CHINA" is printed.
C2) Blue ink stamped. Identical to C1.

Comments: The company began as Taylor, Lee and Smith in 1899. In 1901, another Taylor bought Lee's interest and the company became Taylor, Smith and Taylor. The firm manufactured porcelain, semi-porcelain, and whiteware into dinner services, toilet sets, and short sets of odd dishes. In 1907, the company factory was

1980:53; Cox 1944:1100; Barber 1904:111).
*Identified after illustrations order.

Internal Correlation: N/A.

Sebring Pottery Company (Fig. 171)*

No. of Specimens: 2.
Location: East Liverpool, Ohio.
Date: Company: 1887-1940.
Mark: 1895 and after.
Paste Type: Whiteware.
Shapes and Portions Represented: 2 saucer fragments: both body and base. Both fragments join.
Mark Description: Green ink stamped. Printed in capital letters is the word "KOKUS". The tail of the initial letter K extends and underscores the word. "CHINA" is printed beneath this.
Comments: A partnership between George Ashbaugh, Sampson Turnbull, and five Sebring brothers began this firm in 1887. After a few years, the brothers bought out the other two partners. In 1898 after purchasing and forming new potteries, a piece of land in another Ohio county was purchased. Within one year the brothers founded a town, rightly named Sebring, Ohio. The pottery manufactured semi-porcelain and whiteware into dinner services, toilet sets, commemorative and miscellaneous items. In 1940, the Limoges China Company of Ohio bought out Sebring Pottery but continued to manufacture Sebring products until 1948 (Gates 1982:231, 233; Stradling: pers. comm.; Lehner 1980:133-4; Cox 1944:1101; Barber 1904:135).
*Identified after illustrations order.
Internal Correlation: 57.

The Standard Pottery Company (Fig. 169)*

No. of Specimens: 1.
Location: East Liverpool, Ohio.
Date: Company: 1886-1927.
Mark: 1886-1910.
Paste Type: Whiteware.
Shapes and Portions Represented: 1 unidentifiable fragment: base.
Mark Description: Black ink stamped; British Crest with two lions. The company's initials are intertwined in the shield. Printed above the crest in an arc is the paste type. Printed below in an arc is "EXTRA QUALITY".
Comments: This firm began in 1886 as a cooperative pottery. Sometime in 1894 the company was reorganized with Patrick McNicol heading the

(Barber 1904:110; Lehner 1980:105,106,113,189; Cox 1949:1100,1130; Gate 1982:185-186).

Internal Correlation: N/A.

Patrick McNicol Standard Pottery (Fig. 27)

No. of Specimens: 1.
Location: East Liverpool, Ohio.
Date: Company: 1886 to the early 1920's.
Mark: 1886 to the early 1920's.
Paste Type: Whiteware.
Shapes and Portions Represented: 1 unidentifiable fragment: base.
Mark Description: Green ink stamped. The pottery's name is written; "THE" printed above the name; "MADE IN U.S.A." printed beneath the name.
Comments: One of the three McNicol Potteries to operate in East Liverpool. The Standard was opened in 1886 an closed in the early 1920's due to lack of expansion space. The pottery manufactured semi-porcelain, whiteware, and Rockingham into dinner services, toilet sets, short sets of odd dishes, and table accessories (Lehner 1980:105-106, 189; Gates 1982:247,249).
Internal Correlation: N/A.

Potter's Co-Operative Company (Fig. 190)*

No. of Specimens: 1.
Location: East Liverpool, Ohio.
Date: Company: 1882-1925.
Mark: 1882-1895.
Paste Type: Whiteware.
Shape and Portions Represented: 1 unidentifiable fragment: base.
Mark Description: Black ink stamped; a partial mark. The British Crest with the intertwined initials of the company printed inside the shield. The paste type is printed above the crest in an arc. Printed below the crest in an arc are the company's initials.
Comments: This firm was formed in 1882 by a group of potters who would not hire employees sided with Knights of Labor, an organization or union-type operation. This organization was headed by H.A. McNicol, one of the three McNicols operating in East Liverpool, until his death when his son assumed control. The firm produced semi-porcelain and whiteware into dinner services, tea sets, toilet sets, hotel china, and sanitary ware. In 1925, the Dresden Pottery purchased the works (Gates 1982:211,212; Stradling: pers. comm.; Lehner

Internal Correlation: 281.

CZECHOSLOVAKIA

Porcelain Union (Fig. 47)

No. of Specimens: 2.
Location: Klasterec, Czechoslovakia.
Date: Company: 1921-1927.
Mark: 1921-1927.
Paste Type: Porcelain.
Shapes and Portions Represented: 2 cup fragments; both body and base.
Mark Description: Blue ink stamped. Arranged in a horizontal parallel linear fashion is the word "UNION" followed by the letter "K". This is enclosed in a wreath which is topped with a crown. Underneath the wreath, printed in an arcing fashion, is "MADE IN CZECHOSLOVAKIA". Embossed is the fraction "1/3" - followed by the capital letter "L", all of which is enclosed in a rectangle.
Comments: The Porcelain Union was created by the merging of five potteries in Czechoslovakia in 1921. It continued to operate until 1927 when it joined Epiag of Karlsbad. In 1931 the entire operation ceased production. The Porcelain Union manufactured coffee and tea services as well as household items and decorative pieces all in porcelain (Rontgen 1981:94,428).
Internal Correlation: 279.

Unknown (Fig. 48)

No. of Specimens: 2.
Location: Czechoslovakia.
Date: Company: Unknown.
Mark: 1891 and after.
Paste Type: Semi-porcelain.
Shapes and Portions Represented: 2 bowl fragments: 1 rim, body and base; 1 body and base. Both join to form 1 mark.
Mark Description: Red ink stamped. A circle that has the country of manufacture and the word "MADE" printed around the inner circumference.
Comments: No information on the maker's mark or on the company could be located.
Internal Correlation: 27.

Unknown (Fig. 49)

No. of Specimens: 1.
Location: Czechoslovakia.

Date:	Company: Unknown. Mark: 1891 and after.
Paste Type:	Porcelain.
Shapes and Portions Represented:	1 creamer fragment: body and base.
Mark Description:	Black ink stamped. Printed in a horizontal parallel linear fashion is "CZECHO -", followed by "SLOVAKIA".
Comments:	No information on the maker's mark or on the company could be located.
Internal Correlation:	326.

ENGLAND

T. and R. Boote Ltd. (Fig. 50)

No. of Specimens:	4.
Location:	Burslem, England.
Date:	Company: 1842-1966. Mark: 1890-1906.
Paste Type:	Whiteware.
Shapes and Portions Represented:	4 unidentifiable fragments: all bases.
Mark Description:	Green ink stamped: a ship on water. Above the ship is printed the pattern name. Printed beneath in a horizontal parallel linear fashion is the firm's name; followed by the paste type; next is the location of the firm; and finally the country of manufacture.
Comments:	This firm began in 1842 at the Waterloo Pottery in the Staffordshire Region of England. The company manufactured semi-porcelain, whitewares, earthenwares, Parian ware and a variety of other ceramic bodies into table china, tiles, and other items. By 1906, a complete shift to tile manufacturing took place. The factory closed in 1966 (Godden 1964:84; Cushion 1980:120; Chaffers 1912:684,685; Macdonald-Taylor 1968:189; Mankowitz and Haffar 1957:27; Hughes 1967:57,62).
Internal Correlation:	N/A.

Bridgwood and Clarke (Fig. 51)

No. of Specimens:	11.
Location:	Burslem and Tunstall, England.
Date:	Company: 1857-1864. Mark: 1857-1864.
Paste Type:	Whiteware.
Shape and Portions Represented:	11 unidentifiable fragments; all bases. Of these 11, 10 join to form a total of 5 marks.

ark Description: Black ink stamped: the English Coat of Arms. Beneath is a banner that has the paste type and company's name printed on it. Below, the city and country of manufacture is printed.

omments: The pottery was established in 1857 in the Staffordshire region of England. The firm had a pottery at Burslem and at Tunstall that manufactured semi-porcelain, whiteware, and earthenware. The company ceased production under the name of Bridgwood and Clarke and became Edward Clarke and Company in 1864 (Godden 1964:101; Cushion 1980:120; Chaffers 1912:661; Hartman 1943:100,101; Wetherbee 1980:27; Hughes 1967:50,72).

nternal Correlation: N/A.

avison and Son Ltd. (Fig. 52)

o. of Specimens: 4.

ocation: Burslem, England.

ate: Company: 1898-1952.
Mark: 1898-1952.

aste Type: Whiteware.

hapes and Portions epresented: 4 saucer fragments: 2 rim, body and base; 2 base.

ark Description: Blue ink stamped. Printed in a horizontal parallel linear fashion is the company's name and the country of manufacture.

omments: This firm began the production of pottery in 1898 in the Staffordshire region of England. Davison manufactured semi-porcelain, whiteware, and earthenwares into a variety of shapes and forms. No maker's marks are recorded until 1948 (Godden 1964:193; Cushion 1980:121).

nternal Correlation: N/A.

oulton and Company Ltd. (Fig. 53a-53b)

o. of Specimens: A) 5.
B) 1.

ocation: Burslem and Lambeth, England.

ate: Company: 1858 to present.
Mark: A) 1891-1902.
B) 1902-1922.

aste Type: A) Semi-porcelain.
B) Porcelain.

apes and Portions presented: A) 2 cup fragments: both body and base. 3 saucer fragments: all base.
B) 1 unidentifiable fragment: body and base.

rk Description: A) Green ink stamped: a circular crest design enclosing four interlocked, half-circles.

Printed around the inside of the crest is the company's name and city of manufacture. The crest is topped by a crown. Printed below the crest, in an arc, is the country of manufacture. Below that, in a horizontal parallel linear fashion, is the pattern name followed by the patent number.
B) Green ink stamped with hand painted letters and numbers in gold. Four interlocked half-circles enclosed in a circular design that incorporates the company's name and country of manufacture. Beneath the circular design is the patent number. Above this circular design is a lion standing on top of a crown.

omments: The pottery began in 1858 in Lambeth. At this location, Doulton produced earthenwares and stonewares. The factory at this location closed in 1956. In 1882, the Doulton Company opened another factory in Burslem. The goods manufactured at this location included porcelain (beginning in 1884), semi-porcelain, whiteware, and earthenware. The company expanded the ceramic production to include decorative and statuary items. In 1955, the firm was renamed Doulton Fine China Ltd. and, in 1973, the name became Royal Doulton Tableware. The firm is still manufacturing goods today (Godden 1964:213-9; Cushion 1980:105,121,122; Cox 1947:1023,1042; Macdonald and Taylor 1968:211,212; Hartman 1943:108,109; Chaffers 1912:900-4; Mankowitz and Haggar 1957:75-8).

nternal Correlation: A) 38.
B) N/A.

homas Hughes and Sons Ltd. (Fig. 54)

o. of Specimens: 1.

ocation: Burslem, England.

ate: Company: 1895-1957.
Mark: 1895-1910.

aste Type: Semi-porcelain.

apes and Portions
epresented: 1 unidentifiable fragment; base.

ark Description: Blue ink stamped: a center crown. Printed below, in an arc, is the paste type. Printed beneath the crown in a horizontal parallel linear fashion is the company's name, followed by the country of manufacture.

mments: The pottery was in operation in 1895 in the Staffordshire region of England. The firm was originally The Thomas Hughes Pottery from 1860 to 1894. In 1895, the business name changed

to Thomas Hughes and Son Ltd. This company manufactured porcelain, semi-porcelain, whiteware, and earthenwares. The pottery ceased production in 1957 (Godden 1964:330,340; Cushion 1980:123; Wetherbee 1980:28).

ıternal Correlation: N/A.

)hn Maddock and Sons (Ltd.) (Fig. 55a-55b$_3$)

). of Specimens: A) 1.
B_1) 2.
B_2) 5.
B_3) 8.

)cation: Burslem, England.

ıte: Company: 1855 to present.
Mark: A) 1855 to 1880.
B_1-B_3) 1896 and after.

ıste Type: A-B_1) Porcelain.
B_2-B_3) Whiteware.

ıapes and Portions
epresented:
A) 1 cup fragment: base and body.
B_1) 2 saucer fragments: both rim, body and base. Both join to form 1 mark.
B_2) 5 saucer fragments: 3 rim, body and base; 2 base. Of these 5, 2 join to form a total of 3 marks.
B_3) 3 plate fragments: 1 rim, body and base; 2 base. Of these 3, 2 join to form a total of 2 marks. 5 bowl fragments: 1 rim, body, and base; 2 body and base; 2 base. Of these 5, 5 join to form a total of 2 marks.

ırk Description:
A) Brown ink stamped. A center circle with the last name of founder printed around the top and country of manufacture printed around the bottom. Both words arcing to follow the circumference of the circle.
B_1) Red ink stamped; a circle atopped by a crown. Around the inside circumference is printed the company name and the paste type. Across the center of the circle is printed the country of manufacture. Printed beneath the circle is the pattern name.
B_2) Two different colors of ink stamps; black or brown. The mark is identical to B_1 except that the pattern name is not included.
B_3) Blue ink stamped. The mark is identical to B_1.

mments: The pottery was established in 1855 in the Staffordshire region of England. From 1842 until 1854, the business was entitled John Maddock. In 1855, the firm was renamed John Maddock and Sons, with Ltd. added from 1896. This firm manufactured porcelain, semi-

porcelain, whiteware, and earthenwares into dinner services, coffee and tea sets, sanitary ware and hotel china. This firm is still operating today (Godden 1964:406-407; Cushion 1980:124; Wetherbee 1980:28; Cartman 1943:102-103).

ernal Correlation: A) N/A.
B_1) 34.
B_2) 1.
B_3) 17.

Wharf Pottery (Fig. 56)

of Specimens: 4.
ation: Burslem, England.
e: Company: 1878-1894.
Mark: 1878-1894.
te Type: Semi-porcelain.
pes and Portions resented: 2 cup fragments: both body and base. Both join to form 1 mark. 2 saucer fragments: 1 rim and body: 1 body and base. Both join to form 1 mark.
k Description: Blue ink stamped: printed on underside of saucer rim. Arranged in a horizontal parallel linear fashion, starting with the pattern name; the initials of the firm; and finally the country of manufacture.
ments: The firm began in 1878 in the Staffordshire region of England. This pottery manufactured semi-porcelain, whiteware, and earthenwares into dinner services, coffee and tea sets, and other table wares. The last year of production was 1894. In 1895, the pottery was purchased and became part of the Wood and Son Pottery (Godden 1964:467; Cushion 1980:124; Hartman 1943:104-105).
ernal Correlation: 29.

d and Sons (Ltd.) (Fig. 57a-57b)

of Specimens: A) 2.
B) 3.
ation: Burslem, England.
e: Company: 1865 to present.
Mark: A) 1891 to 1907.
B) 1907 and after.
te Type: A-B) Semi-porcelain.
pes and Portions resented: A) 2 plate fragments: both rim and body.
B) 3 bowl fragments: 2 rim, body and base; 1 base. Of these 3, 2 join to form a total of 2 marks.
k Description: A) Blue ink stamped; printed on underside of

the saucer rim. A crown with a banner beneath; printed on the banner is the company's name. Above the crown in an arcing parallel linear fashion is the pattern name and paste type. Under the banner, the country of manufacture is printed.
B) Green ink stamped: double circular crest design atopped by a crown. The paste type is printed in the inner circle. Around the inside of the outermost circle is printed the firm's name along with the city and country of manufacture.

nents: The firm began in 1865 in the Staffordshire region of England. Wood manufactures semi-porcelain, whiteware, and earthenware into dinner services, coffee and tea sets, table china, and kitchen ware. In 1894, this firm purchased the New Wharf Pottery Company. Today the pottery is still manufacturing wares (Godden 1964:689-690; Cushion 1980:128; Hartman 1943:106,107; Wetherbee 1980:30).

ernal Correlation: A) 11.
B) 7.

ry Alcock and Company (Ltd.) (Fig. 58)

of Specimens: 6.

ation: Cobridge, England.

e: Company: 1861-1910.
Mark: 1891-1910.

te Type: Whiteware.

pes and Portions
resented: 6 unidentifiable fragments: 3 body and base; 3 base. Of these 6, 4 join to form a total of 4 marks.

Description: Green ink stamped: shield topped with a crown. Above shield, in an arc, is printed the paste type. Beneath the shield, in an arcing horizontal parallel linear fashion, is printed the company name; followed by the country of manufacture.

ients: The Alcock Company was formed in 1861 in the Staffordshire region of England. This firm manufactured semi-porcelains, whitewares and earthenwares. In 1910, the company's name changed to the Henry Alcock Pottery and moved to Stoke, England (Godden 1964:27; Cushion 1980:128).

rnal Correlation: N/A.

Edwards and Company (Fig. 59)

of Specimens: 5.

tion: Fenton, England.

Company: 1847-1900.
Mark: 1880-1900.

Type: Whiteware.

and Portions
ented: 3 saucer fragments; 2 body and base; 1 base. All join to form 1 mark. 2 unidentifiable fragments; both bases.

escription: Brown ink stamped: crossed swords behind a shield. In the center of the shield is an eagle. A crown is on top of the shield with a flowing drape coming out of the crown's underside, around the swords and shield's outside. Printed above the shield in an arc is the paste type. Bisecting the crown in a horizontal line is "TRADE MARK". Printed below the shield in an arcing parallel fashion is the firm's name, followed by the country of manufacture.

ts: The pottery was founded in the Staffordshire region of England in 1847. The pottery was originally located in Longton, England (1847-1852) but moved to Fenton in 1853. This firm produced porcelain, semi-porcelain, whiteware, and earthenware into dinner services, coffee and tea sets, and other table and kitchen ware. The pottery closed at the beginning of 1900 (Godden 1964:231; Cushion 1980:131; Hartman 1943:92; Hughes 1967:51,127).

al Correlation: N/A.

n and Company (The Foley China Company) (Fig. 60a$_1$-60a$_2$)

Specimens: A_1) 1.
A_2) 3.

on: Fenton, England.
Company: 1892-1925.
Mark: A_1-A_2) 1892 and after.

Type: A_1) Porcelain.
A_2) Whiteware.

and Portions
ented: A_1) 1 unidentifiable fragment: base.
A_2) 3 bowl fragments: all body and base. All join to form 1 mark.

escription: A_1) Color is faded; interlocking initials of the founder of the company. Above this is a crown and printed above the crown, in an arc, is the factory's name. Below the initials is printed the country of manufacture.
A_2) Green ink stamped: identical to A_1, except that below the country of manufacture is a patent number.

ts: Foley China was operating in 1892 in the Staffordshire region of England. Wileman at

this time also operated and owned another pottery in Longton, England. These potteries manufactured porcelain, semi-porcelain, whiteware, and earthenware into dinner services, coffee and tea sets, decorative items, and other table china. In 1925, Shelly Potteries Limited purchased the Foley Works (Godden 1964:672; Cushion 1980:133; Macdonald and Taylor 1968:299; Hartman 1943:106,107; Mankowitz and Haggar 1957:240; Hughes 1967:83).

al Correlation: A_1) N/A.
A_2) 37.

and Stonier (Fig. 61a_1-61a_2)

Specimens: A_1) 18.
A_2) 53.

on: Hanley, England.
Company: 1891-1939.
Mark: A_1-A_2) 1899-1936.

Type: A_1) Whiteware.
A_2) Semi-porcelain.

and Portions ented:

A_1) 3 plate fragments: all body and base. 15 unidentifiable fragments: all bases. Of these 15, 9 join to form a total of 10 marks.

A_2) 25 plate fragments: 9 rim, body, and base; 3 body and base; 13 bases. Of these 25, 15 join to form a total of 16 marks. 18 bowl fragments: 1 rim, body, and base; 12 body and base; 5 base. Of these 18, 16 join to form a total of 7 marks. 10 unidentifiable fragments: all bases. Of these 10, 2 join to form a total of 9 marks.

escription: A_1) Blue ink stamped. A caduceus enclosed in a triangle which is enclosed by a circle. Printed around the circumference of the circle is the paste type. Atop the circle is a crown and printed above that is the pattern name. Beneath the circle is a banner on which is printed the company's name. Below this is printed the country of manufacture.

A_2) Brown ink stamped. Identical to A_1 but the pattern name is not included.

ts: Formerly Powell, Bishop, and Stonier, Bishop and Stonier began production in 1891 in the Staffordshire region of England. This pottery manufactured porcelain, semi-porcelain, whiteware, and earthenwares into dinner services, coffee and tea sets and a variety of other table wares. In 1939, the operations at this factory ceased (Godden 1964:76,77; Cushion 1980:134,138; Wetherbee 1980:27).

Correlation: A_1) 12.
A_2) 15.

Ltd. (Fig. 62)

pecimens: 3.
: Hanley, England.
Company: 1905-1920.
Mark: 1905-1920.
pe: Semi-Porcelain.
nd Portions
ted: 2 pitcher fragments: 1 body and base; 1 base. Both join to form 1 mark. 1 basin fragment: body and base.
cription: Black ink stamped. Printed in a horizontal parallel linear fashion is the company's name, followed by the country of manufacture.
: Cauldon Limited began operation in 1905 in the Staffordshire region of England. This firm manufactured porcelain, semi-porcelain, whiteware, and earthenwares into dinner services, coffee and tea sets, and sanitary wares. In 1920, the firm was relocated in Stoke, England and the name changed to Cauldon Potteries Ltd. (Godden 1964:133; Cushion 1980:135).
Correlation: 331.

Brothers Ltd. (Fig. 63a-63c)

pecimens: A) 1.
B) 4.
C) 11.
: Hanley and Tunstall, England.
Company: 1883 to present.
Mark: A) 1883-1913.
B) 1900 and after.
C) 1913 and after.
pe: A & C) Whiteware.
B) Semi-porcelain.
nd Portions
ted: A) 1 plate fragment: rim, body, and base.
B) 4 unidentifiable fragments: 1 body and base; 3 base. Of these 4, 3 join for a total of 2 marks.
C) 11 unidentifiable fragments: 3 body and base; 8 base. Of these 11, 9 join for a total of 5 marks.
cription: A) Brown ink stamped. A globe with longitude and latitude lines topped by a crown. Printed above the crown in an arc is the paste type. Printed beneath the globe in an arc is the company's name and below that is the country of manufacture.

B) Brown ink stamped. A crown with the paste type printed above in an arc. Beneath the crown is a banner with the company's name printed on it. Under the banner is printed the country of manufacture.
C) Green ink stamped. A crown, and printed beneath the crown in a horizontal parallel linear fashion is the company's name followed by the country of manufacture.

: The Johnson Brothers, Henry, Robert, Alfred, and Fred, began production in Hanley in 1883 in the Staffordshire region of England. In 1899, a second pottery was opened in Tunstall, England. Operations continued at the second pottery until 1913. The company manufactures porcelain, semi-porcelain, whiteware, and earthenwares into dinner services, coffee and tea sets, and other table ware. Johnson Brothers still operates today as part of the Wedgwood Group (Godden 1964:355,356; Cushion 1980:137; Hartman 1943:102,103; Macdonald-Taylor 1968:231; Mankowitz and Haggar 1957:118,119).

Correlation: A) 39.
B-C) N/A.

Porcelain Works Ltd. (Fig. 64)

pecimens: 1.

: Hanley, England.
Company: 1886-1902.
Mark: 1891-1902.

pe: Whiteware.

nd Portions
ted: 1 unidentifiable: base.

cription: Blue ink stamped: a castle. The company's name is printed at the bottom of the castle. Beneath the castle is the "Staffordshire Knot" enclosing the date of 1790, and below this is printed the country of manufacture.

: This firm succeeded the firm of Old Hall Earthenware Company Ltd. (1861-1886). The original firm was the first liability company in the Staffordshire region. This specific maker's mark was also registered by the Old Hall Pottery in 1884. In 1886, the name changed to the Old Hall Porcelain Works Limited. This firm manufactured porcelain, semi-porcelain, whiteware, and earthenwares until its closing in 1902 (Godden 1964:474,475; Cushion 1980:139; Hartman 1943:104,105; Mankowitz and Haggar 1957:167).

Correlation: N/A.

llerton and Sons (Fig. 65)

ecimens: 2.
Longton, England.
Company: 1859-1942.
Mark: 1915-1942.

e: Porcelain (bone china).

l Portions

ed: 1 cup fragment: body and base. 1 saucer fragment: base.

ription: Black ink stamped: a crown. Printed beneath in a horizontal parallel linear fashion is the company's last name; followed by the country of manufacture. Next is "OLD ENGLISH", and lastly, the paste type.

Charles Allerton and Sons began operation in 1859 in the Staffordshire region of England. This firm manufactured porcelain, semi-porcelain, whiteware, and earthenwares into dinner services, coffee and tea sets and a variety of other table china. In 1912, Cauldon Ltd. bought out the firm but ran it under the name of Allerton's Ltd. The pottery ceased production in 1942 (Godden 1964:30; Cushion 1980:145).

Correlation: N/A.

idgwood and Son (Ltd.) (Fig. 66)

ecimens: 2.
Longton, England.
Company: 1805 to present.
Mark: 1885 and after.

e: Whiteware.

l Portions

ed: 1 bowl fragment: rim, body, and base. 1 unidentifiable fragment: body and base.

ription: Brown ink stamped. Crossed swords behind a shield - material draping around the shield and over the sword with a crown on top of the shield. Printed above the crown in an arc is the paste type which is followed by "TRADE MARK". Printed beneath the shield in an arcing horizontal parallel linear fashion is first the company's name and then the country of manufacture.

This firm was established in 1805 in the Staffordshire region of England. Bridgwood principally manufactured earthenwares with some whiteware into dinner services and table ware. Prior to 1887, porcelain was also produced (Godden 1964:101,102; Cushion 1980:147; Macdonald-Taylor 1968:191; Wetherbee 1980:27; Mankowitz and Haggar 1957:167).

›rrelation: N/A.

| Goddard (Fig. 67)

:imens: 2.
Longton, England.
Company: c.1870.
Mark: c.1870.
Semi-porcelain.

Portions
:: 2 unidentifiable fragments: 1 body and base; 1 base. Both join to form 1 mark.

.ption: Black ink stamped: the English Royal Coat of Arms. Printed beneath in a horizontal parallel linear fashion is the paste type followed by the company of manufacture. Around 1870, the firm of Burgess and Goddard began in the Staffordshire region of England. The firm manufactured semi-porcelain into table china (Wetherbee 1980:27).

›rrelation: N/A.

| and Sons (Ltd.) (Fig. 68a-68b)

:imens: A) 1.
B) 1.
Longton, England.
Company: 1900-1966.
Mark: 1913 and after.
A-B) Porcelain.

Portions
:: A) 1 saucer fragment: body and base.
B) 1 cup fragment: body and base.

ption: A) Blue ink stamped: a shield enclosing the name of the company's works. Beneath the name is the "Staffordshire Knot" with the company's initials printed inside the sections formed by the knot. Beneath the knot is printed "& SONS", and under that the country of manufacture. Above the shield is a rising sun.
B) Blue ink stamped: a crown. Beneath the crown is a banner enclosing the company's name. Printed below the banner is the country of manufacture.
A. B. Jones and Sons began operation in 1900 in the Staffordshire region of England. The company was formerly named A. B. Jones. The pottery manufactured porcelain, semi-porcelain, whitewares, and earthenwares into dinner services, coffee and tea sets and a variety of other table and kitchen wares. In 1966, the Crown House Glass Limited purchased this pottery (Godden 1964:357; Cushion

1980:150).

elation: A) N/A.
B) 317.

rakeford, Ltd. (Fig. 69a-69b)

ens: A) 2.
B) 1.
Longton, England.
Company: 1892-1933.
Mark: A) 1892-1909.
B) 1909-1933.
A-B) Porcelain.

rtions
A) 2 saucer fragments: both rim, body, and base. Both join to form 1 mark.
B) 1 cup fragment: body and base.

ion: A) Brown ink stamped: lion standing upright on a horizontal line. Printed beneath the line are the company's initials.
B) Color faded: lion standing upright on a horizontal line. Printed beneath the line are the company's initials. Printed below that is the country of manufacture. Above the lion, printed in an arc, are the works name and the paste type.
The firm began in 1892 in the Staffordshire region of England. From 1892 until 1902, the plant was operating at the Chatfield Works. In 1902, the firm moved to the Balmoral Works and remained there until 1933 when the company was purchased by the Royal Albion China Company. Redfern and Drakeford manufactured porcelain, semi-porcelain, and whtieware into dinner services, coffee and tea sets and other table ware (Godden 1964:524; Cushion 1980:152).

elation: A-B) 439.

ck (& Sons) (Fig. 70a-70b)

ens: A) 1.
B) 5.
Stoke, England.
Company: 1858-1937.
Mark: A) 1891-1935.
B) 1906-1912.
A) Semi-porcelain.
B) Whiteware.

rtions
A) Brown ink stamped. Printed in an arc are the company's initials. Beneath, in a horizontal line, is printed the country of manufacture.

in 1892, there arose difficulties and the partnership was dissolved with the business split equally between the brothers. Charles Edward was never quite successful and, by 1931, his company carrying the Haviland and Company name ceased production. Theodore, however, expanded and modernized his company becoming one of the leading firms in the exporting trade. William David Haviland, son of Theodore, continued his father's business. In 1941, William David purchased the rights of the old Haviland Company and incorporated it along with his firm to form the Haviland China Company of today. Haviland manufactures dinner services, coffee, tea and chocolate sets, decorative pieces and a variety of other art and table items. This firm still operates today producing only wares in porcelain (Cushion 1950:31; Macdonald-Taylor 1968:224; Jacobson 1979:151,156-160; Schleiger 1952:5-7; Blachere:pers.comm.; Collector's Handbook: n.d.).

elation:
A_1) 210.
A_2) 206.
B) 207.
C_1) 330.
C_2) 411.
D_1) N/A.
D_2) 288.
D_3) 312.
D_4) 208.
D_5) 203.
E) 201.

land (Fig. 90a-90c)

ens:
A) 1.
B_1) 3.
B_2) 7.
B_3) 3.
C) 1.
Limoges, France.
Company: 1892-1941.
Mark: A) 1892 and after.
B_1-B_3) 1895 and after.
C) 1903 and after.
A-C) Porcelain.

rtions

A) 1 demitasse cup fragment: body and base.
B_1) 3 cup fragments: all body and base. Of these 3, 2 join to form a total of 2 marks.
B_2) 4 cup fragments: 1 rim, body and base; 3 body and base. Of these 4, 2 join to form a total of 3 marks. 3 plate fragments: all base

body and base; 2 base. 3 large plate fragments: 3 rim, body and base. 7 small (fruit/sauce) bowl fragments: 5 rim, body and base; 1 body and base; 1 base. Of these 7, 2 join to form a total of 6 marks. 4 large (soup) bowl fragments: 3 rim, body and base; 1 body and base. 1 serving (vegetable) dish fragments: 1 body and base; 2 base. 3 serving platter fragments: all rim, body and base. 2 butter dish fragments: 1 rim, body and base; 1 base. Both join to form 1 mark. 3 lid fragments: 2 body and handle; 1 body. 14 unidentifiable fragments: all base fragments. Of these 14, 6 join to form a total of 11 marks.

›tion: A_1-A_2) Double stamped; 1) Blue ink stamped: a double circle. Printed in an arc between the two circles is the company's name and the city of manufacture; 2) Green ink stamped. Printed in a horizontal parallel linear fashion are the initials of the company underscored by a horizontal line with an "L" underneath.

B) Double stamped; 1) Green ink stamped. Printed in a horizontal parallel linear fashion are the initials of the company underscored by a horizontal line with "DEPOSE" underneath. 2) Green hand written. Only a partial mark - "MARRY-XMAS:1890".

C_1-C_2) Double stamped; 1) Green ink stamped. Printed in a horizontal parallel linear fashion are the company's initials; followed below by an "L"; and beneath that in an arc is the country of manufacture. 2) Red ink stamped. Printed in an arc is the company's name. Printed below in a horizontal line is the city of manufacture.

D_1-D_5) Double stamped; 1) Green ink stamped. Company's name printed in an arc with the country of manufacture printed beneath in a horizontal line. 2) Red ink stamped. Company's name printed in an arc with the city of manufacture printed beneath in a horizontal line.

E) Two different sets of marks. Set 1 are the same marks as D_1-D_5. Set 2 are the same marks as C_1-C_2.

The Haviland Company began in 1839 in New York City by Daniel and David Haviland. Originally the firm was an import company dealing in English wares. In 1842, David opened a factory in Limoges, France, after seeing the fine porcelain from that area. Charles Edward Miller and Theodore Haviland, sons of David, were made partners in 1864. At David's death

orrelation: A) N/A.
B) 263.

hina Company (Fig. 89a$_1$-89e)

cimens: A_1) 7.
A_2) 2.
B) 1.
C_1) 2.
C_2) 2.
D_1) 1.
D_2) 2.
D_3) 2.
D_4) 3.
D_5) 6.
E) 88.

Limoges, France.

Company: 1842 to present.

Mark: A_1-A_2) 1876-1889.
B) 1890.
C_1-E) 1893-1896.

: A_1-E) Porcelain.

Portions
i:

A_1) 7 bowl fragments: 5 rim, body and base; 2 body and base.

A_2) 2 bowl fragments: both body and base. Both join to form 1 mark.

B) 1 bowl: rim, body and base.

C_1) 1 saucer fragment: base. 1 unidentifiable fragment: base.

C_2) 2 bowl fragments: 1 rim, body and base; 1 body and base. Both join to form 1 mark.

D_1) 1 unidentifiable fragment: body and base.

D_2) 2 saucer fragments: 1 rim, body and base; 1 body and base. Both join to form 1 mark.

D_3) 2 cup fragments: both body and base.

D_4) 1 cup fragment: rim, body and base. 2 plate fragments: 1 rim, body and base; 1 body and base.

D_5) 1 cup fragment: body and base. 2 saucer fragments: 1 rim, body and base; 1 body and base. Both join to form 1 mark. 3 small (fruit/sauce) bowls: 1 rim, body and base; 2 body and base. Of these 3, 2 join to form a total of 2 marks.

E) 13 cup fragments: 2 rim, body and base; 7 body and base; 4 base. Of these 13, 6 join to form a total of 10 marks. 12 saucer fragments: 5 rim, body and base; 1 body and base; 6 base. Of these 12, 9 join to form a total of 7 marks. 19 small plate fragments: 3 rim, body and base; 4 body and base; 12 base fragments. Of these 19, 9 join to form a total of 14 marks. 5 plate fragments: 3 rim,

included dinner services, coffee and tea sets, decorative accessories, and objects of art. Double stamping at this plant, like many others, indicates factory decoration in addition to manufacture. Robert Haviland, of the Haviland Company, purchased the Charles Field Haviland mark from GDA in 1941 (Gaston 1980:42; Cushion 1980:31; Hartman 1943:48-9).

orrelation: A) N/A.
B_1) 267.
B_2) 217.

erin (Fig. 88a-88b)

cimens: A) 1.
B) 2.
Limoges, France.
Company: 1877 to present.
Mark: A-B) 1891-1915.

: A-B) Porcelain.

Portions
d: A) 1 unidentifiable fragment: base.
B) 2 saucer fragments: both body and base. Both join to form 1 mark.

iption: A) Green ink stamped. Stylized brackets enclosing the company's initials with the "& Co" printed beneath. Printed below in an arcing fashion is the company of manufacture.
B) Double stamped. 1) Green ink stamped. Stylized brackets enclosing the company's initials with "& Co" printed beneath. Above this, the city of manufacture is printed and below the brackets is the country of manufacture. 2) Blue ink stamped. Arranged in a horizontal parallel linear fashion is first the company name, next, the city of manufacture, and lastely, the country of manufacture.
William Guerin purchased a factory in the Limoges region to begin his own firm in 1877. The company manufactured dinner services, coffee and tea sets, and decorative objects. A specialty of this firm was a "cachepot" which can include anything from a letter holder to a jardiniere, depending on the size. This firm, like many others, used double marks to indicate factory decoration. In 1915, the Pouyat Pottery was purchased and, in 1924, Bawo and Dotter's Elite Works were purchased. From 1924 on, the firm operated under the name of Guerin, Pouyat, Elite, Ltd. Guerin is mainly in the porcelain exporting business (Gaston 1980:44-5; Cushion 1980:31; Hartman 1943:48-9).

factory in Limoges, France. He produced porcelain into dinner services, coffee and tea sets, decorative accessories, and art objects. Since 1863, he has been associated with another pottery, Guery, although no back stamping indicates this. In 1905, an associate, L. Bernardaud became the owner of the pottery (Gaston 1980:39-40; Hartman 1943:48-49).

Correlation: A_1) 235.
A_2) 375.

Dufraisseix, and Abbot (GDA); Porcelains GDA (Fig. 87a-87b_2)

pecimens: A) 2.
B_1) 2.
B_2) 12.

: Limoges, France.
Company: 1900 and after.
Mark: A) 1900 and after.
B_1-B_2) 1900-1941.

pe: A-B_2) Porcelain.

i Portions ted: A) 2 plate fragments: 1 body and base; 1 base. Both join to form one mark.

B_1) 2 saucer fragments: both body and base. Both join to form one mark.

B_2) 8 cup fragments: all body and base. Of these 8, 6 join to form a total of 5 marks. 4 saucer fragments: 1 rim, body and base; 1 body and base; 2 base. Of these 4, 4 join to form a total of 2 marks.

cription: A) Double stamped.
1) Red ink stamped. A wreath laurel enclosing the firm's intials which is underscored by a horizontal line. Printed in an arc under the line is the city of manufacture.
2) Green ink stamped. Initials of the firm handwritten and underscored by a horizontal line. Printed below is the country of manufacture.

B_1-B_2) Double stamped.
1) Red ink stamped. A double circle. Printed in between the two circles, in an arcing fashion around the circumference is "CH. FIELD HAVILAND" "LIMOGES".
2) Green ink stamped. Initials of the firm handwritten then underscored by a horizontal line. Printed below is the country of manufacture.

: In 1900, the French firm of Gerard and Dufraisseix added a third partner, Abbot, an importer from New York City. This pottery manufactured porcelain into table china which

late 1800s. This firm did not manufacture any pottery, they only decorated ceramic ware. Most of the porcelain decorated is done ornately with gold. It is common to find pieces double stamped with their mark and the mark of the Coiffe Company (Gaston 1980:36).

l Correlation: 325.

Decorating Firm (Fig. 85)

Specimens: 1.

n: Limoges, France.
Company: Late 1800s - early 1900s.
Mark: Late 1800s - early 1900s.

ype: Porcelain.

and Portions nted: Plate fragment: base.

scription: Green ink stamped. Double circle bisected by two parallel lines. In between the parallel lines is printed "B & H". In between the two circles, around the circumference, and above the parallel lines is printed the city of manufacture; below the parallel lines, the country of manufacture.

s: B & H Decorating Firm began in the latter half of the 1800s, early 1900s in the Limoges region of France. This firm, like Blakeman and Henderson, only decorated ceramic blanks and never manufactured any of its own pottery (Gaston 1980:34).

l Correlation: N/A.

nieres (D & C) (Fig. 86a$_1$-86a$_2$)

Specimens: A_1) 1.
A_2) 6.

n: Limoges, France.
Company: Mid-1880s - 1905.
Mark: A_1-A_2) 1885-1905.

ype: A_1 & A_2) Porcelain.

and Portions nted: A_1) 1 bureau tray fragment: base.
A_2) 6 plate fragments: 1 rim, body and base; 5 bases. Of these 6, 5 join to form a total of 3 marks.

scription: A_1-A_2) Double stamped.
1) Red ink stamped, company's name and city of manufacture, handwritten in a parallel linear fashion.
2) Green ink stamped. Arranged in a parallel linear fashion, are the initials of the company, a horizontal line, and the country of manufacture.

s: In the mid 1800s, R. Delinieres opened a

A_2) 14 small bowl fragments: 8 rim, body, and base; 3 body and base; 3 base. Of these 14, 4 join to form a total of 11 marks.

A_3) 24 plate fragments: 8 rim, body, and base; 2 body and base; 14 base. Of these 24, 16 join to form a total of 14 marks.

scription: A_1-A_3) Double stamped. 1) Red ink stamped; the seal of the city of Limoges. Above the seal is printed the pottery name; below the seal is printed the city and the country of manufacture. 2) Green ink stamped. Printed in a horizontal parallel linear fashion is the pottery name; underscored by a line, followed by the initial of the city of manufacture, and lastly the country of manufacture.

s: Bawo and Dotter, an American firm, established a plant in Limoges, France, in 1870. The firm initially began in the 1860s in New York City as an importer of Limoges china. With consumers purchasing more imported ware, Bawo and Dotter opened a decorating works and later expanded to the direct manufacturing of porcelain. This pottery manufactured dinner services, fish and game sets and decorative pieces with a specialty in trinket boxes. Items double stamped indicate that it was manufactured and decorated at the factory. In 1924, the Elite Works were purchased by the Guerin-Pouyat Company (Gaston 1980:35; Hartman 1943:48-9).

l Correlation: A_1) 361.
A_2) 359.
A_3) 219.

n and Henderson (Fig. 84)

Specimens: 2.

n: Limoges, France.
Company: Late 1800s.
Mark: Late 1800s.

ype: Porcelain.

and Portions
nted: 2 plate fragments: both rim, body and base. Both join to form 1 mark.

scription: Double stamped.
1) Green ink stamped: firm's name, handwritten, underscored by the city and country of manufacture which are also handwri.ten.
2) Green ink stamped: a shield enclosing the firm's initials. Directly beneath is printed the city of manufacture.

s: Blakeman and Henderson established a decorating factory in the Limoges area in the

of manufacture. Under this is stamped a "3". Off to the upper left of this mark is printed the pattern name.

ents: No information on the maker's mark or on the company could be located.

rnal Correlation: 53.

own (Fig. 81)

of Specimens: 1.

tion: England.

: Company: Unknown.
Mark: 1891 and after.

e Type: Whiteware.

es and Portions
esented: 1 unidentifiable fragment: base.

Description: Green ink stamped: a partial mark. Printed in a horizontal line is "AND".

ents: No information on the maker's mark or on the company could be located.

rnal Correlation: N/A.

own (Fig. 82)

of Specimens: 2.

tion: England.

: Company: Unknown.
Mark: 1891 and after.

e Type: Whiteware.

es and Portions
esented: 2 unidentifiable fragments: both bases.

Description: Blue stamped. Printed in a horizontal line, in capital letters, is the country of manufacture.

ents: No information on the maker's mark or on the company could be located.

rnal Correlation: N/A.

FRANCE

and Dotter/Elite Works (Fig. $83a_1$-$83a_3$)

of Specimens: A_1) 12.
A_2) 14.
A_3) 24.

ion: Limoges, France.
Company: 1870-1924.
Mark: A_1-A_3) 1900-1924.

Type: A_1-A_3) Porcelain.

s and Portions
sented: A_1) 12 small bowl fragments: 5 rim, body, and base; 3 body and base; 4 base. Of these 12, 2 join to form a total of 11 marks.

: Type:	Whiteware.
:s and Portions :sented:	6 plate fragments: 4 rim, body, and base; 2 rim and body. Of these 6, 4 join to form a total of 4 marks. 2 bowl fragments: both body and base. Both join to form one mark. 4 unidentifiable fragments: 1 rim and body; 2 body; and 1 base. Of these 4, 2 join to form a total of 2 marks.
Description:	Blue ink stamped: a center diamond-shaped figure with a "W" stamped in the center. Printed below the figure in a horizontal parallel linear arcing fashion is first the company of manufacture, followed by the patent number. Printed above in an arc is "ATHOL". The mark sometime is printed on the underside of the vessel's rim.
:nts:	No information on the maker's mark or on the company could be located.
:nal Correlation:	9.

:wn (Fig. 79)

:f Specimens:	5.
:ion:	England. Company: Unknown. Mark: 1891 and after.
: Type:	Porcelain (bone china).
:s and Portions :sented:	5 small plate fragments: 3 rim, body, and base; 1 base. Of these 5, 3 join to form a total of 3 marks.
Description:	Green ink stamped: a center crown. On either side of the top of the crown is printed the paste type. Above this is printed the word "IMPERIAL". Printed below the crown is the country of manufacture.
:nts:	No information on the maker's mark or on the company could be located.
:nal Correlation:	265.

:wn (Fig. 80)

f Specimens:	2.
ion:	England. Company: Unknown. Mark: 1891 and after.
Type:	Whiteware.
s and Portions sented:	2 plate fragments: 1 rim, body, and base; 1 base. Both join to form 1 mark.
Description:	Green ink stamped: only a partial maker's mark. Printed in an arc is the paste type. Printed below this, in an arc, is the country

Today, his factory is still manufacturing goods (Godden 1964:425,426; Cushion 1980:165; Hartman 1943:104,105; Wetherbee 1980:29; The Pottery Gazette 2 Dec. 1889:822).

ernal Correlation: 10.

nown (Fig. 76)

of Specimens: 3.
ation: England.
e: Company: Unknown.
Mark: 1891 and after.
te Type: Semi-porcelain.
pes and Portions resented: 2 oval serving dish fragments: both body and base. Both join to form 1 mark. 1 unidentifiable fragment: base.
k Description: Blue ink stamped: a center diamond figure with a "W" printed in the center. At the center peak of the "W" is a circle. Printed below the figure is the country of manufacture.
ments: No information on the maker's mark or on the company could be located.
ernal Correlation: 28.

nown (Fig. 77)

of Specimens: 9.
ation: England.
e: Company: Unknown.
Mark: 1891 and after.
te Type: Whiteware.
pes and Portions resented: 1 oval serving dish fragment: rim, body and base. 8 unidentifiable fragments: all bases. Of these 8, 6 join to form a total of 4 marks.
k Description: Blue ink stamped: the English garter with an upright lion inside. The name of the pattern is painted on the top of the garter. The figure is topped by a crown. Printed beneath the figure, in a horizontal parallel linear fashion, is first the region of production; then the country of manufacture; and lastly the patent number.
nents: No information on the maker's mark or on the company could be located.
ernal Correlation: 56.

nown (Fig. 78)

of Specimens: 12.
ation: England.
e: Company: Unknown.
Mark: 1891 and after.

in an arcing horizontal parallel linear fashion, is the paste type, followed by the country of manufacture which is preceded by "MADE IN".

mments: In 1891, Thomas Gimbert (T. G.) Booth purchased the Church Bank Pottery which he had been previously leasing. By July of 1898, T. G. Booth became Managing Director of the pottery, Booths Limited. This pottery manufactured semi-porcelain, whiteware, and earthenwares into a wide variety of items that included dinner and breakfast services, tea sets, hotel ware, hospital ware, and other table china, ornamental items such as open weave baskets and tiles for fireplaces and cooking areas. In February of 1948, Booths purchased Colclough China and, in March of the same year, the firm's name changed to Booths and Colcloughs Ltd. (Godden 1964:86,87; Cushion 1980:163; Hartman 1943:94,95; Chaffers 1912:1042; Mankowitz and Haggar 1957:28; Pigot and Co. 1841; Shelly 1971; The Pottery Gazette 1880-1921).

ternal Correlation: A) N/A.
B) 4.
C) 2.

fred Meakin (Ltd.) (Fig. 75)

. of Specimens: 19.

:ation: Tunstall, England.

:e: Company: 1875 to present.
Mark: 1875-1897.

ste Type: Whiteware.

apes and Portions
presented: 19 plate fragments: 2 rim, body, and base; 2 body and base; 15 base. Of these 19, 11 join to form a total of 12 marks.

rk Description: Blue ink stamped: a globe with longitude and latitude lines. Printed across the globe's center is the company's name. Outside the upper right portion of the globe is a banner in which is printed the pattern name. Below the outer lower left portion of the globe, the country of manufacture is printed.

mments: Alfred Meakin began manufacturing ceramic ware in 1875 in the Staffordshire region of England. This pottery makes semi-porcelain, whiteware, and earthenware into dinner services, coffee and tea sets, and a variety of other items. In 1913, the firm was retitled "Alfred Meakin (Tunstall)Ltd." Meakin was at one time hailed as "the potter king" in exporting wares to the States.

printed the company name and country of manufacture.

nments: William Adams began manufacturing pottery in 1769 in the Staffordshire region of England. Adams also operated a pottery in Stoke, England. The potteries produced a large variety of wares including semi-porcelain, whiteware, Jasperware, Parian, etc. into a variety of items from dinner services, coffee and tea sets to decorative pieces. The firm of William Adams is still in operation today (Godden 1964:21; Cushion 1980:162; Chaffers 1912:688-691; Wetherbee 1980:27; Macdonald-Taylor 1968:178; Williams 1971:23; Hughes 1967:35,36; Coysh 1974:20,21; Coysh 1972:10-12).

ternal Correlation: 32.

oths Limited (Fig. 74a-74c)

. of Specimens: A) 1.
B) 7.
C) 20.

cation: Tunstall, England.

te: Company: 1891-1948.
Mark: A-B) 1906 and after.
C) 1930-1948.

ste Type: A) Semi-porcelain.
B-C) Whiteware.

ipes and Portions
presented: A) 1 cup fragment: body and base.
B) 4 cup fragments: 1 rim, body, and base; 3 body and base. Of these 4, 2 join to form a total of 3 marks. 3 saucer fragments: 2 body and base; 1 base.
C) 12 cup fragments: 1 rim, body, and base; 10 body and base; 1 base. Of these 12, 6 join to form a total of 9 marks. 4 saucer fragments: 1 rim, body and base; 3 body and base. 4 plate fragments: 1 rim, body and base; 3 base. Of these 4, 2 join to form a total of 3 marks.

k Description: A) Gold ink stamped: a center crown. Printed above the crown is the company's name. Printed below, in arcing horizontal parallel linear fashion is the paste type, followed by the country of manufacture.
B) Blue ink stamped: a center crown. Printed above the crown is the company's name. Printed below the crown, in an arcing fashion, is the paste type. Printed in a horizontal line is the country of manufacture.
C) Blue ink stamped: a center crown. Printed above is the company's name. Printed beneath,

ɔmments: George Jones and Sons was established in 1864 at the Trent Pottery in the Staffordshire region of England. In 1907, the firm moved to the Crescent Pottery and remained in operation until 1957. The firm manufactured porcelain (from 1872 on), semi-porcelain, whiteware, earthenware, and a variety of other wares including Majolica, into dinner services, coffee and tea sets, and other table and decorative wares (Godden 164:359; Cushion 1980:158; Hartman 1943:102,103; Chaffers 1912:728; Wetherbee 1980:28; Hughes 1967:166).

ıternal Correlation: A) 376.
B) 106.

. Winkle and Company Ltd. (Fig. 72)

ɔ. of Specimens: 1.

ɔcation: Stoke, England.

ıte: Company: 1890-1931.
Mark: 1890-1925.

ıste Type: Semi-porcelain.

ıapes and Portions
epresented: 1 unidentifiable: base and body.

ark Description: Blue ink stamped: interlocked initials of the company in center of many concentric decorative circles. Printed around the circumference of the last outer circle is the pottery's name along with the city and the country of manufacture. Beneath this is printed the pattern name and the patent number.

ɔmments: This pottery began production in 1890 in the Staffordshire region of England. F. Winkle and Company manufactured semi-porcelain, whiteware, and earthenware into a variety of items. In 1931, Ridgways purchased the works (Godden 1964:678; Cushion 1980:162; Hartman 1943:106,107).

ıternal Correlation: 25.

ılliam Adams and Sons (Fig. 73)

ɔ. of Specimens: 2.

ɔcation: Tunstall, England.

ıte: Company: 1769 to present.
Mark: 1891 and after.

ıste Type: Semi-porcelain.

ıapes and Portions
epresented: 2 butter pat dishes: both rim, body and base.

ırk Description: Blue ink stamped: an ornate rectangle atopped by a crown. Above the crown is printed the paste type. Enclosed in the rectangle is the pattern name. Beneath the rectangle is

B) Red ink stamped. Two different marks appear. B_1) On basal fragments with small diameters, the mark is identical to A. B_2) On basal fragments with larger diameters: a crown atop a thin rectangular figure. Inside the figure is printed the paste type. Below the figure is printed the initials of the company and below that is printed the country of manufacture.

Comments: Sampson Hancock began manufacturing pottery in 1858 in the Staffordshire region of England. When the firm began, it was originally at Tunstall, England, but, in 1870, the industry was relocated to Stoke-on-Trent. The pottery manufactured semi-porcelain, whiteware, and earthenwares into a variety of items. In 1935, the firm was renamed "S. Hancock and Sons (Potters) Ltd." and again relocated, this time to Hanley, England. Production ceased in 1937 (Godden 1964:308; Cushion 1980:158; Wetherbee 1980:28; Mankowitz and Haggar 1957:104).

Internal Correlation: A) N/A.
B) 101.

George Jones (and Sons Ltd.) (Fig. 71a-71b)

No. of Specimens: A) 2.
B) 1.

Location: Stoke, England.

Date: Company: 1864-1957.
Mark: A-B) 1893-1924.

Paste Type: A) Porcelain.
B) Semi-porcelain.

Shapes and Portions Represented: A) 1 cup fragment: body and base. 1 saucer fragment: body and base.
B) 1 plate fragment: base.

Mark Description: A) Red ink stamped. The initials of the company are interlocked and printed above a crescent. Printed inside the crescent is "& SONS". Above the initials is printed the works name. Below the crescent is printed the paste type followed by the country of manufacture.
B) Decal of yellow, pink, green and blue. The initials of the company are interlocked and printed above a crescent. Printed inside the crescent is "& SONS". Printed above the initials is the word "ANSLO" which is topped by a crown. Below the crescent is printed the paste type. A wreath-like laurel encloses all of this. Beneath the laurel is printed the country of manufacture.

fragments. All join to form a total of 1 mark.

B_3) 2 saucer fragments: both body and base. 1 cup fragment: body and base.

C) 1 cup fragment: rim, body and base.

Mark Description: A) Green ink stamped: 3 castle towers. Printed in an arc above the towers is the company's name. Beneath the towers is written the city of manufacture and printed below that is the country of manufacture.

B_1-B_3) Red ink stamped. Arranged in a parallel horizontal linear fashion is first a medal with a ribbon; followed by the paste type; the company's name; and the city and country of manufacture.

C) Partial mark; red ink stamped. Name of the manufacturer written with the first name underlined.

Comments: The Theodore Haviland Company began in 1892 after the partnership between him and his brother was dissolved. Theodore began in the pottery business in 1864 when his father David, the Haviland firm's original founder, made him a partner along with his brother Charles Edward Miller. In 1879, David died. From then there arose problems between the brothers that ended with division. Charles Edward kept the firm name of Haviland Company and Theodore formed the Theodore Haviland China Company. Charles Edward's pottery fell on hard times and by 1931 production ceased. Theodore, however, had his father's business sense. He expanded and modernized his factory. He introduced new methods in machinery, decorating and firing. He also hired skillful French china makers and artists to head his departments. Like his father, Theodore made his son William D. a partner. William continued to run the firm after Theodore's death in 1919. In 1941, William purchased the rights of the Haviland Company and incorporated both firms to form the Haviland China Company. Theodore manufactured dinner services, chocolate, coffee and tea sets, decorative pieces and a variety of other table wares all in porcelain. The Haviland China Company is still in operation today (Cushion 1980:32; Macdonald-Taylor 1968:225; Jacobson 1979:151,156-60; Schleiger 1952:5-7; Blachere:pers. comm.; Collector's Handbook:n.d.).

Internal Correlation: A) 204.

B_1) 329.
B_2) 285.

B_3) 435.
C) 413.

arles Martin (Fig. 91a1-91a3)

. of Specimens: A_1) 2.
A_2) 2.
A_3) 1.

:ation: Limoges, France.

:e: Company: 1875-present.
Mark: A_1-A_3) 1875-present.

ste Type: A_1-A_3) Porcelain.
ipes and Portions
presented:

A_1) 2 plate fragments: 1 rim, body, base; 1 base. Both join to form 1 mark.

A_2) 2 plate fragments: both base. Both join to form 1 mark.

A_3) 1 saucer fragment: base.

rk Description: A_1) Triple stamped.
1) Green ink stamped. Two horizontal banners connected by a vertical line. In between the two banners is a bird with its wings opened and holding the vertical line in its beak. Printed inside the top banner is the city of manufacture and printed inside the bottom banner is the country of manufacture.
2) Red ink stamped. Printed in a horizontal parallel linear fashion first is, "MADE EXPRESSLY FOR"; then "JOS. HORNE CO"; and lastly, "PITTSBURGH PA".
3) Color faded. Triangle enclosing the intertwined initials of the firm. Printed along one side is the city of manufacture; along another is the country of manufacture; and along the last side is the word "DECOR".
A_2) Double stamped.
1) Green ink stamped. Identical to A_1-1.
2) Green ink stamped. Identical to A_1-2.
A_3) Green ink stamped, partial mark. Identical to A_1-1.

nments: Charles Martin began production in 1875 after purchasing the Nivet Firm. Martin has several business associates, the most well known being Duche (mid-1920s to the mid-1930s). The pottery manufactures porcelain into dinner services and tea sets along with other table china and art objects (Gaston 1980:53; Cushion 1980:32).

:ernal Correlation: A_1) 225.
A_2) 287.
A_3) N/A.

in Pouyat (Fig. 92a-92b)

. of Specimens: A) 2.
B) 17.

cation: Limoges, France.

te: Company: 1842-1914.
Mark: A-B) 1883-1914.

ste Type: A-B) Porcelain

apes and Portions presented: A) 2 unidentifiable fragments: both bases.
B) 5 cup fragments: 1 rim, body and base; 4 body and base. Of these 5, 2 join to form a total of 4 marks. 12 saucer fragments: 7 rim, body and base; 3 body and base; 2 base. Of these 12, 7 join to form a total of 8 marks.

rk Description: A) Double stamped.
1) Green ink stamped. The initials of the company's founder are printed and underscored by a horizontal line. Beneath that is printed a capital "L". Below this is the country of manufacture printed in an arc.
2) Red ink stamped. Printed in a circular form, the first initial and last name of the company's founder and the city of manufacture.
B) Double stamped.
1) Green ink stamped. Identical to A1.
2) Green ink stamped; lighter in color than B1. A laurel wreath with a ribbon intertwined forming a bow at bottom center. The wreath encloses the name of the company's founder and the city of manufacture.

mments: Jean Pouyat, like his grandfather, a faience factory and clay mine owner, and his father, a porcelain factory owner in Paris, established a porcelain factory in the Limoges area in 1842. He manufactured dinner services, coffee and tea sets, art objects and a variety of personal and decorative accessories. Pouyat died in 1849 and the business was carried on by his sons until 1914 when this firm became part of the William Guerin Company. Pieces bearing double marks indicate factory decoration. During the latter half of the 1800s, a strong export business was carried on with the United States. Pouyat is most famous for the many "blank" styles that he produced (Gaston 1980:56,57; Cushion 1980:31; Hartman 1943:48,49; Macdonald-Taylor 1968:262; Chaffers 1912:231,626).

:ernal Correlation: A) 436.
B) 349.

Porcelaine Limousine (Fig. 93a-93b)

. of Specimens: A) 2.
B) 31.

ation: Limoges, France.
e: Company: 1905 to the late 1930s.
Mark: A-B) 1905 to the late 1930s.
te Type: A-B) Porcelain.
pes and Portions
resented: A) 2 saucer fragments: 1 rim, body, and base; 1 base.
B) 9 small plate fragments: 7 rim, body, and base; 1 body and base; 1 base. Of these 9, 3 join to form a total of 7 marks. 11 large plate fragments: 7 rim, body, and base; 1 body and base; 3 base. Of these 11, 8 join to form a total of 7 marks. 11 unidentifiable fragments: all bases. Of these 11, 6 join to form a total of 8 marks.
k Description: A) Green ink stamped. Firm's initials underscored by a horizontal line. Beneath that the city of manufacture and below that the country of manufacture.
B) Double stamped. 1) Green ink stamped, identical to A. 2) Red ink stamped. A circle enclosing the name "M. REDON" and the city of manufacture. Both names are printed around the circle's circumference.
ments: In 1905, the firm of Barny, Rigoni, and Redon became La Porcelaine Limousine. This firm manufactured dinner services, coffee and tea sets, and decorative accessories both personal and nonpersonal. Objects that are double stamped indicate factory decoration. The firm was in operation until the late 1930s (Gaston 1980:55,56; Cushion 1980:32).
ernal Correlation: A) 379.
B) 220.

ssman and Vogt (T & V) (Fig. 94a-94c)
of Specimens: A) 2.
B) 2.
C) 1.
ation: Limoges, France.
e: Company: 1883-1919.
Mark: A-C) 1883-1919.
te Type: A-C) Porcelain.
pes and Portions
resented: A) 2 plate fragments: 1 rim, body, and base; 1 base. Both join to form 1 mark.
B) 2 bowl fragments: 1 rim, body, and base; 1 base. Both join to form 1 mark.
C) 1 plate fragment: base.
c Description: A) Green ink stamped. A rectangle with rounded corners enclosing the firm's initials. Beneath the figure is the country of manufacture.

B) Green ink stamped. A rectangle with rounded corners enclosing the firm's initials. Beneath the figure is the city of manufacture and below that the country of manufacture.
C) Green ink stamped. A rectangle with rounded corners enclosing the firm's initials. Beneath that is the country of manufacture and below that is the word "DEPOSE".

ients: Gustave Vogt began the firm as a china exporter in the 1860s. In 1883, taking on a partner, Tresseman, they established a pottery in the Limoges region. Primarily the firm produced art objects and decorative accessories with some dinner services and other table china being manufactured. By 1909, the name became Porcelaine Gustave Vogt. This continued until 1919 when M. Raynaud bought the firm. After Vogt became sole owner the "T & V" mark was still utilized (Gaston 1980:61,62; Cushion 1980:32; Hartman 1943:48,49).

rnal Correlation: A-B) 286.
C) N/A.

own (Fig. 95)

of Specimens: 1.
tion: Limoges, France.
: Company: Unknown.
Mark: 1891 and after.
e Type: Porcelain.
es and Portions esented: 1 plate fragment: body and base.
Description: Green ink stamped: only a partial mark. Arranged in a horizontal parallel linear fashion on one line is "ES" and on the next is "CE".
ents: No information on the maker's mark or on the company could be located.
rnal Correlation: 385.

own (Fig. 96)

of Specimens: 1.
tion: Limoges, France.
: Company: Unknown.
Mark: 1891 and after.
e Type: Porcelain.
es and Portions esented: 1 unidentifiable fragment: 1 base.
Description: Green ink stamped; only a partial mark. Arranged in a horizontal parallel linear fashion; one on the first line is printed "LIM" and on the second line is "FR".

ıts: No information on the maker's mark or on the company could be located.

ıal Correlation: N/A.

guemines (Utzchneider and Company) (Fig. 97a-97b)

Specimens: A) 5.
B) 7.

ion: Sarreguemines (Lorraine), France.
Company: 1770 to present.
Mark: A-B) c.1800 and after.

Type: A-B) Whiteware.

and Portions
ented: A) 5 small bowl fragments: 2 rim, body and base; 2 body and base; 1 base.
B) 1 cup fragment: body and base. 2 saucer fragments: both rim, body and base. 4 unidentifiable fragments: all bases. Of these 4, 3 join to form a total of 2 marks.

escription: A) Black ink stamped. Arranged in a horizontal parallel linear fashion is the company's name with the initials of the founder superimposed; next is the country of manufacture preceded by "MADE IN"; and last is the pattern name.
B) Blue ink stamped. A shield that is topped by a crown. Around the shield is a wreath-like laurel. printed beneath in an arc is the country of manufacture preceded by "MADE IN".

ıts: Paul Utzchneider established a pottery in 1770 in France. The factory produces fine faience, Wedgwood-like ware, porcelain, semi-porcelain, whiteware, and earthenwares into a variety of items including tea services, table wares and especially decorative pieces. Utzschneider also had a factory in Germany. At one time in the firm's history, M. Fabry had part of the controlling interest. Sarreguemines is still in operation today (Cushion 1980:45; Chaffers 1912:183; Hartman 1943:42,43; Macdonald and Taylor 1968:273).

ıal Correlation: A) 35.
B) 6.

GERMANY

chumann Porcelain Factory (Fig. 98)

Specimens: 3.

on: Arzberg, Germany.
Company: 1881 to present.
Mark: 1881 and after.

Type:	Porcelain.
s and Portions sented:	2 cup fragments: both body and base. Both join to form 1 mark. 1 unidentifiable fragment: base.
Description:	Blue ink stamped. A shield with a lion standing upright. The shield is topped by a crown. Printed beneath in an arc is either the pattern name or specific paste type.
nts:	The Carl Schumann Porcelain Factory was founded in 1881 by Heinrich Schumann. This factory manufactures coffee and tea sets, decorative pieces, gift items, and other table china all in porcelain. The factory is principally an exporting firm for the American consumer market. It is still in operation today (Rontgen 1981:90-91,377,456; Cushion 1980:60; Carl Schumann Porcelain Factory:pers. comm.).
nal Correlation:	N/A.

Anton Mehlem (Earthenware Factory) (Fig. 99)

f Specimens:	2.
ion:	Bonn, Germany. Company: 1836-1920. Mark: 1890-1920.
Type:	Whiteware.
s and Portions sented:	2 unidentifiable fragments: both body and base. Both join to form 1 mark.
Description:	Double marked. 1) Blue ink stamped; a stylized shield that is topped with a crown. Printed inside the shield are the company's initials with a date printed below. Above the crown, the word "ROYAL" is printed. Beneath the shield is printed the city of manufacture. Below this, printed in an arc, in a horizontal linear parallel fashion, is the pattern name and then the country of manufacture. 2) Impressed in the clay are the company's initials with the company's name printed in an arc above and the location printed below in an arc forming a circle around the initials.
nts:	This company began in 1836 in Bonn, Germany. Mehlem manufactured household items, decorative pieces, laboratory and sanitary ware from porcelain, semi-porcelain, whiteware, and earthenware. Hochst figurines from the original molds were manufactured from 1887 until 1903 in porcelain and whiteware. In 1921, Mehlem was bought by Villeroy and Boch in Mettlach, Germany (Rontgen

1981:112,342,385,392; Cushion 1980:62; Hartman 1943:70,71).

Correlation: 8.

ster Porcelain Factory (Fig. 100a$_1$-100a$_4$)

ecimens:
A_1) 1.
A_2) 1.
A_3) 1.
A_4) 2.
Silesia, Germany.
Company: 1831-1926.
Mark: A_1-A_4) 1885 and after.

e: A_1-A_4) Porcelain.

d Portions ed:
A_1) 1 plate fragment: rim, body and base.
A_2) 1 plate fragment: rim, body and base.
A_3) 1 plate fragment: rim, body and base.
A_4) 2 plate fragments: both rim, body and base. Both join to form 1 mark.

ription: A_1-A_4) Blue ink stamped. The initials of the firm are printed in a horizontal line. Above the center initial is a vertical line.
Carl Franz Krister began this pottery in 1831. In 1832, he purchased a small porcelain factory from Rausch to expand his business. Krister's heirs, Robert Hanschke and August Demter, inherited the business in 1869 upon the death of Carl. The new owners kept the original company name. In 1925, the company became a joint stock company and, in 1926, it was sold to Porcelain Factory Ph. Rosenthal and Company in Selb. Krister Porcelain Manufactory produced dinner services, coffee and tea sets, other table wares, and decorative pieces all in porcelain (Rontgen 1981:291,497; Cushion 1980:93; Hartman 1943:70,71).

Correlation:
A_1) 340.
A_2) 342.
A_3) 339.
A_4) 292.

nd Company (Fig. 101a$_1$-101a$_6$)

ecimens:
A_1) 6.
A_2) 3.
A_3) 1.
A_4) 1.
A_5) 1.
A_6) 2.
Silesia, Germany.
Company: 1845-1945.
Mark: A_1-A_6) 1909-1934.

pe: A_1-A_6) Porcelain.

ıd Portions
ted: A_1) 3 cup fragments: 1 rim, body and base; 2 body and base. Of these 3, 2 join to form 2 marks. 3 saucer fragments: 2 rim, body and base; 1 base. Of these 3, 2 join to form a total of 2 marks.

A_2) 3 small plate fragments: all rim, body and base. All join to form 1 mark.

A_3) 1 saucer fragment: rim, body and base.
A_4) 1 unidentifiable fragment: base.
A_5) 1 bowl fragment: body and base.
A_6) 2 unidentifiable fragments: both bases. Both join to form 1 mark.

cription: A_1) Green ink stamped; an eagle with opened wings. Beneath is printed the initials of the company. Below this, printed in an arc, is "ALTWASSER" and beneath this is the city of manufacture.

A_2-A_6) Green ink stamped; an eagle with opened wings. Beneath is printed the initials of the company. Also printed in an arc is the country of manufacture.

: C. Tielsch began his factory in 1845. He manufactured dinner services, coffee and tea sets, table china, decorative items, and hotel china all in porcelain. C. M. Hutschenreuther of Hohenberg purchased the majority of the stock in 1918. He then merged his firm with the Tielsch Company but continued to use the Tielsch marks until 1945 (Roentgen 1981:62,375,419; Cushion 1980:50; Chaffers 1912:503; Hartman 1943:72-73).

Correlation: A^1) 328.

A_2) 213.
A_3) 433.
A_4) 224.
A_5) 298.
A_6) N/A.

(Fig. 102a_1-102a_4)

ecimens: A_1) 21.
A_2) 2.
A_3) 1.
A_4) 1.
Germany.
Company: Unknown.
Mark: A_1-A_4) 1891 and after.

e: A_1-A_4) Porcelain.

ıd Portions
ed: A_1) 10 cup fragments: all body and base. Of thes 10, 4 join to form a total of 8 marks. 11 saucer fragments: 1 complete; 2 rim, body

and base; 8 bases. Of these 11, 2 join to form a total of 10 marks.

A_2) 2 saucer fragments: 1 rim, body and base; 1 base. Both join to form 1 mark.

A_3) 1 unidentifiable fragment: body and base.

A_4) 1 demitasse saucer fragment: rim, body and base.

:iption: A_1) Red ink stamped; the country of manufacture printed in a horizontal line. Sometimes the number "103" is printed beneath.

A_2) Red ink stamped; identical to A_1 but the number printed beneath is "39".

A_3) Red ink stamped; identical to A_1 but without the number.

A_4) Blue ink stamped; identical to A_3.

No information on the maker's mark or on the company could be located.

:orrelation: A_1) 280.

A_2) 373.

A_3-A_4) N/A.

(Fig. 103)

:cimens: 1.

Germany.

Company: Unknown.

Mark: 1891 and after.

:: Whiteware.

l Portions

:d: 1 unidentifiable fragment: base.

:iption: A partial mark; double stamped. 1) Green ink stamped. The country of manufacture printed in a horizontal line. 2) Blue hand painted. Either numbers or letters that are hand written.

No information on the maker's mark or on the company could be located.

:orrelation: N/A.

(Fig. 104a_1-104a_2)

cimens: A_1) 8.

A_2) 1.

Germany.

Company: Unknown.

Mark: 1891 and after.

: A_1-A_2) Porcelain.

Portions

d: A_1) 8 butter pat dishes: 6 rim, body, and base; 1 base. Of these 8, 2 join to form a total of 7 marks.

A_2) 1 small vase, toothpick, match holder, etc.: rim, body, and base.

iption: A_1) Green ink stamped; a crown. Printed

under the crown is a circle with a vertical line slightly piercing the underside and extending down. Beneath the circle the letter "H" is formed and it is superimposed on the vertical line.

A_2) Green ink stamped. The mark is identical to A_1, except there is no crown and the country of manufacture is printed in an arc under the figure.

No information on the maker's mark or on the company could be located.

relation: A_1) 432.
A_2) N/A.

(Fig. 105)

mens: 1.
Germany.
Company: Unknown.
Mark: 1891 and after.
Porcelain.

ortions
1 saucer fragment: rim, body, and base.

tion: Red ink stamped; a circle. Printed around the inner circumference is the country of manufacture preceded by "MANUFACTURED IN".
No information on the maker's mark or on the company could be located.

relation: N/A.

(Fig. 106)

mens: 1.
Germany.
Company: Unknown.
Mark: 1891 and after.
Porcelain.

ortions
1 unidentifiable fragment: base.

tion: Green ink stamped. Printed in an arc is the word "MADE". In a horizontal line beneath is printed the word "IN". Printed in an arc, which completes the circular design, is the country of manufacture.
No information on the maker's mark or on the company could be located.

relation: N/A.

(Fig. 107)

mens: 1.
Germany.
Company: Unknown.
Mark: 1891 and after.

Porcelain.

ons

1 small plate fragment: rim, body, and base.

: Impressed in clay. Printed in a horizontal line, all in capitals, is the country of manufacture.
No information on the maker's marks or on the company could be located.

tion: 404.

JAPAN

(Fig. 108a-108h$_3$)

: A) 1.
B1) 7.
B2) 2.
C1) 3.
C2) 1.
D) 1.
E1) 1.
E2) 1.
F) 1.
G) 2.
H1) 2.
H2) 2.
H3) 2.
Japan.
Company: 1891 to present.
Mark A-F): 1891-1921.
G-H3): 1921 and after.
A-H3): Porcelain.

ons

A) 1 serving platter fragment: rim, body, and base.
B1) 7 small plate fragments: 2 rim, body, and base; 2 body and base; 3 bases. Of these 7, 4 join to form a total of 5 marks.
B2) 1 cup fragment: body and base. 1 unidentifiable: body and base.
C1) 2 cup fragments: 1 body and base; 1 base. 1 small plate or ringless saucer fragment: rim, body, and base.
C2) 1 cup fragment: body and base.
D) 1 cup fragment: rim, body, and base.
E1) 1 large plate fragment: base.
E2) 1 pedestal cup fragment: body and base.
F) 1 plate fragment: body and base.
G) 2 plate fragments: 1 rim, body, and base; 1 base. Both join to form 1 mark.
H1) 1 small plate fragment: rim, body, and base. 1 bowl fragment: body and base.

H2) 2 plate fragments: 1 rim, body, and base; 1 body and base.
H3) 2 plate fragments: 1 rim, body, and base; 1 base. Both join to form 1 mark.
A) Partial mark, green ink stamped. A center crown, red ink stamped. Printed in an arc above the crown is "HAND PAINTED".
B1) Blue decal. In the center, the sun rising on the horizon. Printed above in an arc is "HAND PAINTED". Printed below is the location of manufacture in Japanese.
B2) Blue decal. Identical to B1 except that the words "HAND PAINTED" are written instead of printed.
C1) Blue decal. In the center, a laurel enclosing a capital "M". Printed above in an arc is "Hand Painted" and printed below in an arc is the location of manufacture in Japanese.
C2) Green decal; identical to C1.
D) Blue ink stamped; in the center a circular design, wheel-like. Printed above in a horizontal line is "Hand Painted". Printed beneath in an arc is the location of manufacture in Japanese.
E1) Green decal. A stylized circular design. Inside the circle are the letters "R" and "C" intertwined. Printed around the outer circumference is "Hand Painted"; "NORITAK"; and the location of manufacture in Japanese.
E2) Green decal; identical to E1.
F) Green decal. In the center is a laurel enclosing a capital "M". Printed above in an arc is the word "NORITAKE" and printed below in an arc is the location of manufacture in Japanese. Below this are two hroizontal lines of Japanese characters and numbers.
G) Green decal. In the center, a laurel enclosing a capital "M". Printed above in an arc is the word "NORITAKE". Printed below in a norizontal parallel linear fashion is "MADE IN JAPAN"; "DESIGN PAT." and finally "APPLIED FOR".
H1) Green decal. In the center is a laurel enclosing a capital "M". Printed above in an arc is the work "NORITAKE" and printed below in an arc is "HAND PAINTED". Beneath, printed in a horizontal line, is "MADE IN JAPAN".
H2) Red decal; identical to H1.
H3) Red decal; identical to H1.
Japan was opened to world trade in 1865. New art and life styles of the West were at this time introduced. The Japanese began to manufacture ceramics that appealed to the

taste of the West, and flooded the market with ceramic wares. In 1890, the McKinley Tariff Act was passed for the protection of manufactures in the United States. By 1891, all goods being imported had to be visibly marked with the name of the country where the goods were produced. Ceramic ware from Japan was stamped with the name NIPPON which is Japan in Japanese. In addition to the word NIPPON, the backstamp may contain the name of the kiln, the potter, a symbol representing or the name of the family, names of towns, sections or provinces of Japan, exporter or importer marks, etc. Pottery was marked like this until 1921 when another law was passed stating that Nippon was not an English word and thusly should no longer be used in the maker's mark. At this time "Made in Japan" was printed in substitution. The wares produced span the entire range of items from dinner services to personal and decorative articles, all in porcelain. Noritake still produces ceramics today but the concentration is mainly in dinner services (Van Patten 1979:3-45).

n: A) 221.
B1) 383.
B2) N/A.
C1) 260.
C2) N/A.
D) 308.
E1) N/A.
E2) 209.
F) 305.
G) 222.
H1) 320.
H2) 337.
H3) 307.

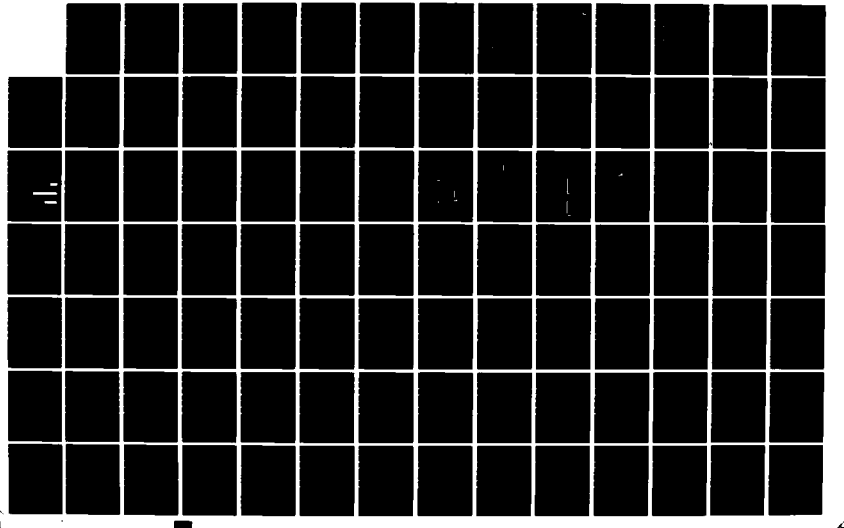
109)

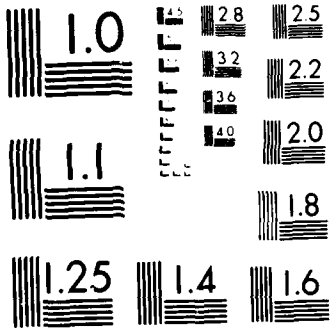
1.
Japan.
Company: Unknown.
Mark: 1891 and after.
Porcelain.

1 saucer fragment: rim, body, and base.
Black ink stamped. Printed in an arc is "HAND PAINTED". Below, printed in a horizontal line is "T () CO" and finally printed in an arc to complete the circular design is "NAGUIA-JAPAN".
No information on the maker's mark or on the

AD-A153 688 ANALYSIS OF ARCHAEOLOGICAL GEOLOGICAL AND HISTORICAL ARTIFACTS AND DOCUME..(U) CARNEGIE MUSEUM OF NATURAL HISTORY PITTSBURGH PA J B RICHARDSON MAR 85 5/10

UNCLASSIFIED DACW59-81-C0023 F/G 5/6 NL





MICROCOPY RESOLUTION TEST CHART

company could be located.

Internal Correlation: 335.

Unknown (Fig. 110)

No. of Specimens: 1.
Location: Japan.
Date: Company: Unknown.
Mark: 1981 and after.
Paste Type: Porcelain.
Shapes and Portions Represented: 1 saucer fragment: rim, body, and base.
Mark Description: Blue decal; arranged in horizontal parallel linear fashion is "MADE IN" on one line and "JAPAN" on another line.
Comments: No information on the maker's mark or on the company could be located.
Internal Correlation: 391.

Unknown (Fig. 111)

No. of Specimens: 3.
Location: Company: Unknown.
Mark: 1891 and after.
Paste Type: Porcelain.
Shapes and Portions Represented: 3 saucer fragments: all rim, body, and base. All 3 join to form 1 mark.
Mark Description: Red ink stamped; a flower-like design with "T4" printed inside. Printed beneath in a horizontal parallel linear fashion; on the first line "MADE IN"; on the second line "JAPAN".
Comments: No information on the maker's mark or on the company could be located.
Internal Correlation: 444.

Unknown (Fig. 112)

No. of Specimen: 1.
Location: Japan.
Date: Company: Unknown.
Mark: 1891 and after.
Paste Type: Porcelain.
Shapes and Portions Represented: 1 saucer fragment: body and base.
Mark Description: Red ink stamped. Country of manufacture is printed in a horizontal line.
Comments: No information on the maker's mark or on the company could be located.
Internal Correlation: 390.

Unknown (Fig. 113)

No. of Specimens: 1.
Location: Japan.
Date: Company: Unknown.
Mark: 1891 and after.
Paste Type: Porcelain.
Shapes and Portions Represented: 1 unidentifiable fragment: base.
Mark Description: Blue ink stamped; only a partial mark. Printed in a horizontal line is "N JAPAN".
Comments: No information on the maker's mark or on the company could be located.
Internal Correlation: N/A.

IMPORTERS

Charles Ahrenfeldt and Son Importer (Fig. 114a$_1$-114a$_2$)

No. of Specimens: A1) 2.
A2) 1.
Location: New York, New York.
Date: Company 1880-1910.
Mark A1-A2) 1886-1910
Paste Type: A1-A2) Porcelain.
Shapes and Portions Represented: A1) 2 small plate fragments: 1 rim, body and base; 1 base. Both join to form 1 mark.
A2) 1 unidentifiable fragment: base.
Mark Description: A1-A2) Red ink stamped; a shield with the region and country of manufacture printed cutting across at an angle from right to left. In the upper corner of the shield is printed a "C" and in the lower right is printed an "A".
Comments: Charles Ahrenfeldt was an importer of Bohemian and German porcelain. In 1894, he established a porcelain decorating shop in Altrohlau, Bohemia. Like other importers, Ahrenfeldt applied his mark to the wares instead of the factories which produced the blanks. He also owned a factory in Limoges, France, which, in addition to decorating the blanks, also manufactured them. Included in the items that were decorated by his factory, were dinner services, coffee and tea sets, and decorative pieces. In 1910, Hermann C. Kupper took over the operations at which time the decorating factory at Altrohlau went out of business (Rontgen 1981:196, 373, 454; Cushion 1980:31; Macdonald-Taylor 1967:178; Hartman 1943:76-7).
Internal Correlation: A1) 306.
A2) N/A.

Bawo and Dotter Importer (Fig. 115)

No. of Specimens:	1.
Location:	New York, New York.
Date:	Company 1864-1914. Mark 1884-1914.
Paste Type:	Porcelain.
Shapes and Portions Represented:	1 saucer fragment: body and base.
Mark Description:	Red ink stamped. A shield with a lion printed in the center. Printed above the shield is "CARLSBAD" and printed below in a linear arcing parallel fashion is first the word "CHINA" followed by the word "AUSTRIA".
Comments:	Bawo and Dotter began in New York City as an importer of porcelain, dolls and dolls' heads. In 1883, the firm acquired a porcelain factory and decorating shop in Fischern, Bohemia, to supply the American market. The goods that were manufactured in Fischern carry the marks of the Bawo and Dotter firm. This factory manufactured coffee and tea sets, decorative pieces, gift items, and collector's pieces, all in porcelain (Rontgen 1981:45, 401, 454; Hartman 1943:76-7).
Internal Correlations:	N/A.

P. H. Leonard Importer (Fig. 116)

No. of Specimens:	A1) 1. A2) 2.
Location:	New York, New York.
Date:	Company 1889-1908. Mark A1-A2) 1890-1908.
Paste Type:	A1-A2) Porcelain.
Shapes and Portions Represented:	A1) 1 small plate fragment: rim, body and base. A2) 2 unidentifiable fragments: both bases. Both join to form 1 mark.
Mark Description:	A1-A2) Green ink stamped; a crown with "VIENNA" stamped underneath. Under this are two shields that slant towards each other. Printed beneath this is "AUSTRIA".
Comments:	P.H. Leonard ran a shop that imported Bohemian porcelain from various factories. The Leonard mark was used in place of the factory mark. Dinner services, coffee and tea sets, decorative pieces, and other table china, all of porcelain, carried the Leonard mark. After 1908, the business was carried on for a few more years under the name of Anna B. Leonard (Rontgen 1981:107, 455; Hartman 1943:76-7).
Internal Correlation:	A1) 408. A2) N/A.

UNIDENTIFIABLE MAKER'S MARKS

Figure No.		
116	Blue ink stamped.	
117	Red; hand-painted number and letter sequence.	
118	Blue ink stamped.	
119	Black ink stamped.	
120	Gold; hand-painted numbers.	Internal Correlation: 427.
121	Blue ink stamped.	
122	Blue ink stamped.	
123	Blue ink stamped.	
124	Black ink stamped.	
125	Gold ink stamped.	
126	Green ink stamped.	
127	Green ink stamped.	
128	Green ink stamped.	
129	Gold ink stamped.	
130	Color not determined due to fading.	
131	Gold; hand-painted numbers.	
132	Impressed in clay.	
133	Blue ink stamped.	
134	Blue ink stamped.	
135	Red ink stamped.	Internal Correlation: 443.
136	Gold, hand painted.	
137	Impressed in clay.	
138	Black ink stamped.	
139	Blue ink stamped.	
140	Red; hand-painted numbers.	
141	Green ink stamped.	
142	Blue ink stamped.	
143	Blue ink stamped.	
144	Blue ink stamped.	
145	Green ink stamped.	
146	Green ink stamped.	
147	Gold; hand-painted number.	
148	Impressed in clay.	
149	Gold ink stamped.	
150	Green ink stamped.	
151	Brown ink stamped.	
152	Gold; hand painted.	
153	Blue ink stamped.	
154	Red ink stamped.	
155	Black ink stamped.	
15o	Brown; hand-painted number and letter sequence.	Internal Correlation: 309.
157	Green ink stamped.	
158	Black ink stamped.	
159	Black ink stamped.	
160	Green; hand-painted letters.	Internal Correlation: 382.
161	Gold; hand-painted numbers.	
162	Red ink stamped.	Internal Correlation: 420.
163	Green; hand-painted numbers.	

U. S. A.



Fig. 1



Fig. 2



Fig. 3



Fig. 4a

FLORENCE
COOK POTTERY CO.

Fig. 4b



Fig. 4c



Fig. 5



Fig. 6



Fig. 7



Fig. 8



Fig. 9



Fig. 10a



Fig. 10b



Fig. 10c

O. P. CO.
CHINA
SEMI-VITREOUS

Fig. 11a

O.P.CO.
SYRACUSE
CHINA

49

Fig. 11b



Fig. 12



Fig. 13



Fig. 14



Fig. 15



Fig. 16



Fig. 17

E L P. W.
WACO. CHINA

Fig. 18



Fig. 19



Fig. 20



Fig. 21



Fig. 22a

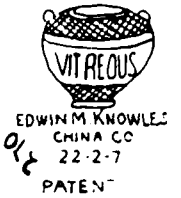


Fig. 22b



Fig. 22c



Fig. 22d



Fig. 23a



Fig. 23b



Fig. 23c

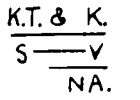


Fig. 23d

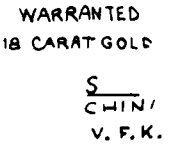


Fig. 23e



Fig. 24a

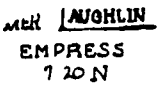


Fig. 24b



Fig. 24c



Fig. 25



Fig. 26



Fig. 27



Fig. 28a

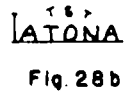


Fig. 28b



Fig 28c



Fig 29a1



Fig 29a2



Fig. 29a3



Fig. 30



Fig. 31a

Blue Bird Dinnerware

esign Patented
U. S. Pat. Office
Ser. N 52765



Fig. 31b

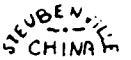


Fig. 32a



Fig. 32b



Fig. 33



Fig. 34a



Fig. 34b



Fig. 35



Fig. 36



Fig. 37a

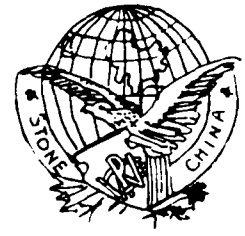


Fig. 37b

EUROPE



Fig. 38a



Fig. 38b



Fig. 38c1



Fig. 38c2



Fig. 39a-b



Fig. 39c



Fig. 39d



Fig. 40

AUSTRIA

Figs. 40 & 41



Fig. 42



Fig. 43



Fig. 44



Fig. 45a



Fig. 45b



Fig. 45c



Fig. 46



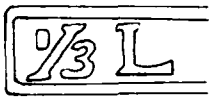


Fig. 47



Fig. 48

Czecho-
Slovakia

Fig. 49



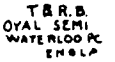


Fig. 50



Fig. 51

DAVISON & SON
ENGLAND

Fig. 52



Fig. 53a



h7699
K

Fig. 53b



Fig. 54



Fig. 55a



Fig. 55b1



Fig. 55b2



ORCHID

Fig. 55b3

POPPY
N.W.P.
ENGLAND

Fig. 56



Fig. 57a



Fig. 57b



Fig. 58



Fig. 59



Fig. 60a1-a2



Fig. 61a1



Fig. 61a2

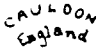


Fig. 62



Fig. 63a



Fig. 63b



Fig. 63c



Fig. 64



Fig. 65



Fig. 66



Fig. 67



Fig. 68a



Fig. 68b



Fig. 69a



Fig. 69b

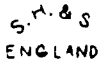


Fig. 70a



Fig. 70b



Fig. 71a



Fig. 71b



KELMSCOTT
R#N° 396132

Fig. 72



Fig. 73



Fig. 74a



Fig. 74b



Fig. 74c

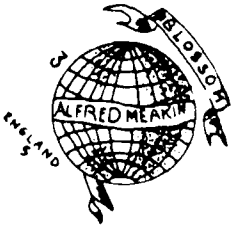


Fig. 75



Fig. 76



Fig. 77



Fig. 78



Fig. 79



Fig. 80



Fig 81



Fig. 82



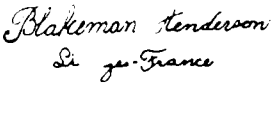






Fig. 85

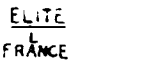


Fig 83a1-a3

Fig 84



F[illegible] 2



Fig 87a



Fig 87b1-b2



Fig 88a



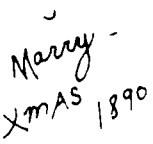
WOGUÉRIN & CO
Limoges
FRANCE

Fig. 88b



H&C°
L

Fig 89a1-a2



H&C°
DEPOSE

Fig. 89b



Fig. 89c1-c2
Fig. 89e2



Fig. 89d1-d5
Fig. 89e1



Fig. 90a



Fig 90b1-b3



Fig. 90c



MADE EXPR
JOS HORNE
PITTSBURGH PA



MADE EXPRESSLY FOR
JOS HORNE Co
PITTSBURGH PA

Fig 91a2

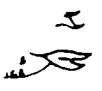


Fig. 91a3



Fig 92a



Fig. 91a1

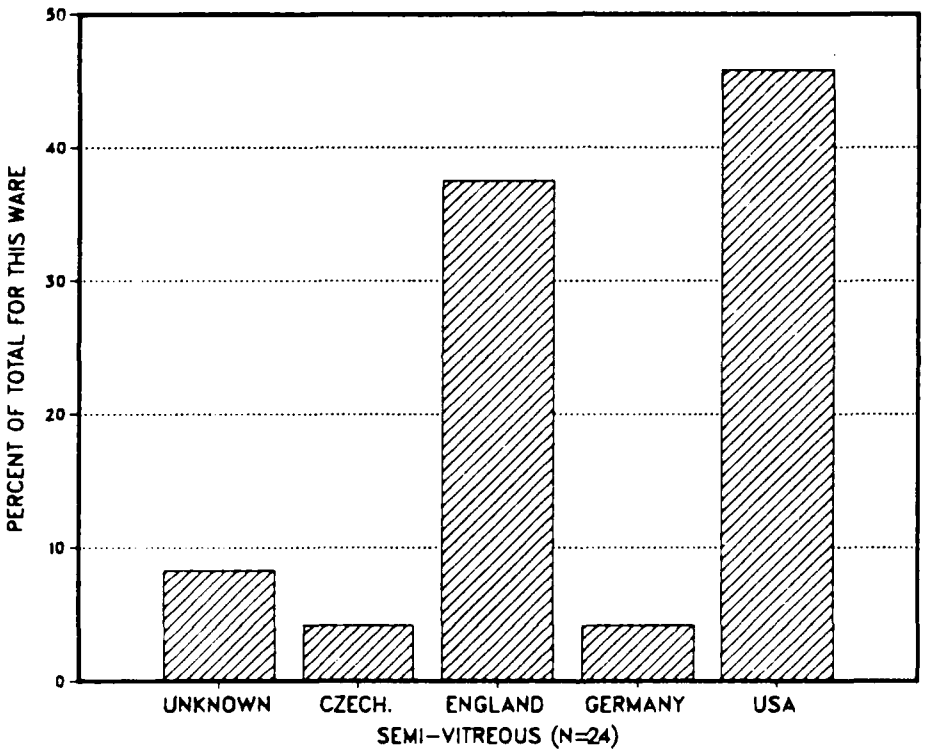
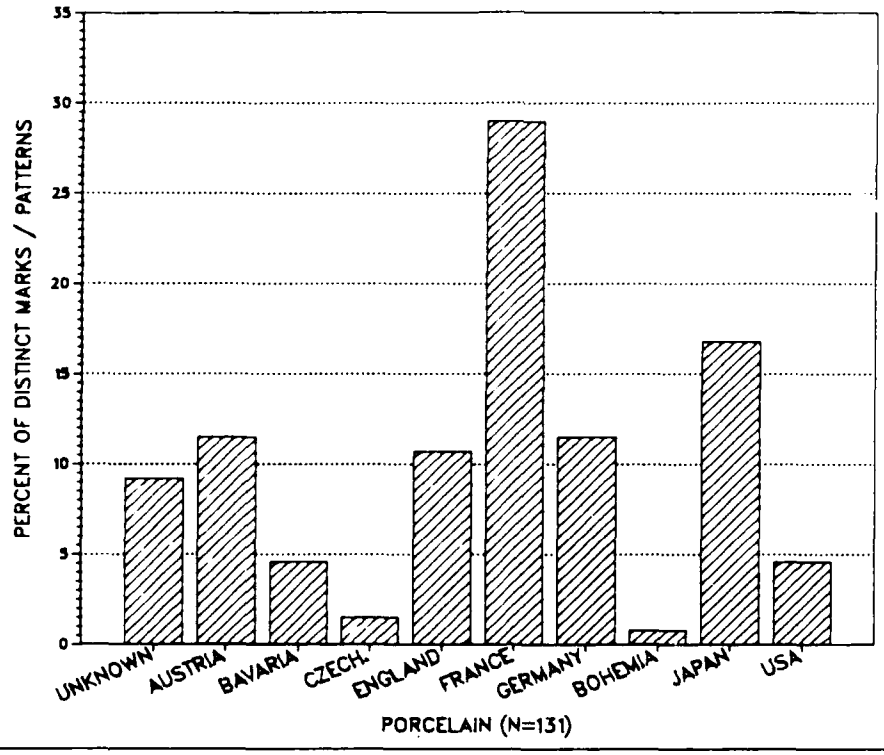

NATIONAL ORIGINS OF ANALYZED CERAMICS – C
PERCENT OF TOTAL FOR THIS WARE
50
40
30
20
10
0
UNKNOWN
CZECH.
ENGLAND
GERMANY
USA
SEMI–VITREOUS (N=24)

Figure 205



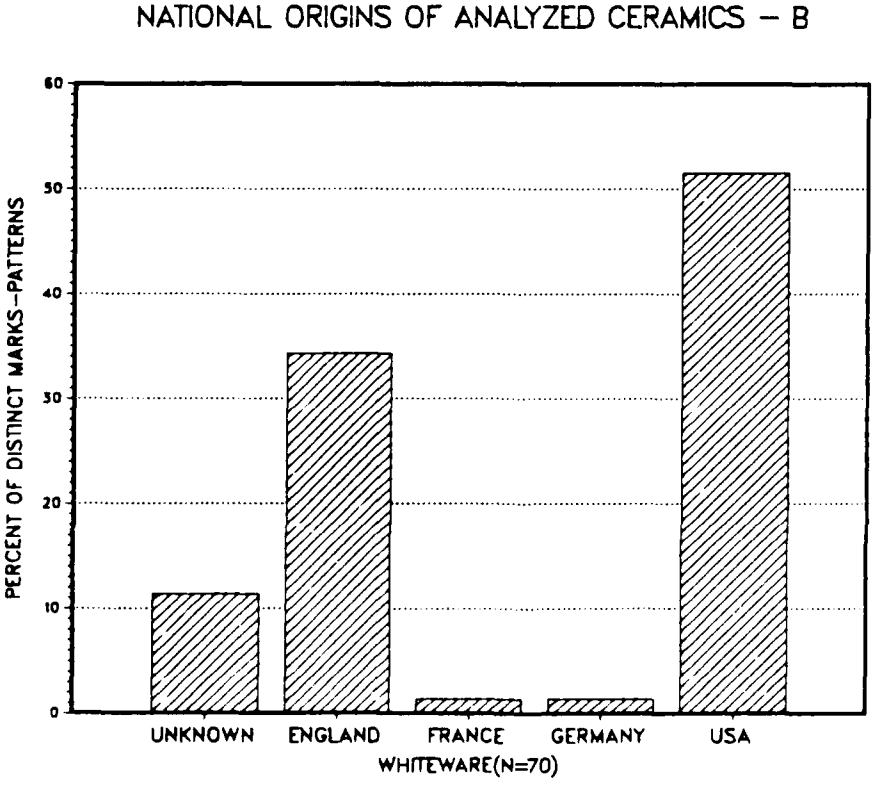


Figure 204 A and B

CERAMIC MAKERS' MARKS

PASTE PERCENTAGES

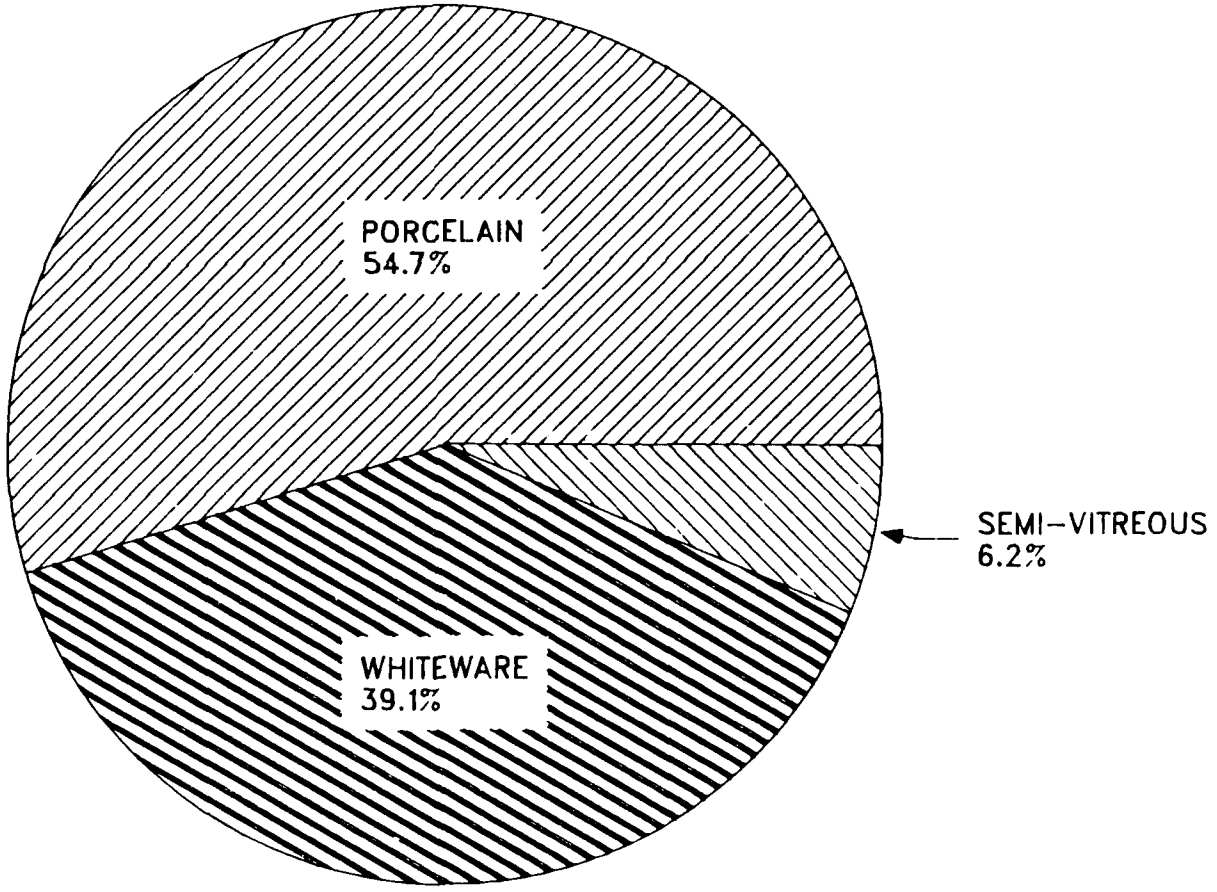
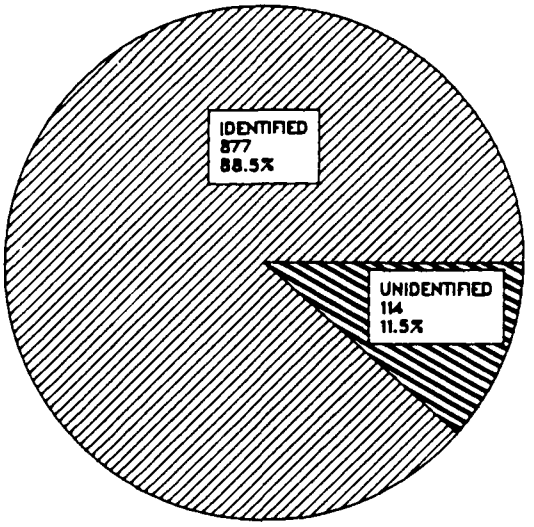


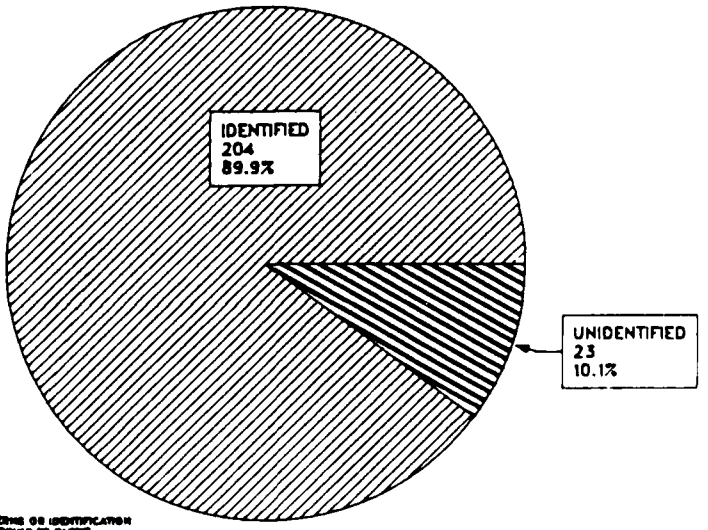
Figure 203

PERCENT OF MAKER'S MARKS FRAGMENTS IDENTIFIED



(1 UNIT PER MARK FRAGMENT)

IDENTIFIED CERAMIC MAKER'S MARKS
(Separate Marks or Patterns)



(MARK FRAGMENTS WITHOUT ASSOCIATED PATTERNS OR IDENTIFICATION HAVE BEEN GROUPED INTO SINGLE UNITS ACCORDING TO PASTE)

(1 UNIT PER DISTINCT PATTERN OR MARK)

Figure 202

suggests that Pittsburgh was economically active during the time of occupation. Pittsurgh, being less that ten miles south of the site, is the largest metropolitan area to serve the needs of the Neville House residents.

proportions than that of the French set.

Whiteware is best represented from the United States, with 50.7% of the total. This is explained by the emergence and development of the ceramic industry in this country. In the early to mid-1800's the majority of this ceramic ware was produced along the east coast, particularly in New Jersey. After the civil war, East Liverpool, Ohio, became the largest domestic producer (Gates, 1981:1). This is reflected in the Neville House data set, with Ohio producing 55.5% of the total American whiteware ceramics and New Jersey second with 24.1%. The only state not represented in whiteware production is New York. Ohio and New Jersey also produced porcelain and semi-vitreous wares, but in lesser quantities. It should be noted that an entire dinner set is not included in the whiteware vesels. Single pieces such as pitchers are most prevalent in this category (Figure 204_b).

Semi-vitreous is the last category represented. Only three European countries (England, Germany, and Czechoslovakia) are represented. The United States, again, has the majority of marks with 45.8%. As noted above, Ohio, New Jersey, and New York are the three states producing semi-vitreous ware. New Jersey has 38.5% of these ceramics. Unlike whiteware, the vessels are bathroom sets including items such as basins and ewers (Figure 205_c).

The overall assemblage of marks dates from the late 1800's to approximately 1930, though there are a few early European marks (mid 1700's to 1825). The first United States date is from the early to mid-1800's. Both European and United States regions show the same basic curve of frequency (Figure 206 and 207).

When the countries are plotted in the same time blocks as the overall geographic region, the same frequency curve results. France and Bavaria are the countries in the earlier time blocks. The United States, England, and France (and to a lesser extent Austria, Germany, and Czechoslovakia) peak between 1851 and 1875. A sharp decrease is seen in Germany and Austria (to a lesser extent France, England, and the United States) between 1925 and 1950. This probably reflects the world economic situation during World War II, with stoppage in ceramic production and trade with European countries probably a factor.

When America is plotted in the time block, the evolution of the ceramic industry is easily seen. Ohio peaks between 1901 and 1925, while New Jersey declines. Most of the ceramic manufacturers for all regions began production in the time period between 1876 to 1900, and ceased in 1901 to 1925.

The Neville House ceramics maker's mark assemblage shows several things. One is the fluctuation of the ceramic industry over a short time period. Further indepth economic research is needed at both local and regional levels to better explain the rise and fall of the ceramic industry. The second is that the occupants of the Neville House purchased new ceramic wares as they became available, supporting innovations and improvements in the industry. Lastly, the high percentage of imported wares and the later increase in goods from East Liverpool, Ohio

CONCLUSIONS

The 991 analyzed fragments of the ceramic maker's mark category consisted of 877 (88.5%) fragments that are identifiable and 114 (11.5%) that are not. The fragments represent 204 (89.9%) individual identifiable marks and 23 (10.1%) individual unidentifiable marks (Figure 202). The majority of the unidentifiable marks are handpainted numbers or symbols, but unidentified transfer and decal marks are present as well.

Maker's marks are represented most frequently on porcelain, followed by whiteware, and lastly semi-vitreous (Figure 203). In order for the data to be computerized, some of the fragments were lumped together; for example all fragments that were of the same paste type, i.e. porcelain, and only identified to a country of manufacturer, i.e. England, are counted as one even if they were represented by 10 separate fragments. The assemblage also includes one redware and one stoneware fragment with a maker's mark. Since each category is only represented by one piece, the percentage is so slight (0.4%) that only the designation of identifiable/unidentifiable and paste type are used.

The high number of marks on porcelain can be accounted for in several ways. First, the residents of the house were wealthy for the standards of the day and could afford ceramics of higher quality. The second factor relates to the fact that large quantities of the same dinnerware pattern were deposited in the dump at one time. For example, there are a total of 286 marks or fragments of marks from France. Of these, 116 can be attributed to the Haviland Company from Limoges. But of these 116, 88 marks or fragments of such are from the same pattern: number 201. Almost an entire dinner set is represented: cups, saucers, varying sizes of plates and bowls, serving dishes, platters, and a butter dish. Most of the pieces are from the central portion of the dump (N10W125-W115 and N15W125-W120) and it is likely that deposition occured in one episode. Again, numerous speculations can be made: the set was no longer "complete" enough to be useful, the owner purchased a new set of china, or new occupants discarded items left by previous residents. Whatever the reasons, the dumping of pattern number 201 greatly increased the percentage of maker's marks on porcelain. Another major contributor to this category is Asia. All 25 marks or fragments of marks from Japan were on procelain wares. The maker's marks on the porcelain assemblage are predominantly from the seven European countries, Japan, and the unknown category, with only a slight percentage from the United States (Figure 204_a).

There is a dramatic change in manufacture location in the maker's marks on whiteware. Europe is represented by only three countries (England, France, and Germany). France produced only 1.4% of the maker's marks, while England is the major source with 35.2%. The high percentage of whiteware from England is comparable to the high percentage of porcelain from France. Like pattern number 201 from the latter country, pattern number 15 from Bishop and Stonier of Hanley, England, is represented by 53 marks or fragments thereof. Its main concentration is also from the center of the dump and once more could indicate a single dumping episode. This pattern again consists of an entire service of dishes, but in differing

	ɜen ink stamped.	
	ɜd; hand-painted letters.	Internal Correlation: 214.
	,lue ink stamped.	
	Black ink stamped.	Internal Correlation: 55.
	Brown ink stamped.	
	Black ink stamped.	
)	Color not determined due to burning.	
1	Green ink stamped.	Internal Correlation: 57.
72	Green ink stamped.	
,73	Green ink stamped.	Internal Correlation: 16.
174	Brown; hand-painted numbers.	Internal Correlation: 395.
175	Black ink stamped.	
176	Green ink stamped.	
177	Black ink stamped.	
178	Brown ink stamped.	Internal Correlation: 75.
179	Blue ink stamped.	
180	Brown ink stamped.	
181	Red; hand-painted numbers.	
182	Blue ink stamped.	
183	Gold ink stamped.	
184	Black ink stamped.	
185	Silver ink stamped.	Internal Correlation: 446.
186	Black ink stamped.	
187	Blue ink stamped.	Internal Correlation: 51.
188	Green and brown decal.	Internal Correlation: 212.
189	Blue ink stamped.	Internal Correlation: 54.
190	Black ink stamped.	
191	Stamped in a brass fitting on the base.	
192	Gold ink stamped.	
193	Gold; hand-painted numbers.	Internal Correlation: 52.
194	Red; hand written.	Internal Correlation: 250.
195	Red; hand written.	Internal Correlation: 442.
196	Red; hand written.	
197	Red; hand written.	Internal Correlation: 392.
198	Blue ink stamped.	Internal Correlation: 277.
199	Red; hand written.	Internal Correlation: 441.
200	Blue; hand written.	Internal Correlation: 424.



Fig. 195



Fig. 196



Fig. 197



Fig. 198

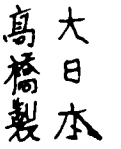


Fig. 199

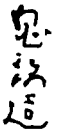


Fig. 200



Fig. 201



Fig. 171



Fig. 172



Fig. 173



Fig. 174



Fig. 175



Fig. 176



Fig. 177



Fig. 178



Fig. 179



Fig. 180



Fig. 181



Fig. 182

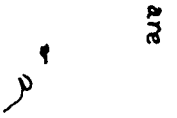


Fig. 183

KAT GOLD

Fig. 184



Fig. 185



Fig. 186



Fig. 187

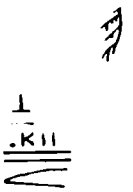


Fig. 188



Fig. 189



Fig. 190



Fig. 191

MANNING BOWMAN & CO

Fig. 192



Fig. 193

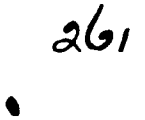


Fig. 194



Fig. 144



Fig. 145



Fig. 146



Fig. 147



Fig. 148



Fig. 149



Fig. 150



Fig. 151

Fig. 152



Fig. 153



Fig. 154



Fig. 155



Fig. 156



Fig. 157



Fig. 158



Fig. 159



Fig. 160



Fig. 161



Fig. 162



Fig. 163



Fig. 164

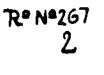


Fig. 165



Fig. 166



Fig 167



Fig. 168

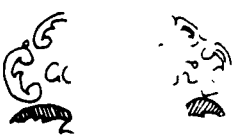


Fig. 169



Fig. 170

UNIDENTIFIED

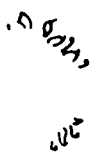


Fig. 117

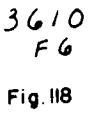


Fig. 118



Fig. 119



Fig. 120



Fig. 121

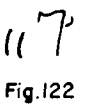


Fig. 122

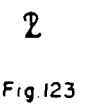


Fig. 123



Fig. 124



Fig. 125



Fig. 126



Fig. 127

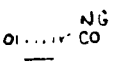


Fig. 128



Fig. 129



Fig. 130

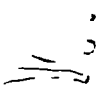


Fig. 131



Fig. 132



Fig. 133

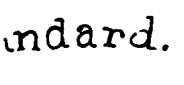


Fig. 134



Fig. 135



Fig. 136

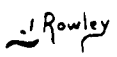


Fig. 137



Fig. 138



Fig. 139

Fig. 140



Fig. 141



Fig. 142



Fig. 143

ASIA



Fig. 108a



Fig. 108 b1



Fig. 108b2



Fig. 108c1-c2



Fig. 108d



Fig. 108e1-e2



Fig. 108 f



Fig. 108g



Fig. 108h1-h3

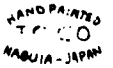


Fig. 109



Fig. 110



Fig. 111



Fig. 112

Fig. 113

IMPORTERS



Fig. 114 a1 - a2



Fig. 115



Fig. 116



Fig. 92 b



Fig.93a





Fig.94a



Fig.94b



Fig.94c



Fig.93b



Fig. 95



Fig.96



Fig. 97 a



Fig. 97 b



Fig. 98

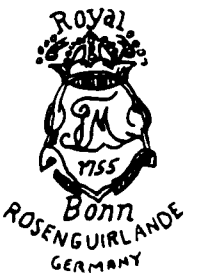


Fig. 99



Fig.100a1-a4



Fig.101 a1



Fig.101a2-101a6



Fig.102a1



Fig.102a2



Fig.102 a3 - a4

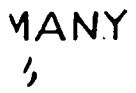


Fig.103



Fig.104a1



Fig.104a2



Fig. 105

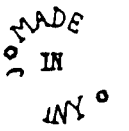


Fig. 106

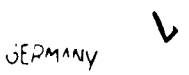


Fig. 107

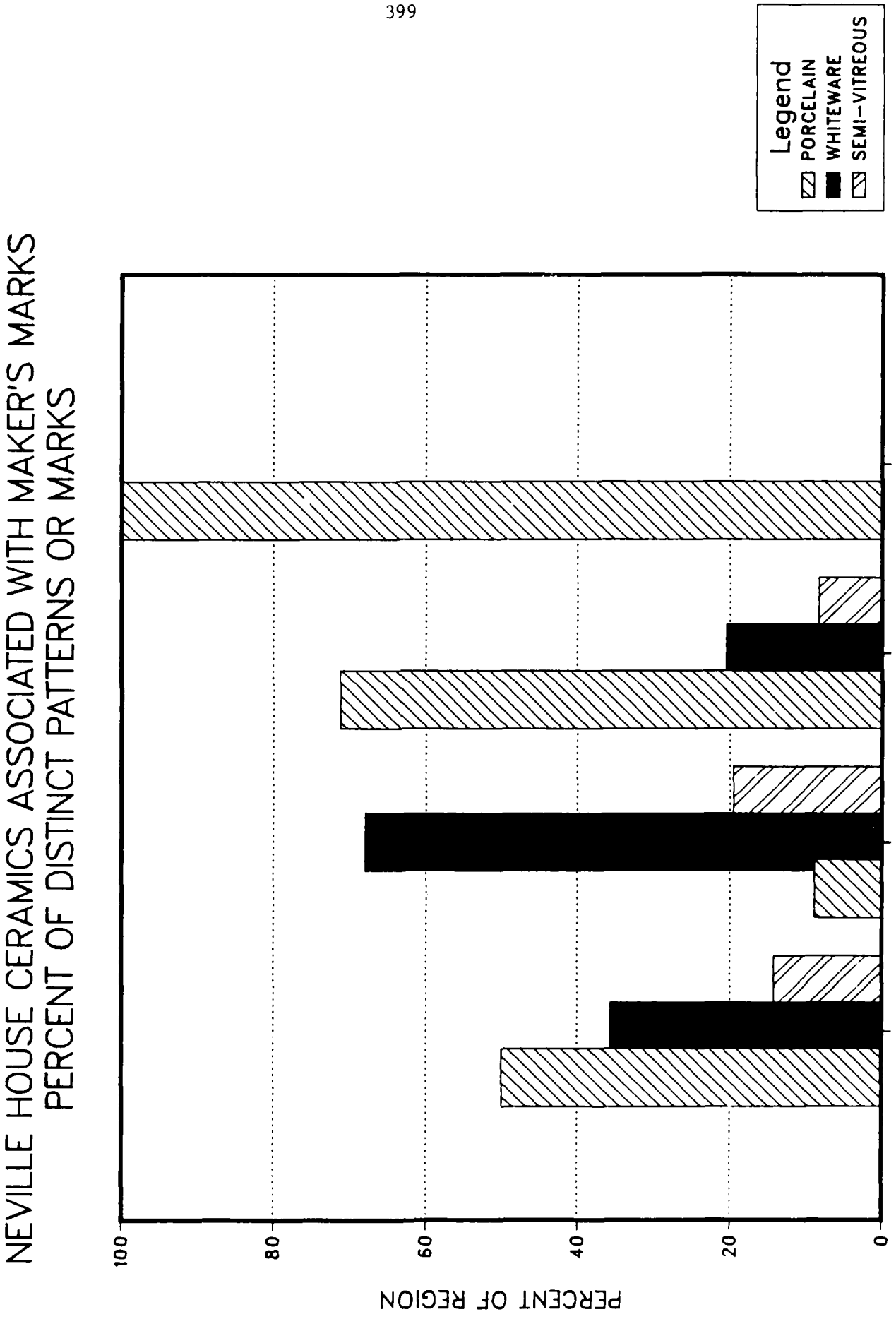

NEVILLE HOUSE CERAMICS ASSOCIATED WITH MAKER'S MARKS
PERCENT OF DISTINCT PATTERNS OR MARKS
Legend
PORCELAIN
WHITEWARE
SEMI-VITREOUS
ASIA
EUROPE
USA
UNKNOWN
0
20
40
60
80
100
PERCENT OF REGION

Figure 206

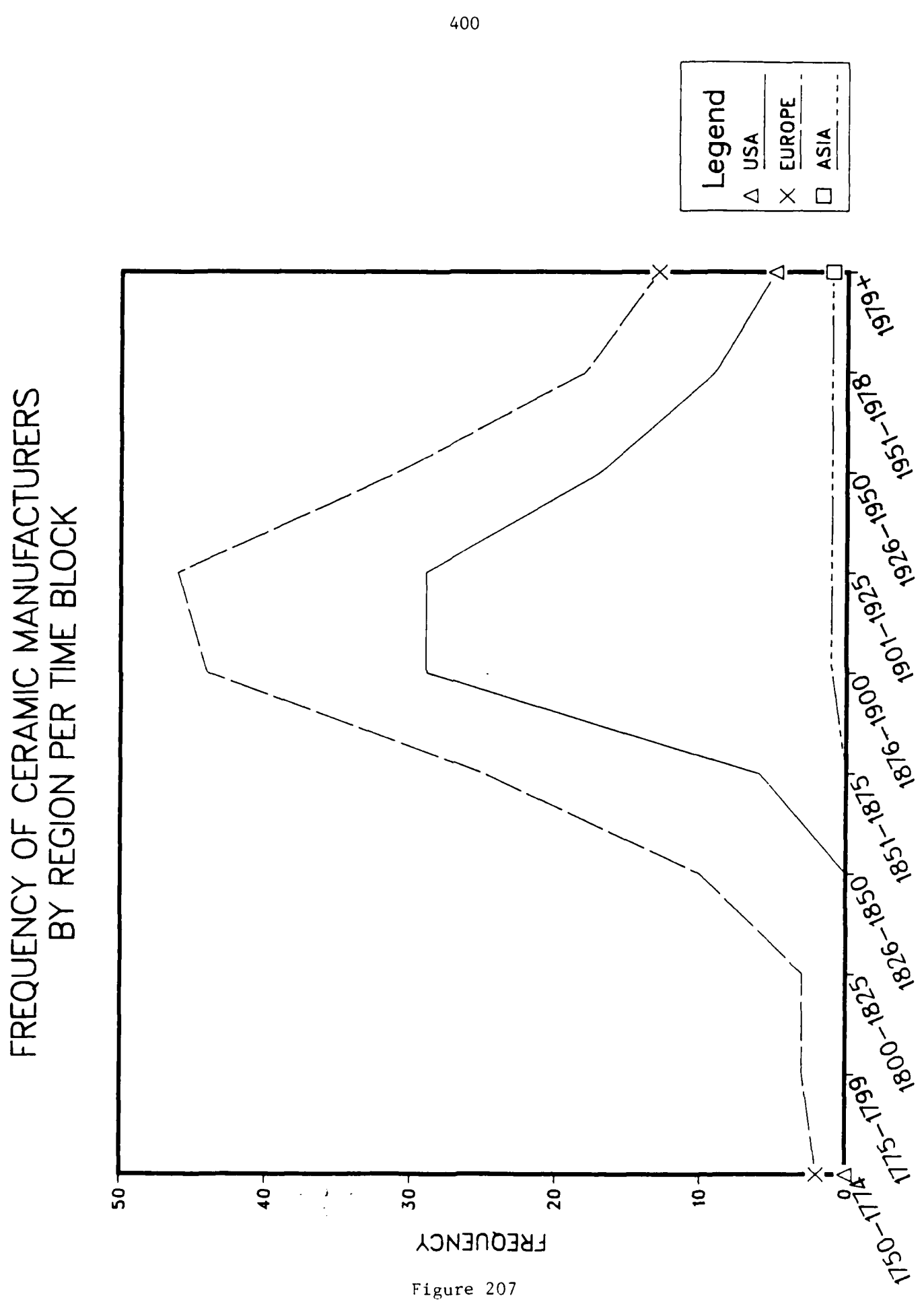

FREQUENCY OF CERAMIC MANUFACTURERS
BY REGION PER TIME BLOCK
Legend
USA
EUROPE
ASIA
FREQUENCY
0
10
20
30
40
50
1750-1774
1775-1799
1800-1825
1826-1850
1851-1875
1876-1900
1901-1925
1926-1950
1951-1978
1979+

Figure 207

INTRODUCTION TO GLASSWARE

by

Robert Winters

Glass is one of man's most indestructible products. He has been fashioning objects from it for over four thousand years. Glass, due to its initial liquid state, can be made into an infinite variety of products. Glass artifacts, their proliferation and sophistication, have provided many insights into the daily regime of ancient civilizations. Even the smallest bits of glass can yield information as to the manufacturing technique and the probable use of the object as a container or utilitarian object. Deposition of glass objects in a trash midden also reflects the preferences of the depositor. This section deals with the subsequent breakdown and analysis of the glassware from Neville House.

DEFINITIONS

The breakdown of Neville House glassware into the key elements used in their analysis is as follows:

Bottle - A narrow mouth container usually with a long neck. Bottles are more closely associated with liquid substances, than are jars, hence the need for a narrow mouth. Bottles may also contain powders that are used in measured amounts. Any fragments such as neck or rim sherds that exhibit a narrow mouth would be considered a bottle.

Jar - A wide mouth container usually without a neck. Jars are usually associated with semi-solid substances, aggregates of larger solids surrounded by liquids or dried substances, hence the need for a wide mouth container. Any wide mouth rim sherd would be considered a jar part.

Common Containers - Those bottles and jars massed produced with limited surface decoration, to be emptied of their contents and discarded.

Decorated Containers and Other Glassware - A specially decorated item be it a bottle, jar, stemware goblet, candy dish, vase, decanter, figrine, lamp, etc..

Miscellaneous Glassware - An object without special decorations of a more utilitarian nature. Generally not a bottle or a jar, these items would be a vial, eye dropper, hypodermic syringe, marble, eye glass, light bulb, mirror etc. Also undecorated items such as: lamps, water glasses, kitchen ware etc.

Window Glass - Any sherd that is very flat and thin with a characteristic light green tint through which a basically undistorted image can be clearly seen.

Glass Color - Color played a significant role in the determination of the catagories. Glass colors are created by the addition of mineral oxides to

the basic glass mix of sand, soda lime and potash. Cobalt in varying amounts produces dark blue to cornflower blue. Light blue or aqua is the natural color of glass. Various shades of green are produced by the addition of chromium or nickle, amber with iron, red with gold or copper, yellow with uranium and amethyst with manganese. Clear glass is produced by adding various bleaching reagents to the glass batch such as selenium and arsenic. (See section definitions for Glass Jars and Rims).

The Categories of Neville House Glassware

The 67,877 glass artifacts recovered from the Neville House midden represent the largest single class of artifacts from the excavations. They comprise 53.9% of a total 125,994 recovered artifacts and were initially broken down into 19 categories. Each category was assigned an abbreviated letter designation. The following categories were interpreted to be diagnostic.

GB - Glass Bottle - A whole glass bottle of any color, 542 items.

GBNRL - Glass Bottle, Neck, Rim or Lip - Recognizable sherds of bottles of any color, 3368 items.

GJ - Glass Jar - A whole glass jar of any color, 190 items.

GJR - Glass Jar Rim - A recognizable sherd of a jar of any color, 1207 items.

GMM - Glass Maker's Mark - Container glass with a manufacturers' mark or embossed product label or company name, of any color, 4657 items.

DG - Decorated Glass - A sherd of specialized glass that is: wheel cut, cut, pressed, etched, painted, flashed, stained, or otherwise decorated in any fashion of any color glass, 4353 items. (Generally not a common bottle or jar sherd.)

MGWO - Miscellaneous Glassware Object - Whole or sherds of: vials, stoppers, eye droppers, lamps, lamp parts, marbles, beads, light bulbs, water glasses, eye glasses, etc.; of any color, 1431 items.

PBB - Pontiled Bottle Base - Any base (none recovered whole) that exhibits a scar resulting from the implantation of a pontil rod, of any color, 42 items.

GBJB - Glass Bottle and Jar Bases - A base of any common container not exhibiting a maker's mark or pontil scar of any color, 3,266 items.

WGE - Window Glass, Etched - A sherd of unstained window pane, generally light green in color, bearing a pattern or writing, etched or scratched into the surface, 109 items.

WG - Window Glass - A sherd of common window pane, generally light green in color, not stained or etched, 4257 items.

The following categories are determined solely by color and exhibit

no other definitive attributes, being strictly fragments of common bottle or jar containers. These are grouped as non-diagnostic categories.

CGC - Clear Glass Container (fragments) - Sherds of such, 27,582 items.

BLGC - Blue Glass Container (fragments) - Sherds of such, 1,845 items.

LBGC - Light Blue Glass Container (fragments) - Sherds of such, 6,232 items.

GGC - Green Glass Container (fragments) - Sherds of such, 2,021 items.

LGGC - Light Green Glass Container (fragments) - Sherds of such, 2,253 items.

BGC - Brown Glass Container (fragments) - Sherds of such, 3,007 items.

YGC - Yellow Glass Container (fragments) - Sherds of such, 72 items.

RGC - Red Glass Container (fragments) - Sherds of such, 12 items.

MGC - Milk Glass Container (fragments) - Sherds of such, 1,031 items.

AGC - Amethyst Glass Container (fragments) - Sherds of such, 359 items.

METHODS

To begin the separation, each artifact was identified with a field catalogue number corresponding with the unit and depth in which the artifact was recovered. The artifacts within each field catalogue number were separated into their respective categories and bagged. Certain categories were recognized to be much more important than others. These diagnostic categories were designated for immediate analysis. They were: Glass Bottles; Glass Bottles Necks, Rims, and Lips; Glass Maker's Marks; Glass Jars; Glass Jar Rims; Decorated Glass; and Miscellaneous Glassware Objects. Other categories were designated non-diagnostic and set aside for later consideration. These were the 10 categories of colored and clear glass container fragments, Glass Bottle and Jar Bases, and Window Glass.

As the analysis progressed it was necessary to combine some categories and add others. It was evident from the inception of the project that a broken item, especially a bottle or a jar, could end up in three catagories, Glass Bottle Necks, Rims, and Lips; Glass Maker's Marks; and Glass Bottle and Jar Bases. To remedy this situation Glass Jars and Glass Jar Rims were analyzed together, receiving the same analytical designations (subcategory, group, subgroup, and variety) and being described together. A reference was made with each description as to whether the items were whole or rim sherds or both and a count was given. This proved to be a successful measure and Glass Bottles and Glass Bottle Necks, Rims, and Lips were also combined after each category had been analyzed separately. Glass Maker's Marks posed another problem. All items in this catagory were sherds and many types were represented in Bottles and Jars as whole pieces. Any Maker's Mark that was found to be represented in another category was so noted in the written description of both catagories

under a specific internal correlation number.

The greatest problem confronting the researchers was separating the decorated glasswares from the miscellaneous glassware objects. Many of the fragments were small in size and for a small percentage of the items it was difficult to determine if the piece was decorated or not. Many pieces had scratches which appeared to be segments of wheel cut decorations and an arbitrary decision was made in placing these items into either category. There was also some small confusion as to what constituted a jar rim and a bottle rim especially when dealing with small sherds. These problems were quickly overcome and corrected by the researchers as the project progressed.

Two other categories were created after the initial separations. These were Etched Window Glass, and Pontiled Bottle Bases. During the initial separations it was noted that there existed a number of etched or engraved window glass sherds. These items were culled and, since similiar etched windowpanes were present in the ballroom of Neville House, they were placed in a separated category for analysis. Non-embossed broken bottle and jar bases were at first thought to possess little information of any importance to the researchers. As the project progressed it was pointed out that no containers had been found that possessed a pontil scar. Empontilling of containers is an older mode of manufacture, predating the use of automatic bottling machines by 50 years or more. It was decided to go through the broken bottle and jar bases and extract any that possessed a pontil scar. These bases were then placed in a separate category. (See Pontil Bottle Bases.)

During the progress of research, it was noted that a set of basic attributes for analysis was generally applicable to all categories of container glass. This set of basic attributes consisted of manufacturing technique, origin of container, product content or use, probable date of manufacture and color. Additional varying attribute sets were recorded by the researchers of the different diagnostic categories. A working assumption was made that the 12 non-diagnostic categories consisted mostly of fragments from specimens probably already represented in diagnostic categories. As such they could supply no further information about the set of basic attributes or other data attributes. Thus, the non-diagnostic categories were not subject to a detailed analysis but were counted and included in the overall evaluation of the artifact class.

Any item in the analyzed categories went through several selective processes. First they were arranged in a numerical sequence according to their respective field catalogue numbers. Each artifact was given its own numerical designation. This consisted of the field catalog number representing the unit and level in which the artifact was recovered and a piece number, in a numerical sequence that varies in accordance with the total amount of recovered material for that field catalogue number. The artifacts were then organized into a hierarchy of analytical groupings (ie, subcategory, group, subgroup, variety) according to each researcher's own criteria.

All whole glass bottles were measured for height, body diameter, inside diameter of mouth and outside diameter of mouth. Because most of

the whole bottles were blown in a mold or machine made, it was found that there was little deviation in size within a subgroup or variety. Consequently it was decided to measure only one item of each subgroup or variety for glass jars and rims and glass bottle necks, lips and rims. All of these were either machine made or blown in a mold. All artifacts assigned to Glass Maker's Marks were fragments and none were measured. Due to extreme diversity and fragmentary condition of the artifacts assigned to Decorated Glasswares, Miscellaneous Glasswares and Window Glass, none of these were measured.

Each artifact upon its assignment to a particular analytical grouping within the researcher's framework for his particular category, was so noted on a separate sheet. This sheet was attached to the final description of that analytical grouping. All observations on each analyzed speciman were encoded for addition to the computerized data base. (See section dealing with the computerization of Neville House artifacts). An individual of each group or subgroup from the categories of Glass Bottles and their Necks, Rims and Lips and Glass Jars and Rims, was selected for illustration. Representative artifacts of Glass Makers' Marks were described but not illustrated.

The researchers focusing on the categories of glass artifacts were confronted by large numbers of specimens and a mass of potential data observations to make and record. They had to begin analysis in essentially a methodological vacuum resulting from an absence of any established guidelines for systematic classification, data observation and recording, and computer data base encoding of glass artifacts from the period under study. The basic classifications, data variables and attributes, recording procedures, and encoding formats were devised by a cooperative effort of the glass category analysts with the occasional assistance of other Neville House researchers. An extensive library of reference works on glass wares and glass manufacture, including bottle hunter guides, period catalogues and price lists, etc. was accumulated. In addition local bottle collectors, and antique dealers, who gave willingly of their time and expertise, were consulted on questions of glass maker mark and product content labels.

In the following sections, each researcher further defines his specific glassware categories and discusses the method of analysis used.

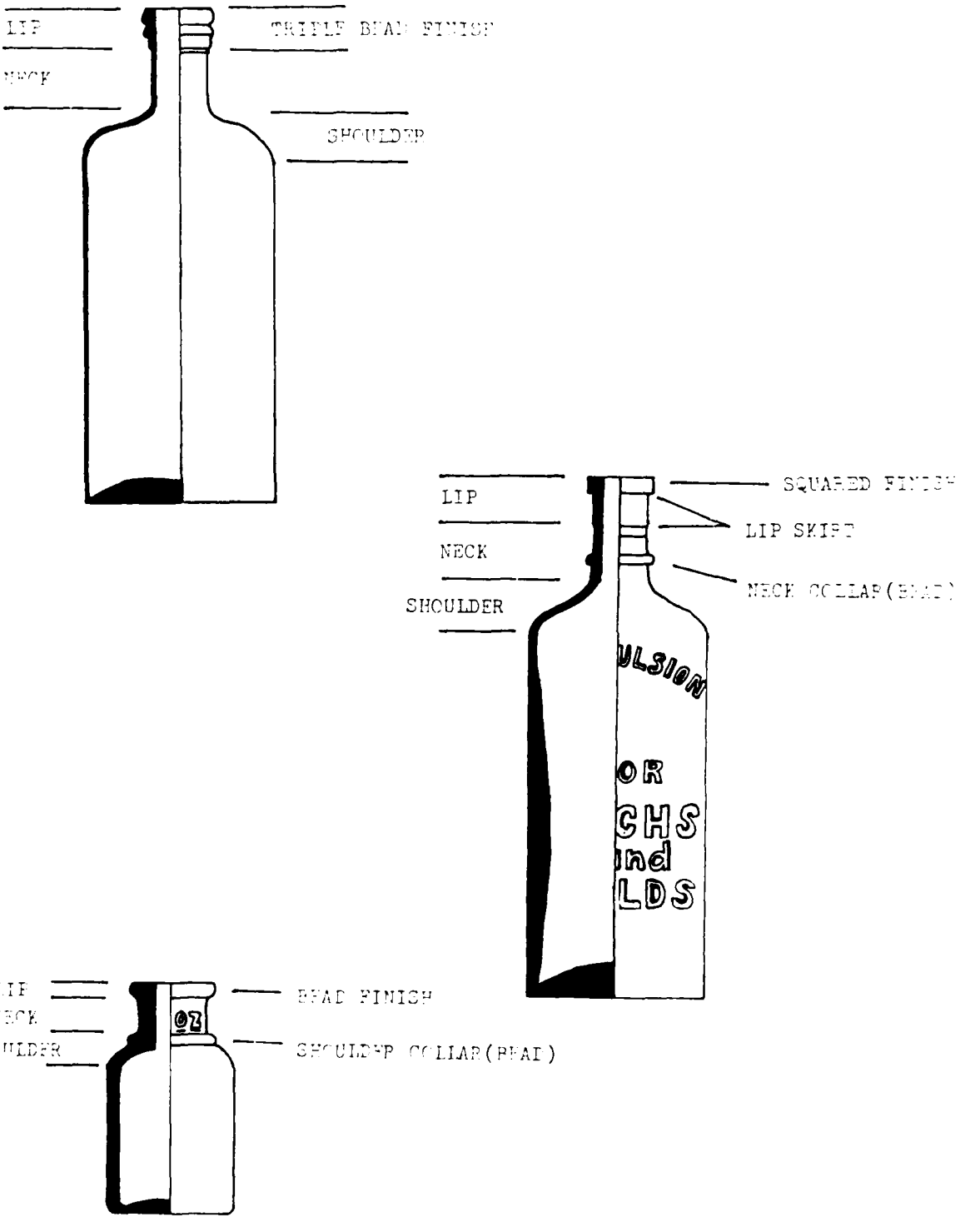


Figure 1

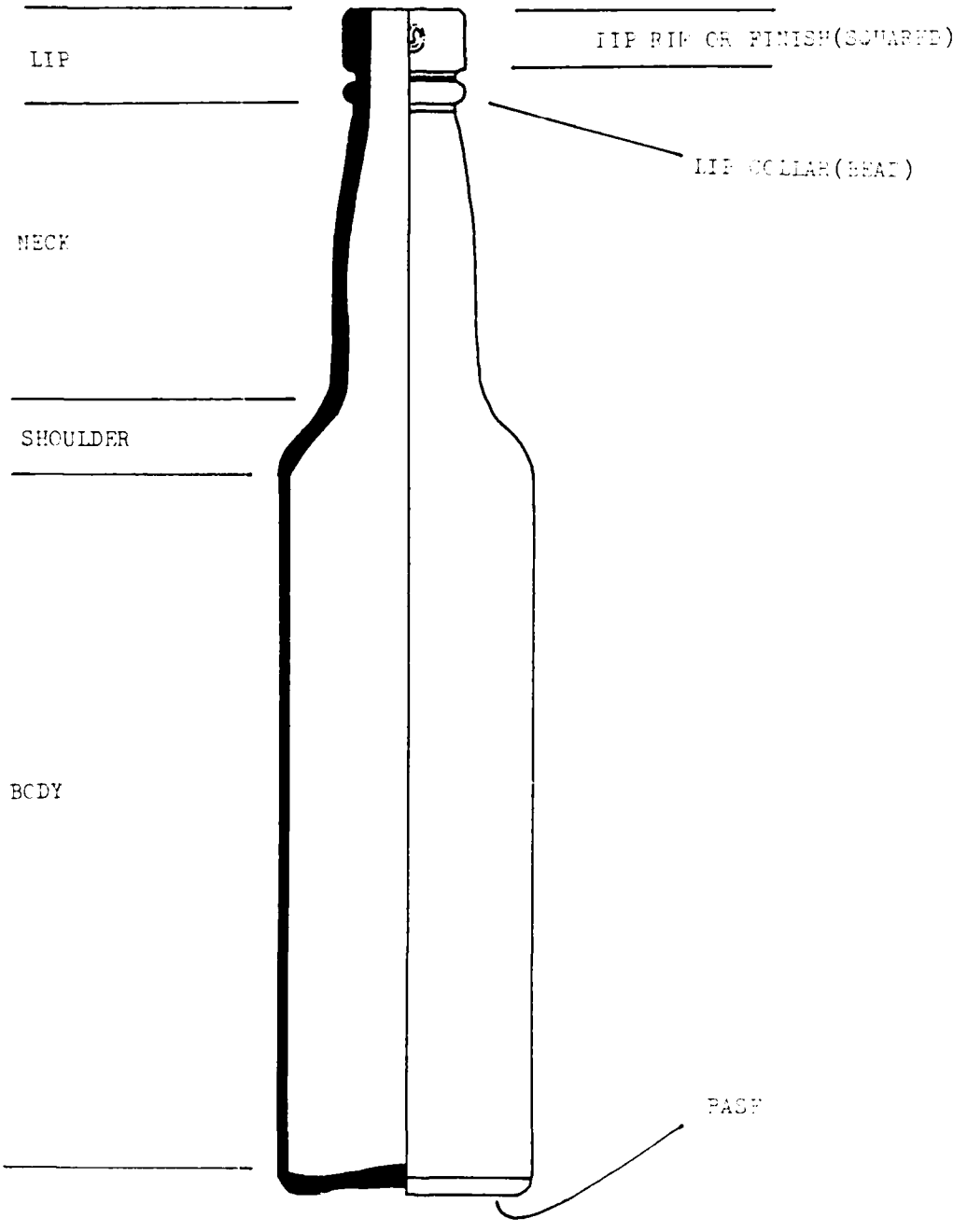
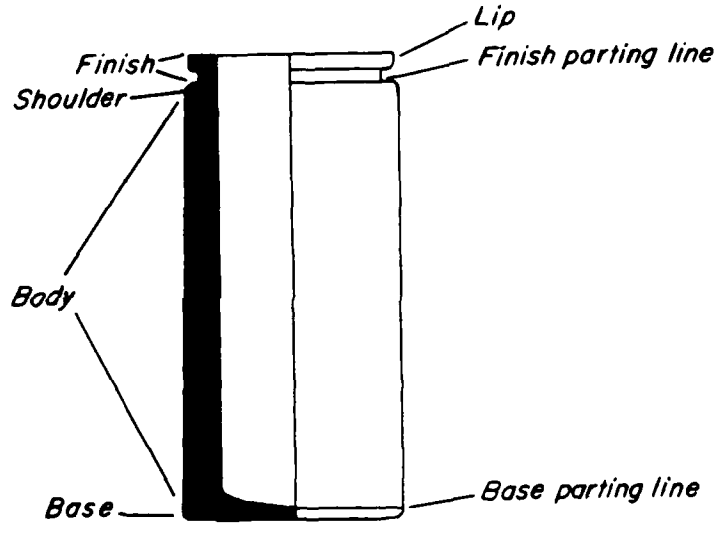

LIP
LIP RIM OR FINISH(SQUARED)
LIP COLLAR(BEAD)
NECK
SHOULDER
BODY
PASP

Figure 2

JAR ATTRIBUTES

Non-Threaded



Threaded

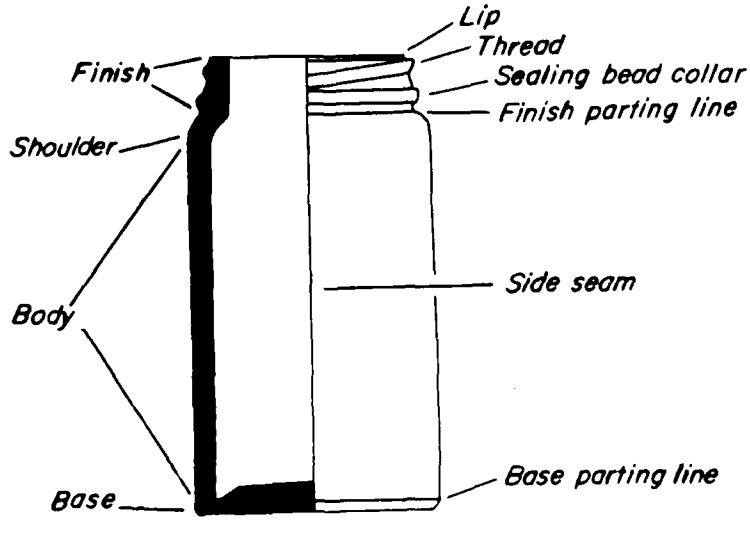
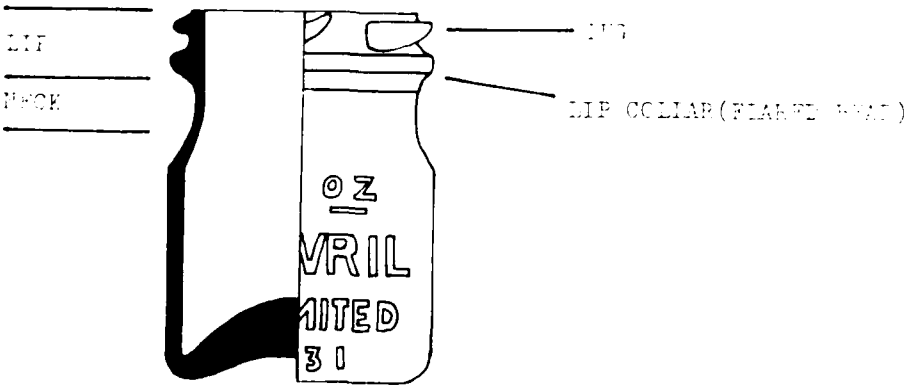


Figure 3


LIP
NECK
LIP COLLAR(FLARE BEAD)
OZ
VRIL
MITED
31

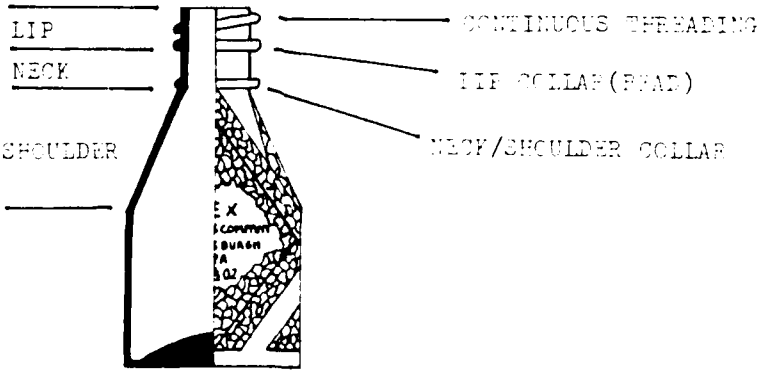

LIP
NECK
SHOULDER
CONTINUOUS THREADING
LIP COLLAR(BEAD)
NECK/SHOULDER COLLAR

Figure 4

BOTTLE NECK/LIP STYLES

FROM THE NEVILLE HOUSE TRASH MIDDEN

by

Mark Denton

Bottle Neck Classification and Analytical Groups

Because of the vast number of bottle necks and whole bottles recovered from the Neville House trash midden, it was impossible to define each variation in simple understandable terms. It was also impossible to find previously published definitions or discussions for all of these numerous variations. Therefore a numbering system was developed to match classificatory groupings of bottle neck and lip styles. With this system, the total collection of 3,368 bottle necks and the 542 whole bottles were divided into eighteen major groups that were based on stylistic variations in the manufacture of the neck/lip combinations. Also added was a nineteenth group which included bottle neck fragments that had been broken or melted in such a manner as to prevent classification by manufacture style. The eighteen groups were defined by group names (ie. Rolled Back lip, Rounded Bead lip, Collared, etc.) most of which are self-explanatory names commonly used in lip style terminology. All of the neck/lip styles included in a group are basically similar but distinguishable into a number of subgroups which occasionally were further subdivided into a set of related varieties. The numeric term or name of a neck/lip style will in this text always be composed of at least two numbers (ex. 1 - 1; which is Group # - Subgroup #) separated by a dash. An additional numeric term was also used to indicate varieties of a particular subgroup. This total numeric term would thus be a three numbered term (ex: 1 - 1.1; which is Group # - Subgroup #. Variety #) with a dot or decimal point between the subgroup number and the variety number. Subgroups denote differences like exterior beveling or flaring of the lip, inclusion of a lip collar, neck shape, ground lip edge, overall lip size (if the variation is considerable) and other major stylistic variations in the group. The varieties are style variations of the subgroup such as: seam termination and placement, glass color, addition of a neck collar, use of a lip skirt, a ground neck interior, a shoulder/neck variation, and overall size variation. There are occasional overlaps in the use of classificatory attributes used to assign subgroup and variety numbers because of the number of complex variations discovered in the Neville House collection. Almost no group classfied included a collection of totally identical neck/lip styles, particularly the hand finished examples. Slight size, color or other manufacture differences do occur but cannot be cited as distinct variations meriting additional subclassification.

The neck/lip or whole bottle drawings used in this text to illustrate the groups, represent an average or typical example of the group in question. Where possible whole bottle illustrations were

used. Most of these bottles came from the Neville House collection but a few of the illustrated whole bottles came from other collections found to have neck/lip combinations identical to a Neville House "group". The whole bottle drawings provide a much better idea of the container that accompanied a neck/lip style and were preferred if the whole example was available. In some cases, however, there were whole bottle examples of a "group" in the Neville House collection but they were not illustrated because a particular neck/lip piece in the collection was a better example for illustration.

The text of the group descriptions includes many variables requiring explanation. The "Code" refers to the numeric term for the total Group/Subgroup/Variety combination. The "Code" consists of three digits. The first represents the group number which is separated from the second number, or subgroup number, by a dash. The variety number is separated from the subgroup number by a decimal point. The variable labeled "Total" is simply the total number of bottle neck pieces classified under that group. The Date Range" is the range of years years for a neck/lip style. In most cases this range was determined on the basis of manufacturing technique though some ranges are based on or limited by association to known (dateable) manufacturing marks, patent marks, labels, or product advertisements found on the examples. Some date ranges are, regrettably, broad due to lack of information indicating a more concise temporal range. For instance, the date range 1903 - 1979 represents the years in which fully machine-made bottles could have been introduced into the Neville House trash midden. This example of a 76-year range for a group's feasible manufacture (based strictly on manufacturing technique) in many cases, produces a mean date inconsistent with other factors. The mean date for the 1903 - 1979 range (1941) is probably later than the actual date of manufacture for many groups. Basic lip styles, body shape, or comparable variables often suggest a manufacturing date around 1910 but lack of verifiable evidence promoted the use of the broader 1903 - 1979 date range and thus the 1941 mean. The "Mean Date" variable is simply the arithmetic mean of the "Date Range". The "Group Name" variable category is a simple descriptive name for each of the eighteen major groups. The "Product Function(s)" variable lists the kinds of products bottled using a particular neck/lip style. There were numerous products identified with the Neville House collection including:

TYPE	SUBTYPE
1. Medical	1. Prescription 2. Personal care (ie. patent medicine, cough syrup, anti-acids, aspirin, etc.) 3. Veterinary 4. Bitters/Others
2. Cosmetic	1. Perfume/Colonge 2. Creams (Facial, etc.) 3. Tonics (Hair, etc.) 4. Other

3. Household	1. Cleaning Chemicals (Ammonia, etc.)
	2. Dyes and Polishes
	3. Other
4. Edible	1. Soda
	2. Water
	3. Extract
	4. Dairy/Juices
	5. Condiments (Ketsup, relishes, etc.)
	6. Preserves/Canned Goods (Pickles, fruit, vegetables, etc.)
	7. Other
5. Liquor	1. Beer
	2. Whiskey
	3. Wine
	4. Other
6. Tobacco	1. Snuff
	2. Tobacco
	3. Other

7. Medical or Edible (Types that could have contained either)

8. Other or Multiple Possibilities.

The next variable is that of "Closure" which includes:

1. stoppers (ie. cork, rubber, etc.)
2. glass stoppers
3. crown top caps
4. "Kork-n-Seal" caps
5. pry-off caps (metal, plastic or paper)
6. zip tops and foil caps
7. paper caps (waxed cardboard, etc.)
8. threaded caps
9. wired or clamped lids
10. Hutchinson stopper
11. Lugged cap

The "Side Seam Classification" variable includes an explanation of where the seam terminates or is no longer visible because the lip was applied or tooled onto the neck. The listings include: 1) full (machine made bottles), 2) base of lip, 3) 3/4 neck (three quarter of the way up the neck), 4) mid-neck (approximately half way up the neck), 5) mid-lip, or 6) none visible.

It was decided to avoid a discussion in the text of the presence of ring seams which occur on bottle bases, shoulders, necks and/or lips. Ring seams can be used in dating a bottle and were considered in

Code: 4-6 Total: 15 Figure: 24.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Milk white.
Lip Diameter: 2.9 cm Mouth Diameter: 1.6 cm.
Collar Diameter: N/A.
Description: Applied lip on a two piece mold body. Manufactured with fluted, sloping neck that meet squared side shoulders.

Whole Bottle Example(s): 1.
Body Style: Beveled shoulder oval Figure: N/A.
Max. Height: 13 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 5.8 cm x 3 cm.
Neck Height: 3.4 cm Mid-Neck Diameter: 2.2cm.
Comments: N/A.

Code: 4-7 Total: 1 Figure: 26.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Cobalt blue.
Lip Diameter: 3.2 cm Mouth Diameter: 1.6 cm.
Collar Diameter: N/A.
Description: Machine made bottle in a two price mold with a long tapered neck and sloping shoulder. The body was round.

Code: 4-8 Total: 10 Figure: 27.
Date Range: 1903-1930 Mean Date: 1916.5
Group Name: Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Clear.
Lip Diameter: 2.7 cm Mouth Diameter: 1.3 cm.
Collar Diameter: N/A.
Description: Applied lip on a two piece mold body with rounded shoulders. The body was square in shape.

Whole Bottle Example(s): 1.
Body Style: Square Figure: N/A.
Max. Height: 10.8 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 5.6 cm x 5.6 cm.
Neck Height: 2.8 cm Mid-Neck Diameter: 2.1 cm.
Comments: Marked "Glyco-Thymoline" (see Hochrein, Code 83). Manufactured by the Millville Bottle Works, Millville, N.J. This company used old bottle making methods and equipment long into the 20th century and never automated.

Whole Bottle Example(s): 9.
Body Style: Rectangular Figure: N/A.
Max. Height: 6.7 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 4.9 cm x 2.7 cm.
Neck Height: 1.1 cm Mid-Neck Diameter: 2.1cm.
Comments: This is the one hundred tablet Bell-Ans (Anti-acid tablet) bottle that was manufactured in the early 20th century out of Orangeburg, N.Y. by Bell and Co. Inc. The product used to be called "Pa-Pay-Ans" (Bartholomew, 1970, Adams 1972). After 1914 the bottles were machine made but the termination date of the glass made bottle is unknown. (See Hochrein, Code 16.)

Code: 4-5.1 Total: 21 Figure: 23.
Date Range: 1914-1979 Mean Date: 1946.5
Group Name: Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Brown.
Lip Diameter: 2.5 Mouth Diameter: 1.6 cm.
Collar Diameter: N/A.
Description: Identical to Code 4.5 but this is machine made.

Whole Bottle Example(s): 4.
Body Style: Rectangular Figure: N/A.
Max. Height: N/A Max. Diameter: N/A.
Square or Rectangular Diameter: N/A.
Neck Height: N/A Mid-Neck Diameter:N/A.
Comments: This is the later machine made version on Code 4.5 but manufactured the same size and shape.

Code: 4-5.2 Total: 9 Figure: 24.
Date Range: 1914-1979 Mean Date: 1946.5
Group Name: Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Brown.
Lip Diameter: 2.4 cm Mouth Diameter: 1.6 cm.
Collar Diameter: N/A.
Description: Same basic lip as on Code 4-5 but this is a round vial-like bottle with a small rounded shoulder and machine made. It is also a BELL-ANS product.

Whole Bottle Example(s): 23.
Body Style: Round Figure: 24.
Max. Height: 7.8 cm Max. Diameter: 3.2 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 1.7 cm Mid-Neck Diameter: 1.6 cm.
Comments: This is the twenty five tablet Bell-Ans bottle.

Date Range: 1870-1910 Mean Date: 1890
Group Name: Bead lip.
Product Function(s): Medical (Prescription).
Closure Type: Glass stopper.
Side Seam: None visible.
Color(s): Clear.
Lip Diameter: 3.5 cm Mouth Diameter: 2.2 cm.
Collar Diameter: N/A.
Description: Applied lip on a possible turn mold body. The bead is flat on top and the interior of the lip and neck are ground. The shoulders are squared and the body was also square.

Whole Bottle Example(s): 3.
Body Style: Short round vial Figure: N/A.
Max. Height: 6.5 cm Max. Diameter: 2.3cm.
Square or Rectangular Diameter: N/A.
Neck Height: 1.2 cm Mid-Neck Diameter:1.9.
Comments: N/A.

Code: 4-4 Total: 2 Figure: 22.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Cobalt blue.
Lip Diameter: 2.4 cm Mouth Diameter: 1.4 cm.
Collar Diameter: N/A.
Description: Applied lip, two piece molded bottle that has no base. This small bodied bottle has a short neck and rounded shoulders.

Whole Bottle Example(s): 1.
Body Style: Oval/No base Figure: 3.
Max. Height: 7.9 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 4.4 cm x 2.0 cm.
Neck Height: 1.4 cm Mid-Neck Diameter: 1.9cm.
Comments: Body marked with B.P.CO. (see Hochrein, Code #20). This bottle was a pill bottle.

Code: 4-5 Total: 5 Figure: 23.
Date Range: 1900-1914 Mean Date: 1907
Group Name: Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Brown.
Lip Diameter: 2.5 cm Mouth Diameter: 1.6 cm.
Collar Diameter: N/A.
Description: Applied bead lip, two piece mold body with squared shoulders.

Code: 4-1.14 Total: 1 Figure: 19.
Date Range: 1907-1928 Mean Date: 1917
Group Name: Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Cobalt blue.
Lip Diameter: 4.6 cm Mouth Diameter: N/A.
Collar Diameter: N/A.
Description: Identical to Code 4-1.11 but larger.

Code: 4-1.15 Total: 7 Figure: 19.
Date Range: 1907-1928 Mean Date: 1917
Group Name: Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Cobalt blue.
Lip Diameter: N/A Mouth Diameter: N/A.
Collar Diameter: N/A.
Description: Bromo bottle necks that have been melted down or damaged in the Neville House dump. This includes only necks that have identifiable neck collars.

Code: 4-1.16 Total: 28 Figure: N/A.
Date Range: 1891-1954 Mean Date: 1922.5
Group Name: Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper and Foil cap.
Side Seam: N/A.
Color(s): Cobalt blue.
Lip Diameter: N/A Mouth Diameter: N/A.
Collar Diameter: N/A.
Description: Bromo bottle necks that have been melted down or damaged in the Neville House dump and includes all variety of un-collared types.

Code: 4-2 Total: 1 Figure: 20.
Date Range: 1810-1860 Mean Date: 1835
Group Name: Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: None visible.
Color(s): Light blue.
Lip Diameter: 2.4 cm Mouth Diameter: 1.4.
Collar Diameter: N/A.
Description: Applied bead lip on an apparent full blown bottle. The body has a wide sloping rounded shoulders.

Code: 4-3 Total: 1 Figure: 21.

Date Range: 1928-1954 Mean Date: 1941
Group Name: Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Foil cap.
Side Seam: Full.
Color(s): Cobalt blue.
Lip Diameter: 4.6 cm Mouth Diameter: 3.3 cm.
Collar Diameter: N/A.
Description: Identical to Code 4-1.9 only larger.

Code: 4-1.11 Total: 1 Figure: 19.
Date Range: 1907-1928 Mean Date: 1917.5
Group Name: Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Cobalt blue.
Lip Diameter: 3.3 cm Mouth Diameter: 2.1 cm.
Collar Diameter: 2.9 cm.
Description: Similar to the applied lip style in that the lip is thick but it is fully machine made and has a low neck collar.
Comments: Temporally Codes (4-1.11 through 4-1.14) fall between the uncollared applied lip Bromos and uncollared machine made Bromas. Apparently the first machine made Bromos had a low neck collar and a thick lip to take the stopper. In 1928 when the company changed over to a foil cap closure they changed the lip thickness and removed the neck collar.

Code: 4-1.12 Total: 6 Figure: 19.
Date Range: 1907-1928 Mean Date: 1917
Group Name: Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Cobalt blue.
Lip Diameter: 3.6 cm Mouth Diameter: 2.2 cm.
Collar Diameter: 3.1 cm.
Description: Identical to Code 4-1.11 only larger.

Code: 4-1.13 Total: 63 Figure: 19.
Date Range: 1907-1928 Mean Date: 19'7
Group Name: Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Cobalt blue.
Lip Diameter: 4 cm Mouth Diameter: 2.7 cm.
Collar Diameter: 3.5 cm.
Description: Identical to 4-1.11 but larger.

Code: 4-1.6 Total: 7 Figure: 17.
Date Range: 1891-1907 Mean Date: 1899
Group Name: Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Mid-neck to three quarter.
Color(s): Cobalt blue.
Lip Diameter: 3.2 cm Mouth Diameter: 2.1 cm.
Collar Diameter: N/A.
Description: This subclass of the Bromos has a lip size identical to Code #4-1.3 but the neck length is longer.

Code: 4-1.7 Total: 4 Figure: 18.
Date Range: 1928-1954 Mean Date: 1941
Group Name: Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Foil cap.
Side Seam: Full.
Color(s): Cobalt blue.
Lip Diameter: 3.2 cm Mouth Diameter: 2.1 cm.
Collar Diameter: N/A.
Description: Similar to the applied lip styles but this lip is thinner in thickness and full machine made.

Code: 4-1.8 Total: 5 Figure: 18.
Date Range: 1928-1954 Mean Date: 1941
Group Name: Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Foil cap.
Side Seam: Full.
Color(s): Cobalt blue.
Lip Diameter: 3.5 cm Mouth Diameter: 2.3 cm.
Collar Diameter: N/A.
Description: Similar to the applied lip styles but this lip is thinner in thickness and fully machine made. Its also larger than the Code 4-1.7.

Code: 4-1.9 Total: 7 Figure: 18.
Date Range: 1928-1954 Mean Date: 1941
Group Name: Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Foil cap.
Side Seam: Full.
Color(s): Cobalt blue.
Lip Diameter: 3.7 cm Mouth Diameter: 2.7 cm.
Collar Diameter: N/A.
Description: Similar to Code 4-1.8 only larger.

Code: 4-1.10 Total: 2 Figure: 18.

1928 to 1954, after 1954 they used screw caps. The Bromos' that used foil caps or seals had thinner bead lips than the stoppered bottles. Machine made Bromo's with neck collars pre-date uncollared varieties and probably took stoppers.

Code: 4-1.2 Total: 8 Figure: 17.
Date Range: 1891-1907 Mean Date: 1899
Group Name: Bead Lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Mid-neck - three quarter.
Color(s): Cobalt blue.
Lip Diameter: 2.6 cm Mouth Diameter: 1.6 cm.
Collar Diameter: N/A.
Description: Identical to Code 4-1.1 only larger.

Code: 4-1.3 Total: 68 Figure: 17.
Date Range: 1891-1907 Mean Date: 1899
Group Name: Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Mid-neck - three quarter.
Color(s): Cobalt blue.
Lip Diameter: 3.2 cm Mouth Diameter: 2.1 cm.
Collar Diameter: N/A.
Description: Identical to Code #4-1.1 and 4-1.2 only larger and the mouth flares somewhat.

Code: 4-1.4 Total: 3 Figure: 17.
Date Range: 1891-1907 Mean Date: 1899
Group Name: Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Mid-neck to three quarter.
Color(s): Cobalt blue.
Lip Diameter: 3.5 cm Mouth Diameter: 2.3 cm.
Collar Diameter: N/A.
Description: Identical to Code #4-1.3 only larger.

Code: 4-1.5 Total: 5 Figure: 17.
Date Range: 1891-1907 Mean Date: 1899
Group Name: Bead lip.
Product Function(s): Medical (Personal care).
Closure Type: Stopper.
Side Seam: Mid-neck to three quarter.
Color(s): Cobalt blue.
Lip Diameter: 4.5 cm Mouth Diameter: 3.2 cm.
Collar Diameter: N/A.
Description: Identical to Code #4-1.1 only larger.

separted by a gap and both were close to the edge of the lip. The edge of the lip tapered up a short distance to the mouth.

Whole Bottle Example(s): 1 Figure: N/A.
Body Style: Tapered round Max. Height: 31.7.
Max. Diameter: 8.4 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 10.5 cm Mid-Neck Diameter: 3.3 cm.
Comments: Marked with label #142. This bottle had a machined kick-up base and was manufactured by an unknown company.

Code: 4-1.1 Total: 1 Figure: 17.
Date Range: 1891-1907 Mean Date: 1899
Group Name: Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Three quarter neck.
Color(s): Cobalt blue.
Lip Diameter: 2.3 cm.
Collar Diameter: N/A. Mouth Diameter: 1.4 cm.
Description: Hand finish lip and a two piece molded body. The lip is a thick rounded bead that was applied and tooled.

Whole Bottle Example(s): 38 (all varieties).
Body Style: Round Figure: 2.
MAX.Height:N/A Max. Diameter: N/A.
Square or Rectangular Diameter: N/A.
Neck Height: N/A Mid-Neck Diameter: N/A.
Comments: Most of the divisions for Bromo's (4-1.1-4-1.14) are size variations. There are however three basic manufacturing and stylist varieties of the Bromo-Seltzer bottle represented in the Neville House collection. An applied lip version (Codes 4-1.1 through 4-1.6). A machine made version without a neck collar (Codes 4-1.7 through 4-1.10) and a machine made version with a neck collar (4-1.11 through 4-1.14). According to the Bromo company they may have made a semi-automatic made bottle between 1900-1907 but no examples of this exist in the Neville House collection at least have not been recognized as such. The applied lip Bromos' have neck seams that range between mid-neck and 3/4 neck in length. Each example is turn tooled and it is hard to tell the exact point. Dating of Bromos' is difficult and little is published about the exact date of the start of the manufacture of the cobalt blue colored Bromo bottle. Green glass was supposedly the original color, produced on a hand finished lip bottle (around 1904). None of this color can be positively identified in the Neville House collection. This 1904 date and color conflicts with an advertisement in the Jan. 1891 issue of Ladies Home Journal" (Baldwin 1973:82) that lists a cobalt blue Bromo bottle and product. The company was in business this early but supposedly not distributing nationally. At any rate, the Bromo company gave the Baltimore Glass Company a charter to manufacture machine made Bromos' in 1907. This gives us a possible date range for the cobalt blue bottles with hand finished lips from 1891-1907. Bromos used stoppers from approx. 1891 to 1928 and foil caps or seals from

Code: 3-7 Total: 2 Figure: 13.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Straight lip with a lip collar.
Product Function(s): Liquor (wine).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Green.
Lip Diameter: 3.2 cm Mouth Diameter: 2.2 cm.
Collar Diameter: 3.5 cm.
Description: Machine made bottle with a wide thin collar close to the edge of the lip. The body was round and tapered gradually from the shoulder.

Code: 3-8 Total: 1 Figure: 14.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Straight lip with a lip collar.
Product Function(s): Liquor (whiskey, etc.).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Brown.
Lip Diameter: 2.9 cm Mouth Diameter: 1.7 cm.
Collar Diameter: 3.2 cm.
Description: Machine made bottle with a short neck and a bevel edged square collar that is done to the edge of the lip. The body was oval or flask-like in shape and had a slightly sloping squared shoulder.

Code: 3-9 Total: 1 Figure: 15.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Straight lips with a bead lip collar.
Product Function(s): Household (ink).
Closure: Stopper.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 3.3 cm Mouth Diameter: 2.3 cm.
Collar Diameter: 3.5 cm.
Description: Machine made bottle with a thin bead collar about 3/8" down from the edge of the lip, the body was round and squat with a bead around the intersection of the shoulder and neck. The shoulder was rounded.

Code: 3-10 Total: 5 Figure: 16.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Straight lip with a double bead, lip collar.
Product Function(s): Liquor (Vermouth).
Closure Type: Stopper (wired or tied).
Side Seam: Full.
Color(s): Green.
Lip Diameter: 3.4 cm Mouth Diameter: 2.3 cm.
Collar Diameter: 3.5 cm.
Description: Machine made bottle with two bead lip collar that were

lip includes a applied squared bead collar close to the edge of the lip. This collar is much thinner than the code 3-2 collar and the glass is blown thinner.

Code: 3-4 Total: 4 Figure: 10.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Straight lip with a lip collar.
Product Function(s): Liquor (wine).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Clear.
Lip Diameter: N/A Mouth Diameter: 2.2 cm.
Collar Diameter: 3.5 cm.
Description: Similar to Code 3-3 only with a mid-neck seam and made with clear glass. The collar is apparently hand applied (lip is broken on all pieces). The bound was round and tapered up from the shoulder.

Code: 3-5 Total: 4 Figure: 11.
Date Range: 1870-1910 Mean Date: 1890
Group Name: Straight lip with a lip collar.
Product Function(s): Liquor (wine).
Closure Type: Stopper (probably wired or tied).
Side Seam: None visible.
Color(s): Green.
Lip Diameter: 3.7 cm Mouth Diameter: 2.2 cm.
Collar Diameter: 4.0 cm.
Description: Hand finished lip with an applied collar on a probable two piece molded body. The collar is larger and squarer than the Code's 3-3 or 3-4. The body was round and tapered up from the shoulder.

Code: 3-6 Total: 1 Figure: 12.
Date Range: 1880-1920 Mean Date: 1900
Group Name: Straight lip with a slightly tapered lip collar.
Product Function(s): Liquor (wine).
Closure Type: Stopper (possibly wired or tied).
Side Seam: Base of collar.
Color(s): Light green.
Lip Diameter: 3.1 cm Mouth Diameter: 2.4 cm.
Collar Diameter: 3.6 cm.
Description: Possibly a semi-automatic make bottle with a tooled lip. The lip is tapered slightly and is wider than the Code 3.5. The collar tapers to within 1/4" of the edge of the lip. Molded in a two piece mold. The body was round and tapered up from the shoulder.

Whole Bottle Example(s): 1 from CMNH collection.
Body Style: Round Figure: 1.
Max. Height: 30.0 cm Max. Diameter: 7.0 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 5.1 cm Mid-Neck Diameter: 3.0 cm.
Comments: N/A.

Color(s): Light blue.
Lip Diameter: 3.1 cm Mouth Diameter: 2.0 cm.
Collar Diameter: N/A.
Description: Hand finished partially rolled back lip that is not rolled completely back against the neck. The glass is thin and has numerous air bubbles in it. Probably some sort of proprietory medicine.

Whole Bottle Example(s): 1.
Body Style: Short oblong octagon Figure: N/A.
Max. Height: 4.2 cm Max. Diameter: Missing.
Square or Rectangular Diameter: N/A.
Neck Height: 1.3 cm Mid-Neck Diameter: 1.3 cm.
Comments: N/A.

Code: 3-1 Total: 38 Figure: 7.
Date Range: 1840-1910 Mean Date: 1875
Group Name: Straight lip with a lip collar.
Product Function(s): Liquor (wine).
Closure: Stopper (probably wired or tied down).
Side Seam: None visible.
Color(s): Green.
Lip Diameter: 3.3 cm Mouth Diameter: 2.4 cm.
Collar Diameter: 3.2 cm.
Description: Hand finished neck with a applied squared bead collar. The neck has been twisted and was probably blown into a two piece mold though no examples have visible seams. The end of the neck was merely sheared and heat smoothed then the collar was applied.

Code: 3-2 Total: 2 Figure: 8.
Date Range: 1850-1910 Mean Date: 1880
Group Name: Straight lip with a lip collar.
Product Function(s): Liquor (Whiskey, etc.).
Closure: Stopper.
Side Seam: Collar base (three quarter neck).
Color(s): Light blue.
Lip Diameter: 3.2 cm Mouth Diameter: 2.3 cm.
Collar Diameter: 3.7 cm.
Description: Hand finished neck and lip, the neck was sheared and heat finished with a squared bead collar applied close to the edge of the lip. Two piece molded body with sloping, squared shoulders.

Code: 3-3 Total: 2 Figure: 9.
Date Range: 1840-1900 Mean Date: 1870
Group Name: Straight lip with a lip collar.
Product Function(s): Liquor (Whiskey, etc.).
Closure Type: Stopper (probably wired or tied).
Side Seam: None visible.
Color(s): Light green.
Lip Diameter: 3.3 cm Mouth Diameter: 2.6 cm.
Collar Diameter: 3.7 cm.
Description: Hand finish lip on a possible turn or dip mold body. The

Code: 1-4 Total: 2 Figure: 4.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Slightly flaring neck.
Product Function(s): Household (ink bottle).
Closure: Stopper.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 3.6 cm Mouth Diameter: 2.4 cm.
Collar Diameter: 3.8 cm.
Description: Machine made neck with a mid-neck bead collar.

Whole Bottle Example(s): 1.
Body Style: Slender round vial Figure: N/A.
Max. Height: 11.3 cm Max. Diameter: 2.7 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 1.4 cm Mid-Neck Diameter: 1.5 cm.
Comments: N/A.

Code: 2-1 Total: 1 Figure: 5.
Date Range: 1800-1850 Mean Date: 1825
Group Name: Rolled lip.
Product Function(s): Liquor (Whiskey, etc.).
Closure: Stopper.
Side Seam: None visible.
Color(s): Light green.
Lip Diameter: 2.7 cm Mouth Diameter: 2.0 cm.
Collar Diameter: N/A.
Description: Hand finished rolled back lip that has a blown two piece molded body. Thin glass with lots of air bubbles.

Code: 2-1.1 Total: 1 Figure: 5.
Date Range: 1800-1840 Mean Date: 1820
Group Name: Rolled lip.
Product Function(s): Medical (Personal care).
Closure: Stopper.
Side Seam: None visible.
Color(s): Light blue.
Lip Diameter: 3.4 cm Mouth Diameter: 2.5 cm.
Collar Diameter: N/A.
Description: Similar to Type #2-1 but this subtype may have been of turn mold manufacture but probably a two piece mold bottle. A hand finished rolled back lip. The glass is thin and contains numerous air bubbles.

Code: 2-2 Total: 2 Figure: 6.
Date Range: 1800-1850 Mean Date: 1825
Group Name: Rolled lip.
Product Function(s): Medical (Personal Care).
Closure: Stopper.
Side Seam: Mid-neck.

BOTTLE NECKS AND WHOLE BOTTLES

Code: 1-1 Total: 1 Figure: 1.
Date Range: 1800-1850 Mean Date: 1825
Group Name: Slightly flaring neck (sheared and heat turned).
Product Function(s): N/A.
Closure: Stopper.
Side Seam: Three quarter neck.
Color(s): Light green.
Lip Diameter: 3.6 cm Mouth Diameter: 2.8 cm.
Collar Diameter: N/A.
Description: a hand finished neck that probably is a General Washington flask (a GI-5, H. McKearin and K.M. Wilson, 1978, 523). The shoulder has a triple bead design listed as the only one McKearin & Wilson know of with a triple bead along the sides. Possibly manufactured in the "Early Monongahela and Pittsburgh District" sometime in the late 18th to early 19th centuries. There is no applied lip.

Code: 1-2 Total: 1 Figure: 2.
Date Range: 1880-1910 Mean Date: 1890
Group Name: (Sheared and Turned), slightly flaring neck.
Product Function(s): Medical (Personal Care).
Closure: Stopper.
Side Seam: Mid-neck.
Color(s): Light brown.
Lip Diameter: 3.0 cm Mouth Diameter: 2.2 cm.
Collar Diameter: N/A.
Description: Hand finished neck on a two piece molded, small pill bottle. The neck flares up from the squared shoulder. No applied lip.

Code: 1-3 Total: 1 Figure: 3.
Date Range: 1880-1910 Mean Date: 1890
Group Name: Slightly flaring neck (Sheared and heat turned).
Product Function(s): Cosmetic (Perfume).
Closure: Glass stopper.
Side Seam: None visible.
Color(s): Clear.
Lip Diameter: 2.4 cm Mouth Diameter: 1.6 cm.
Collar Diameter: N/A.
Description: A hand finished, short, thin neck fragment with a constricted neck passage. It has a heat turned neck and lip that flares only slightly.

Whole Bottle Example(s): 1.
Body Style: Oval Figure: N/A.
Max. Height: 6.5 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 3.3 cm x 2 cm.
Neck Height: 1 cm Mid-Neck Diameter: 1 cm.
Comments: N/A.

the original research but were eventually eliminated as a study variable due to the time constraints.

The "Color(s)" variable is a listing of the glass color or colors present for each group. The "Measurements" variable is self-explanatory. The measurements, like the illustrations, are single examples selected and measured, not the average diameters taken from the total group sample. Outside comparisons to the Neville House groups should rely more on the descriptions and illustrations than the measurements. Most examples, however, are fairly uniform in size.

The "Generalized Description" variable provides a description of the basic manufacture style or character of the group under consideration. Additional information such as basic shape, differences between similar groups, manufacturing companies or products can be reviewed in this variable. For whole bottle examples of a particular neck/lip form in the Neville House collection, the body shape and an example of measurements for that bottle are listed under the "Whole Bottle Examples" variable. Any additional comments on the whole bottle examples or on each group in general were noted if needed in a final "Comments" variable.

The following are the listings and descriptive data for each stylistic variation of the bottle neck groupings recovered from the Neville House trash midden.

Code: 4-9 Total: 3 Figure: 28.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Light blue.
Lip Diameter: 3.6 cm Mouth Diameter: 1.8 cm.
Collar Diameter: N/A.
Description: Machine made bottle with a oval shaped, sloping shoulder. The body was also oval shaped.

Whole Bottle Example(s): 1.
Body Style: Oval Figure: 5.
Max. Height: 12.7 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 5.4 cm & 3.0 cm.
Neck Height: 6.5 cm Mid-Neck Diameter: 4.1 cm.
Comments: This bottle contained a cough medicine or proprietary medicine called "Syrup of Hypophosphetes, Fellows" (see Hochrein's Code 75.)

Code: 4-9.1 Total: 3 Figure: 28.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Bead lip.
Product Function(s): Household (Polish).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 3.5 cm Mouth Diameter: 1.9 cm.
Collar Diameter: N/A.
Description: Similar to Code 4-9 only the shoulder shape is more rectangular and the product was called "Easy Bright Polish" B.F. Stinson & Co. Buffalo, N.Y. U.S.A."

Code: 4-10 Total: 5 Figure: 29.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Clear.
Lip Diameter: 2.8 cm Mouth Diameter: 1.8 cm.
Collar Diameter: N/A.
Description: Applied lip on a two piece mold body with somewhat squared sloping shoulders. The body is generally round, (almost square).

Whole Bottle Example(s): 5.
Body Style: Short Round with constricted neck Figure: N/A.
Max. Height: 6.4 cm Max. Diameter: 3 cm.
Square or Rectangular Diameter: N/A.

Neck Height: 1 cm Mid-Neck Diameter: 1.3 cm.
Comments: N/A.

Code: 4-10.1 Total: 1 Figure: 30.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 2.8 cm Mouth Diameter: 1.8 cm.
Collar Diameter: N/A.
Description: Identical to Code 4-10 only machine made.

Code: 4-11 Total: 42 Figure: N/A.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Clear, Brown, Cobalt blue.
Lip Diameter: 3.6 cm Mouth Diameter: 2.0 cm.
Collar Diameter: N/A.
Description: Applied lip on a two piece mold body. Relatively small rectangular or oval bodies with rather flat bead lips that are laid on the very rim of the neck.

Whole Bottle Example(s): 1.
Body Style: Rectangular Figure: N/A.
Max. Height: 9.9 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 3.8 cm x 1.9 cm.
Neck Height: 2.1 cm Mid-Neck Diameter: 1.6 cm.
Comments: N/A.

Code: 4-11.1 Total: 3 Figure: N/A.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 2.9 cm Mouth Diameter: 2.2 cm.
Collar Diameter: N/A.
Description: Similar to Code 4-11 only machine made with less shoulder and a slightly shorter and smaller body size.

Whole Bottle Example(s): 1.
Body Style: Rectangular Figure: N/A.
Max. Height: 9.3 Max. Diameter: N/A.
Square or Rectangular Diameter: 3.9 cm x 2.7 cm.
Neck Height: 2.0 cm Mid-Neck Diameter: 2.1 cm.

Comments: N/A.

Code: 4-11.2 Total: 1 Figure: N/A.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Green.
Lip Diameter: 2.9 cm Mouth Diameter: 2.1 cm.
Collar Diameter: N/A.
Description: Similar lip style to 4-11 and 4-11.1 but the body has a panel inset front with lettering: "Moone's Emerald Oil" (see Hochrein, Code 157.)

Whole Bottle Example(s): 1.
Body Style: Square Figure: N/A.
Max. Height: 4.3 Max. Diameter: N/A.
Square or Rectangular Diameter: 1.7 cm x 1.7 cm.
Neck Height: 1.6 cm Mid-Neck Diameter: 1.3 cm.
Comments: N/A.

Code: 4-11.3 Total: 11 Figure: N/A.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Bead lip.
Product Function(s): Medical (Personal Care).
Household.
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Brown.
Lip Diameter: 4.0 cm Mouth Diameter: 3.1 cm.
Collar Diameter: N/A.
Description: Similar to Code 4-11 only this type includes wide mouth bottles that were used as both personal care products and household polishes. They had short necks with applied lips.

Code: 4-12 Total: 1 Figure: 32.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Base of lip.
Color(s): Clear.
Lip Diameter: 2.6 cm Mouth Diameter: 1.8 cm.
Collar Diameter: N/A.
Description: Applied lip on a two piece mold bottle that is actually a short vial. The lip is very thin and was not tooled well. The neck is short and the shoulder is only a few millimeters wider than the neck and is rounded. The vial was manufactured by "Wm. R. Warner & Co. Philadelphia" (see Hochrein, Code 232).

Code: 4-13 Total: 4 Figure: 33.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Bead lip.
Product Function(s): Medical Prescription.
Closure Type: Glass Stopper.
Side Seam: None visible.
Color(s): Clear.
Lip Diameter: 3.8 cm Mouth Diameter: 2.1 cm.
Collar Diameter: N/A.
Description: Applied lip on a upward tapering neck from squared shoulder. The interior lip and neck are ground. All examples are too small to identify a seam classification.

Code: 4-14 Total: 1 Figure: 34.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Bead lip.
Product Function(s): Medical (Prescription).
Closure Type: Glass stopper.
Side Seam: None visible.
Color(s): Clear.
Lip Diameter: 5.2 cm Mouth Diameter: 3.8 cm.
Collar Diameter: N/A.
Description: Applied lip on a possible turn mold bottle but the one example is too small to tell for sure. The shoulder is squared and the neck very short. The interior of the lip and mouth are ground.

Code: 4-15 Total: 1 Figure: 35.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper or Foil.
Side Seam: Full.
Color(s): Brown.
Lip Diameter: 4.8 cm Mouth Diameter: 3.0 cm.
Collar Diameter: N/A.
Description: Machine made bottle that is similar in size and shape to Code 4-1.10 of the Bromos but the machined lip is different in placement of the lip ring seam and of course the color is different. The shoulder slopes out rounder and fuller than the Bromos.

Code: 4-16 Total: 7 Figure: 36.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Bead lip.
Product Function(s): Cosmetic (Tonics).
Closure Type: Stopper.
Side Seam: Three quarter.
Color(s): Clear.
Lip Diameter: 2.8 cm Mouth Diameter: 1.4 cm.
Collar Diameter: N/A.
Description: Applied lip that is thin and flat on top the neck is long

and neck passage is somewhat constricted. The shulders are rounded and the body tapers up from the base to the shoulder.

Code: 4-17 Total: 14 Figure: 37.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Bead lip.
Product Function(s): Cosmetic (Perfume).
Closure Type: Glass stopper.
Side Seam: Mid-neck.
Color(s): Clear.
Lip Diameter: 2.2 cm Mouth Diameter: 1.1 cm.
Collar Diameter: N/A.
Description: Applied lip on a two piece mold body. This small bottle had rounded shoulders and a ground interior lip and neck. The body is also square.

Whole Bottle Example(s): 10.
Body Style: Extremely tapered rectangle Figure: N/A.
Max. Height: 8 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 5.2 cm x 3.2 cm.
Neck Height: 1.4 cm Mid-Neck Diameter: 1.7 cm.
Comments: N/A.

Code: 4-17.1 Total: 3 Figure: 37.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Bead lip.
Product Function(s): Cosmetic (Perfume).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 2.1 Mouth Diameter: 1.0 cm.
Collar Diameter: N/A.
Description: Similar to Code 4-17 but smaller and machine made. Its body is also round or multi-sided.

Whole Bottle Example(s): 1.
Body Style: Round Figure: N/A.
Max. Height: 6.1 cm Max. Diameter: 2.1 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 1.8 cm Mid-Neck Diameter: 1.5 cm.
Comments: N/A.

Code: 4-18 Total: 2 Figure: 38.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Bead lip.
Product Function(s): Cosmetic (Perfume).
Closure Type: Glass stopper.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 2.3 cm Mouth Diameter: 1.2 cm.
Collar Diameter: N/A.

Description: Machine made bottle with a long slender neck and a sloping stepped shoulder. This is probably some sort of toilet water product.

Code: 4-19 Total: 9 Figure: 39.
Date Range: 1810-1860 Mean Date: 1835
Group Name: Bead lip.
Product Function(s): Household (Dyes or Polishes).
Closure Type: Stopper.
Side Seam: None visible.
Color(s): Light blue.
Lip Diameter: 3.5 cm Mouth Diameter: 2.0 cm.
Collar Diameter: N/A.
Description: Applied lip, wide mouth bottle with a short neck and a rectangular shaped body with squared shoulders and a panel inset front. The 1835 date is probably too early and the actual date is closer to 1860.

Whole Bottle Example(s): 3 Figure: N/A.
Body Style: Round (Squat wide mouth).
Max. Height: 9.6 cm Max. Diameter: 5.4 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 2.2 cm Mid-Neck Diameter: 3.2.
Comments: N/A.

Code: 4-20 Total: 5 Figure: 40.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Bead lip.
Product Function(s): Household (Ink?).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Light blue.
Lip Diameter: 3.8 cm Mouth Diameter: 2.1 cm.
Collar Diameter: N/A.
Description: Machine made bottle that is similar in styling to Code 4-1.7 a Bromo bottle but this style doesn't have a neck collar. The neck is short, the shoulder's rounded and it has a rather flat shoulder collar where the neck connects to the shoulder.

Code: 4-21 Total: 1 Figure: 41.
Date Range: 1880-1895 Mean Date: 1887.5
Group Name: Bead lip.
Product Function(s): Household (Polish).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Dark Green.
Lip Diameter: 3.0 cm Mouth Diameter: 1.7 cm.
Collar Diameter: N/A.
Description: Applied lip on a two piece molded small bottle that has a square body with a panel inset front. The one example matches a GMM bottle fragment labeled "Eclipse French Satin Gloss" (see Hochrein, Code 69).

Code: 4-22 Total: 2 Figure: 42.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Bead lip.
Product Function(s): Edible (Condiments).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Clear.
Lip Diameter: 4.4 cm Mouth Diameter: 2.8 cm.
Collar Diameter: N/A.
Description: Applied lip on a two piece mold with a rounded shoulders. The bead lip is thick and the glass of the entire body is also thick.

Code: 4-23 Total: 3 Figure: 43.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Bead lip.
Product Function(s): Edible (condiment).
Closure Type: Foil.
Side Seam: Mid-neck.
Color(s): Clear.
Lip Diameter: 4.8 cm Mouth Diameter: 3.5 cm.
Collar Diameter: N/A.
Description: Applied lip that is thin and flat on a two piece mold body. Most of the long wide neck has been tooled along with the lip. This wide mouth bottle has a neck that slopes down from the lip to the rounded wide body with almost no shoulder point.

Code: 4-24 Total: 4 Figure: 44.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Bead lip.
Product Function(s): Edible (Oil).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Clear.
Lip Diameter: 2.6 cm Mouth Diameter: 1.2 cm.
Collar Diameter: N/A.
Description: Applied lip on a two piece mold body. The neck is long and slender that slopes down and out just slightly from the lip to the shoulder. The body is round and the neck passage is somewhat constricted.

Code: 4-25 Total: 1 Figure: 45.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Bead lip.
Product Function(s): Edible (condiment).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Clear.
Lip Diameter: 2.4 cm Mouth Diameter: 1.1 cm.
Collar Diameter: N/A.

Description: Applied lip on a two piece mold, tear-drop shaped body. This small bottle type has a slightly flaring bead lip and is a pepper sauce product.

Code: 4-25.1 Total: 2 Figure: 45.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Bead lip.
Product Function(s): Edible (condiment).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 2.4 cm Mouth Diameter: 1.1 cm.
Collar Diameter: N/A.
Description: Identical to Code 4-25 only machine made.

Whole Bottle Example(s): 1.
Body Style: Tear drop round Figure: N/A.
Max. Height: 8.1 cm Max. Diameter: 4.2 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 3.4 cm Mid-Neck Diameter: 2.1 cm.
Comments: N/A.

Code: 4-26 Total: 1 Figure: 46.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Bead lip.
Product Function(s): Cosmetic (Perfume).
Closure Type: Glass Stopper.
Side Seam: None visible.
Color(s): Milk white.
Lip Diameter: N/A Mouth Diameter: N/A.
Collar Diameter: N/A.
Description: This possible perfume bottle has a small applied bead lip and a flaring, short neck. The lip has been ground along the top and because of heat damage no seam can be seen, or is there any shoulder left.

Code: 4-27 Total: 21 Figure: N/A.
Date Range: 1880-1915 Mean Date: 1897
Group Name: Bead lip.
Product Function(s): N/A.
Closure Type: N/A.
Side Seam: N/A.
Lip Diameter: N/A Mouth Diameter: N/A.
Collar Diameter: N/A.
Description: Heat damaged necks and bottle lip that are distorted beyond identification besides knowing that they have bead lips.

Code: 4-28 Total: 2 Figure: 47.
Date Range: 1880-1915 Mean Date: 1897
Group Name: Bead lip.

Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Three quarter.
Color(s): Clear.
Lip Diameter: 2.5 cm Mouth Diameter: 1.4 cm.
Collar Diameter: 2.3 cm.
Description: Applied lip on a two piece mold body. The tooled lip is rather flat and the mouth is somewhat constricted. The neck has a low neck, bead collar that was east in the mold. The shoulder slopes down to a square edge the body was rectangular.

Whole Bottle Example(s): 1.
Body Style: Square Figure: N/A.
Max. Height: 8.2 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 3 cm x 3 cm.
Neck Height: 2 cm Mid-Neck Diameter: 1.5 cm.
Comments: N/A.

Code: 4-29 Total: 5 Figure: 48.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Brown, Clear.
Lip Diameter: 3.5 cm Mouth Diameter: 2.5 cm.
Collar Diameter: 3.5 cm.
Description: Applied lip on a two piece mold body with a molded low neck collar that is seated at the point where the neck and shoulder meet. This type is similar to Code 4-1.11 and may have been a product similar to Bromo-Seltzer.

Whole Bottle Example(s): 1.
Body Style: Round Figure: N/A.
Max. Height: 9.8 cm Max. Diameter: 5.3 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 3.5 cm Mid-Neck Diameter: 2.0 cm.
Comments: N/A.

Code: 4-29.1 Total: 1 Figure: 49.
Date Range: 1906-1979 Mean Date: 1942.5
Group Name: Bead lip.
Product Function(s): Cosmetic (talcum).
Closure Type: Metal Cap.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 3.4 cm Mouth Diameter: 2.5 cm.
Collar Diameter: 3.8 cm.
Description: Machine made bottle that has a metal cap attached to it that served as a pour spout. The cap has a patent number and date of 1906 on it. The lip is a bead that serves as a seat for the metal cap. It also has a shoulder/neck collar similar to the one on Code 4-29.

Code: 4-30 Total: 2 Figure: 50.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Bead lip.
Product Function(s): Medical (Prescription).
Closure Type: Glass stopper.
Side Seam: Mid-neck.
Color(s): Green.
Lip Diameter: 3.1 cm Mouth Diameter: 2.2 cm.
Collar Diameter: 3.3 cm.
Description: Applied lip with a low neck collar (close of the shoulder) on a two piece mold body. Partially labeled "Larkin Soap Co., Buffalo" (See Hochrein's Code 126) and cited in Adams (1969:108). The interior lip and milk passage are ground.

Code: 4-31 Total: 11 Figure: 51.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Bead lip.
Product Function(s): Medical (Personal Care) or Household (Polish).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Clear.
Lip Diameter: 3.4 cm Mouth Diameter: 2.1 cm.
Collar Diameter: 3.3 cm.
Description: Applied lip on a two piece mold body with a low neck/shoulder collar. It also has tapered and fluted shoulders and beveled corners on its oblong body. Listed by Adams (1969:105).

Whole Bottle Example(s): 1.
Body Style: Oblong Figure: N/A.
Max. Height: 13.5 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 4.5 x 2.7 cm.
Neck Height: 2.5 cm Mid-Neck Diameter: 2.1 cm.
Comments: N/A.

Code: 4-32 Total: 1 Figure: 52.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Clear.
Lip Diameter: 2.8 cm Mouth Diameter: 1.4 cm.
Collar Diameter: 2.6 cm.
Description: Applied lip on a two piece mold body with a low neck/shoulder collar. The shoulder is stepped and squared. The product was probably a proprietary medicine.

Whole Bottle Example(s): 2.
Body Style: Square Figure: N/A.
Max. Height: 5.6 cm Max. Diameter: N/A.

Square or Rectangular Diameter: 2.4 cm x 2.0 cm.
Neck Height: 1.9 cm Mid-Neck Diameter: 1.3 cm.
Comments: N/A.

Code: 4-33 Total: 1 Figure: 53.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Bead lip.
Product Function(s): Cosmetic (Cologne).
Closure Type: Stopper.
Side Seam: Three quarter.
Color(s): Clear.
Lip Diameter: 2.7 cm Mouth Diameter: 1.5 cm.
Collar Diameter: N/A.
Description: Applied lip on a two piece mold body with tapered and fluted neck with a mid-neck bead collar. The shoulders are rounded and stepped.

Code: 4-34 Total: 2 Figure: 54.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Bead lip.
Product Function(s): Household (Cleaner).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 2.3 cm Mouth Diameter: 1.2 cm.
Collar Diameter: 2.5 cm.
Description: Machine made bottle with a tapered and slightly constricted mouth and molded bead, mid-neck collar. Made in a two piece mold. Probably an ammonia product or other cleaner.

Code: 4-35 Total: 2 Figure: 55.
Date Range: 1080-1910 Mean Date: 1895
Group Name: Bead lip.
Product Function(s): Household (ink).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Light blue, Clear.
Lip Diameter: 2.6 cm Mouth Diameter: 1.4 cm.
Collar Diameter: 3.3 cm.
Description: Applied lip on a two piece mold body. The body is cone shaped with a thick lower neck/shoulder collar. The neck is stepped in from the shoulder about .3 cm all around. Labeled "Firmin & Sons' Inc Pittsburgh".

Code: 4-36 Total: 5 Figure: 56.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Bead lip.
Product Function(s): Household (Ink).
Closure Type: Stopper.
Side Seam: Full.

Color(s): Clear.
Lip Diameter: 3.3 cm Mouth Diameter: 1.9 cm.
Collar Diameter: N/A.
Description: Machine made bottle with a wide mouth and short squat body that has a stepped shoulder. The shoulder has two rounded stepped tiers and a round final shoulder edge.

Whole Bottle Example(s): 3.
Body Style: Squat Round Figure: 6.
Max. Height: 6.2 cm Max. Diameter: 4.7 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 2.0 cm Mid-Neck Diameter: 2.9 cm.
Comments: N/A.

Code: 4-37 Total: 7 Figure: 57.
Date Range: 1903-1979 Mean Date: 1941
Group Name: N/A.
Product Function(s): Household (Polish or ink).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 3.6 cm Mouth Diameter: 2.3 cm.
Collar Diameter: 3.5 cm.
Description: Machine made bottle with a mid-neck collar and a neck/shoulder collar, plus embossed lettering on the neck; "3 Fluid Oz." the body is round and the shoulder is stopped and rounded.

Whole Bottle Example(s): 2.
Body Style: Round Max. Diameter: 4.6 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 2.9 cm Mid-Neck Diameter: 3.3 cm.
Comments: N/A.

Code: 4-38 Total: 1 Figure: 58.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Bead lip.
Product Function(s): Edible (Preserves).
Closure Type: Stopper? Foil.
Side Seam: Mid-neck.
Color(s): Light blue.
Lip Diameter: 4.2 cm Mouth Diameter: 3.0 cm.
Collar Diameter: 4.3 cm.
Description: Applied and tooled lip on a two piece mold body with a molded mid-neck collar and sloping slightly squared shoulder. The body is also slightly squared.

Code: 4-39 Total: 11 Figure: 59.
Date Range: 1870-1910 Mean Date: 1890
Group Name: Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.

Side Seam: Mid-neck.
Color(s): Clear.
Lip Diameter: 3.4 cm Mouth Diameter: 1.6 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on a two piece mold body. The lip flares slightly and has a squared skirt that is attached to it and was tooled as part of the lip. It is directly below the lip but not as wide in diameter as the lip. The shoulder is stepped and rounded on a oblong body.

Whole Bottle Example(s): 3.
Body Style: Oblong Figure: 7.
Max. Height: 23.0 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 9.4 cm x 5.6 cm.
Neck Height: 5.0 cm Mid-Neck Diameter: 3.0 cm.
Comments: N/A.

Code: 4-39.1 Total: 20 Figure: 60.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Clear, Brown, Cobalt blue.
Lip Diameter: 2.6 cm Mouth Diameter: 1.5 cm.
Collar Diameter: N/A.
Description: Similar to Code#4-39 but the necks are shorter and they are machine made and have long neck skirts. They have rectangular, oblong and round bodies but no stepped shoulders.

Whole Bottle Example(s): 25.
Body Style: Round Figure: 8.
Max. Height: 9.8 cm Max. Diameter: 4.8 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 2.4 cm Mid-Neck Diameter: 2.0 cm.
Comments: N/A.

Code: 4-40 Total: 1 Figure: 61.
Date Range: 1870-1910 Mean Date: 1890
Group Name: Bead lip.
Product Function(s): Household?
Closure Type: Glass stopper and stopper.
Side Seam: Mid-neck.
Color(s): Brown.
Lip Diameter: 3.1 cm Mouth Diameter: 1.7 cm.
Collar Diameter: 2.6 cm.
Description: Applied and tooled lip and squared skirt combination on a two piece mold body. There is also a bead collar just below the skirt that was tooled as part of the whole lip, the bead lip is flat on top and the skirt tapers down and out. The shoulder is rounded and body is oblong.

Code: 4-41 Total: 1 Figure: 62.
Date Range: 1810-1860 Mean Date: 1835
Group Name: Bead lip (flared).
Product Function(s): Liquor (whiskey, etc.).
Closure Type: Stopper.
Side Seam: None visible.
Color(s): Green.
Lip Diameter: 4.1 cm Mouth Diameter: 2.0 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on a probable two piece molded or free blown body. The neck is constricted some at the mouth and the bead lip flares out some. The lip also has a beveled edge around its upper edge. Shoulder shape is unknown.

Code: 5-1.1 Total: 29 Figure: 63.
Date Range: 1890-1910 Mean Date: 1900
Group Name: Squared Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Brown.
Lip Diameter: 4.1 cm Mouth Diameter: 2.6 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on a two piece mold body. A wide mouth bottle labeled "Bromo-Lithia" (see Hochrein, Code 23). This bottle has rounded shoulders and a thick squared lip. Bromo Lithia was a company owned by the Keasby and Mattison Co. of Philadelphia, PA. The last date of manufacture is not known.

Whole Bottle Example(s): 2.
Body Style: Round Figure: 9.
Max. Height: 14.8 cm Max. Diameter: 6.0 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 2.8 cm Mid-Neck Diameter: 3.3 cm.
Comments: N/A.

Code: 5-1.2 Total: 1 Figure: 63.
Date Range: 1890-1910 Mean Date: 1900
Group Name: Squared Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Brown.
Lip Diameter: 3.3 cm Mouth Diameter: 2.1 cm.
Collar Diameter: N/A.
Description: Identical to Code 5-1.1 only it's a small sized bottle of Bromo-Lithia.

Whole Bottle Example(s): 2.
Body Style: Square (wide mouth).
Max. Height: 12.3 cm Max. Diameter: N/A.

Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Light Blue, Clear.
Lip Diameter: 2.8 cm Mouth Diameter: 1.3 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on a two piece mold body. The lip has a beveled base that is quite similar to a "prescription lip (flaring square). This style, however, has a flat lip rim. Its body shape is oval with a sloping rounded shoulder.

Code: 5-20.1 Total: 16 Figure: 101.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Squared Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Clear, Brown.
Lip Diameter: 2.5 cm Mouth Diameter: 1.5 cm.
Collar Diameter: N/A.
Description: Machine made version of Code 5.20 but with shorter necks and often found on flask-like oval bodies and oblong or rectangular body styles.

Code: 5-20.2 Total: 75 Figure: 102.
Date Range: 75 Mean Date: 1895
Group Name: Square Bead lip.
Product Function(s): Medical (Prescription).
Closure Type: Glass stopper.
Side Seam: Back of neck or lower neck, including a shoulder seam.
Color(s): Clear.
Lip Diameter: 3.3 cm Mouth Diameter: 1.8 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on a three or four piece mold (possible and early semi-automatic made bottle). The neck and lip have been tooled in such a fashion as to obscure seam marks there. The shoulder is squared and the body is rectangular with somewhat rounded corners. The interior of the neck and lip are ground.

Whole Bottle Example(s): 1.
Body Style: Rectangular. Figure: N/A.
Max. Height: 7.5 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 3.7 cm x 2.3 cm.
Neck Height: 1.8 cm Mid-Neck Diameter: 1.9 cm.
Comments: N/A.

Code: 5-21 Total: 3 Figure: 103.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Squared Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.

Lip Diameter: 4.0 cm Mouth Diameter: 2.3 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip that is quite wide and thick and has a rounded bottom outer edge. The lip is applied to a short, thick glass neck with a slightly squared shoulder on a round body that was large, possibly demi-john sized.

Code: 5-19.1 Total: 1 Figure: 99.
Date Range: 1870-1900 Mean Date: 1885
Group Name: Square Bead lip.
Product Function(s): Liquor (Whiskey, etc.)?
Closure Type: Stopper.
Side Seam: Three quarter.
Color(s): Aqua.
Lip Diameter: 3.0 cm Mouth Diameter: 1.4 cm.
Collar Diameter: N/A.
Description: Applied & tooled lip on a two piece mold body. The lip style is similar to Code 5-19 only this style has a shorter lip and a flask-like body shape. This product could have been a medicine product.

Whole Bottle Example(s): 1.
Body Style: Flaring rectangle Figure: N/A.
Max. Height: 7.5 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 3.7 cm x 2.9 cm.
Neck Height: 2 cm Mid-Neck Diameter: 1.6 cm.
Comments: N/A.

Code: 5-19.2 Total: 1 Figure: 100.
Date Range: 1870-1900 Mean Date: 1885
Group Name: Squared Bead lip.
Product Function(s): Edible (Mineral Water?).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Aqua.
Lip Diameter: 3.8 cm Mouth Diameter: 2.1 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on a two piece mold body. This style is similar to Code 5-18 but the lip is shorter and more squat. The body shape was rounded.

Whole Bottle Example(s): 1.
Body Style: Square (Wide Mouth) Figure: N/A.
Max. Height: 10.6 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 3.9 cm x 3 cm.
Neck Height: 2 cm Mid-Neck Diameter: 2.7 cm.
Comments: N/A.

Code: 5-20 Total: 22 Figure: 101.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Squared Bead lip.

Closure Type: Stopper.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 2.5 Mouth Diameter: 1.4.
Collar Diameter: N/A.
Description: Machine made bottle with a squared lip that has a beveled or flaring base to the lip. The top of the lip is flat and there is a molded bead collar low on the neck. The neck is long and the body is rectangular with a rounded shoulder. Contained a patent medicine product.

Code: 5-18.1 Total: 2 Figure: 96.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Squared Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 2.3 cm Mouth Diameter: 1.2 cm.
Collar Diameter: 2.1 cm.
Description: Identical to Code 5-18 only this type is machine made and the neck length is longer.

Whole Bottle Example(s): 1.
Body Style: Rectangular Figure: N/A.
Max. Height: 9.9 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 3.8 cm x 1.9 cm.
Neck Height: 2.1 cm Mid-Neck Diameter: 1.6 cm.
Comments: N/A.

Code: 5-18.2 Total: 20 Figure: 97.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Squared Bead lip.
Product Function(s): Medical (Personal Care) or Edible (Extract).
Closure Type: Stopper.
Side Seam: Stopper.
Color(s): Clear.
Lip Diameter: 2.8 cm Mouth Diameter: 1.5 cm.
Collar Diameter: N/A.
Description: A machine made bottle that was similar in styling to Code 5-18 but this styleincluded no low neck collar and was placed on a square body. Some examples with this lip style have panel inset fronts. The lip is also shorter than on Codes 5-18 or 5-18.1.

Code: 5-19 Total: 2 Figure: 98.
Date Range: 1870-1900 Mean Date: 1885
Group Name: Squared Bead lip.
Product Function(s): Edible (Mineral Water).
Closure Type: Stopper.
Side Seam: Base of neck.
Color(s): Aqua.

Description: Similar to Code 5-15 only the lip is wider and the neck shorter, plus it is machine made.

Code: 5-15.2 Total: 1 Figure: 92.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Squared Bead lip.
Product Function(s): Liquor (Whiskey, etc.).
Closure Type: Stopper.
Side Seam: Three quarter.
Color(s): Clear.
Lip Diameter: 2.9 Mouth Diameter: 1.7 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip that is similar to Code 5-15 but the neck has a large globular chamber at the base of the neck just above the rounded shoulder. Made from a two piece mold the body was round and must have held at least 1/5 of a gallon or a quart of fluid.

Code: 5-16 Total: 6 Figure: 93.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Squared Bead Lip.
Product Function(s): Liquor (Whiskey, etc.).
Closure Type: Stopper.
Side Seam: Three quarter.
Color(s): Clear.
Lip Diameter: 2.9 Mouth Diameter: 1.7 cm.
Collar Diameter: 3.7 cm.
Description: Applied and tooled lip on a two piece molded body. The neck is similar to Code 5-15.2 in that this neck also has a globular bulge on it but its lip is not as wide and the neck has three low neck collars that are all together between the bulge and shoulder. The shoulder is rounded and the body was round.

Code: 5-17 Total: 1 Figure: 94.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Squared Bead lip.
Product Function(s): Medical (Prescription).
Closure Type: Glass Stopper.
Side Seam: Mid-neck.
Color(s): Clear.
Lip Diameter: 3.1 cm Mouth Diameter: 1.6 cm.
Collar Diameter: N/A.
Description: Applied lip on a two piece mold body with a short lip that is rounded on the top outer edge. The neck flares slightly from the shoulder and the interior of the lip is ground. The shoulder is squared and slopes from the base of the neck only slightly.

Code: 5-18 Total: 30 Figure: 95.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Squared Bead lip.
Product Function(s): Medical (Personal Care).

Comments: N/A.

Code: 5-13 Total: 2 Figure: 88.
Date Range: 1870-1900 Mean Date: 1885
Group Name: Squared Bead lip.
Product Function(s): Liquor (Whiskey, etc.).
Closure Type: Stopper.
Side Seam: Base of lip.
Color(s): Dark Brown.
Lip Diameter: 2.8 cm Mouth Diameter: 1.3 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on a two piece mold body that has a short squat neck and a flask-like shoulder. The lip is thick and the mouth somewhat constricted.

Code: 5-14 Total: 1 Figure: 89.
Date Range: 1870-1900 Mean Date: 1885
Group Name: Squared Bead lip.
Product Function(s): Liquor (Whiskey, etc.).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Aqua.
Lip Diameter: 3.1 cm Mouth Diameter: 2.0 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip with a two piece mold body. The neck is rather thick and squat and the lip is wide and also thick. The body has flask-like shoulders.

Code: 5-15 Total: 3 Figure: 90.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Squared Bead lip.
Product Function(s): Liquor (Whiskey, etc.).
Closure Type: Stopper.
Side Seam: Three quarter.
Color(s): Dark Green, Brown.
Lip Diameter: 2.9 cm Mouth Diameter: 1.6 cm.
Collar Diameter: N/A.
Description: Applied lid tooled lip on a two piece mold body. Body style unknown, because of lack of an example, though the lip style is similar to Code 5-14.

Code: 5-15.1 Total: 1 Figure: 91.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Squared Bead lip.
Product Function(s): Liquor (Whiskey, etc.).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Brown.
Lip Diameter: 3.0 cm Mouth Diameter: 1.7 cm.
Collar Diameter: N/A.

Code: 5-10.1 Total: 3 Figure: 85.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Squared Bead lip.
Product Function(s): Edible (condiment).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 2.4 cm Mouth Diameter: 1.6 cm.
Collar Diameter: N/A.
Description: Identical to Code 5-10 only machine made.

Whole Bottle Example(s): 1.
Body Style: Round Figure: N/A.
Max. Height: N/A. Max. Diameter: 4.7 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 7.1 cm Mid-Neck Diameter: 2 cm.
Comments: N/A.

Code: 5-11 Total: 4 Figure: 86.
Date Range: 1880-1910 Mean Date:1895
Group Name: Squared Bead lip.
Product Function(s): Cosmetic (Tonic or Perfume).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Clear.
Lip Diameter: 2.4 cm Mouth Diameter: 1.3 cm.
Collar Diameter: 1.3 cm.
Description: Applied and tooled lip that is short and thin on a two piece mold body. The mouth is constricted and the neck tapers down from the lip to the shoulder forming a wide shoulder that has a squared edge. The body is round and flares from the base.

Code: 5-12 Total: 12 Figure: 87.
Date Range: 1870-1979 Mean Date:1924.5
Group Name: Squared Bead lip.
Product Function(s): Medical (Prescription).
Closure Type: Stopper.
Side Seam: None visible.
Color(s): Clear.
Lip Diameter: 1.8 cm Mouth Diameter: 1.4 cm.
Collar Diameter: N/A.
Description: Free blown or turn molded vial with no visible seam anywhere on neck lip or body examples. This vial has a squared lip that is almost all wide in diameter on the body and there is a indented ring that runs around the body forming the bottom of the neck.

Whole Bottle Example(s): 4.
Body Style: Round (Vial) Figure: 12.
Max. Height: 6.0 cm Max. Diameter: 2.2 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 0.9 cm Mid-Neck Diameter: 1.3 cm.

Group Name: Squared Bead lip.
Product Function(s): Edible (Dairy).
Closure Type: Foil.
Side Seam: Mid-neck.
Color(s): Clear.
Lip Diameter: 4.8 cm Mouth Diameter: 3.4 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on a two piece mold body with a lip that tapers slightly. The mouth and neck are wide and shoulder slopes steeply and the body is round.

Whole Bottle Example(s): 3.
Body Style: Round Figure: N/A.
Max. Height: 16.6 cm Max. Diameter: 6.5 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 4.9 cm Mid-Neck Diameter: 4.5 cm.
Comments: N/A.

Code: 5-9.3 Total: 15 Figure: 84.
Date Range: 1880-1910 Mean Date:1895
Group Name: Squared Bead lip.
Product Function(s): Edible (Preserves).
Closure Type: Stopper.
Side Seam: Three quarter.
Color(s): Light green.
Lip Diameter: 4.3 cm Mouth Diameter: 3.0 cm.
Collar Diameter: 4.7 cm.
Description: Applied and tooled lip on a two piece body with a molded neck collar just above the shoulder. The body is a tapering square similar to a cathedral bottle.

Code: 5-10 Total: 2 Figure: 85.
Date Range: 1880-1910 Mean Date:1895
Group Name: Squared Bead lip.
Product Function(s): Edible (Condiment).
Closure Type: Stopper.
Side Seam: Three quarter.
Color(s): Clear.
Lip Diameter: 2.4 cm Mouth Diameter: 1.5 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on a two piece mold body. These necks are usually long and have somewhat constricted neck passages. The shoulders are round and bodies round with multple fluted, possible early Heinz products.

Whole Bottle Example(s): 1.
Body Style: Oblong panel inset Figure: N/A.
Max. Height: 18.2 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 5.1 cm x 3.5 cm.
Neck Height: 4.1 cm Mid-Neck Diameter: 2.2 cm.
Comments: N/A.

Product Function(s): Cosmetic (Perfume).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 2.2 cm Mouth Diameter: 1.2 cm.
Collar Diameter: N/A.
Description: Machine made bottle with a long slightly consisted neck. The body is round as are the shoulders with embossed flowers and vines on the body. The style is somewhat similar to Code 5-3.

Code: 5-8 Total: 1 Figure: 81.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Squared Bead lip.
Product Function(s): Edible (Extract).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 1.8 cm Mouth Diameter: 1.0 cm.
Collar Diameter: N/A.
Description: Machine made bottle with a long somewhat constricted neck with a lip that is wider than Codes 5-6 or 5-7. The body was a rectangular panel (inset style).

Code: 5-9 Total: 22 Figure: 82.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Squared Bead lip.
Product Function(s): Edible (Preserves).
Closure Type: Foil.
Side Seam: Mid-neck and three quarter.
Color(s): Light green, Clear.
Lip Diameter: N/A Mouth Diameter: 3.8 cm.
Collar Diameter: N/A.
Description: Applied lip on a two piece mold body with a wide mouth on a long wide neck and a round and slightly flaring body, that is not much wider than the neck. This bottle probably held pickles or a relish.

Code: 5-9.1 Total: 11 Figure: 82.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Squared Bead lip.
Product Function(s): Edible (Preserves).
Closure Type: Foil.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 5.8 cm Mouth Diameter: 5.0 cm.
Collar Diameter: N/A.
Description: Identical to Code 5-9 only machine made.

Code: 5-9.2 Total: 43 Figure: 83.
Date Range: 1880-1910 Mean Date: 1895

Description: Machine made bottle neck that is identical in style to Code 5-4.

Code: 5-5 Total: 1 Figure: 77.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Squared Bead lip
Product Function(s): Household (Ink).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Aqua (Light blue).
Lip Diameter: 2.7 cm Mouth Diameter: 1.5 cm.
Collar Diameter: 3.4 cm.
Description: Applied and tooled lip on a cone shaped, two piece mold body with a thin bead shoulder collar.

Code: 5-5.1 Total: 1 Figure: 78.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Squared Bead lip.
Product Function(s): Household (Ink).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Light green.
Lip Diameter: 2.7 cm Mouth Diameter: 1.8 cm.
Collar Diameter: N/A.
Description: Machine made bottle with a thin square lip on a square squat body. The shoulder is stepped and square.

Code: 5-6 Total: 2 Figure: 79.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Squared Bead lip.
Product Function(s): N/A.
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Aqua.
Lip Diameter: 2.2 cm Mouth Diameter: 1.2 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on a two piece mold body with a short neck and round squat body.

Whole Bottle Example(s): 2.
Body Style: Round
Figure: 11.
Max. Height: 4.0 cm Max. Diameter: 2.5 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 1.5 cm Mid-Neck Diameter: 1.6 cm.
Comments: N/A.

Code: 5-7 Total: 1 Figure: 80.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Squared Bead lip.

Whole Bottle Example(s): 1.
Body Style: Rectangular Figure: N/A.
Max. Height: 13.0 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 4.3 cm x 2.0 cm.
Neck Height: 3.7 cm Mid-Neck Diameter: 1.8 cm.
Comments: N/A.

Code: 5-3.8 Total: 2 Figure: 75.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Squared Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Clear.
Lip Diameter: 2.5 cm Mouth Diameter: 1.1 cm.
Collar Diameter: 2.4 cm.
Description: Applied and tooled lip on a two piece mold body. This type is similar to Code 5-3.6 but the lip is wider and the bead neck collar is closer to the shoulder. This is traditionally referred to as a "Packer" lip.

Whole Bottle Example(s): 2.
Body Style: Rectangular Figure: N/A.
Max. Height: 14.2 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 4.8 cm x 2.3 cm.
Neck Height: 3.9 cm Mid-Neck Diameter: 1.8 cm.
Comments: N/A.

Code: 5.4 Total: 1 Figure: 76.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Squared Bead lip.
Product Function(s): Medical (Personal Care) ?
Closure Type: Stopper.
Side Seam: Three quarter.
Color(s): Aqua.
Lip Diameter: 3.4 cm Mouth Diameter: 2.6 cm.
Collar Diameter: N/A.
Description: This wide mouth bottle had an extremely wide applied lip that is thin and tooled to a two piece mold body. The one fragment recovered from the Neville House dump was not large enough to note a collar.

Code: 5-4.1 Total: 2 Figure: 76.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Squared Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Aqua.
Lip Diameter: 3.3 cm Mouth Diameter: 2.5 cm.
Collar Diameter: N/A.

Description: Applied and tooled lip on a two piece mold body with molded shoulder straps on an oval body. The lip is wide and thick and the body comes in various sizes. The product is probably similar to Milk of Magnesia.

Code: 5-3.5 Total: 14 Figure: 73.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Squared Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Light blue.
Lip Diameter: 3.1 cm Mouth Diameter: 2.0 cm.
Collar Diameter: N/A.
Description: Similar to Code 5-3.4 but this type is machine made. This is the "Phillips Milk of Magnesia" product (see Hochrein's Code 152).

Whole Bottle Example(s): 1.
Body Style: Oblong Figure: 10.
Max. Height: 17.6 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 8.6 cm x 3.7 cm.
Neck Height: 4.1 cm Mid-Neck Diameter: 2.8 cm.
Comments: N/A.

Code: 5-3.6 Total: 47 Figure: N/A.
Date Range: 1880-1915 Mean Date: 1897.5
Group Name: Squared Bead lip.
Product Function(s): Medical (Personal Care) & Edible (extract).
Closure Type: Stopper.
Side Seam: Mid and three quarter.
Color(s): Clear.
Lip Diameter: 2.2 cm Mouth Diameter: 1.2 cm.
Collar Diameter: 2.2 cm.
Description: Applied and tooled lip on a two piece mold with a long tapering neck. Several of the examples like this have panel inset fronts and thin rectangular bodys. Many also have oblong bodies with sloping rounded soulders. They also have mid-neck molded collars. This is either a patented medicine or extract product.

Code: 5-3.7 Total: 25 Figure: 74.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Squared Bead lip.
Product Function(s): Medical (Personal Care) and Edible (Extract).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 2.2 cm Mouth Diameter: 1.2 cm.
Collar Diameter: 2.2 cm.
Description: Similar to Code 5-3.6 only machine made and the bead neck collar is slightly lower.

Whole Bottle Example(s): 19.
Body Style: Round Figure: N/A.
Max. Height: 10.8 cm Max. Diameter: 4.6 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 2.3 cm Mid-Neck Diameter: 1.9 cm.
Comments: N/A.

Code: 5-3.2 Total: 2 Figure: 70.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Squared Bead lip.
Product Function(s): Medical (Prescription).
Closure Type: Glass Stopper.
Side Seam: Mid-neck.
Color(s): Brown.
Lip Diameter: 2.8 cm Mouth Diameter: 1.7 cm.
Collar Diameter: N/A.
Description: Similar to Code 5-3 only this style has a much larger neck than the average 5-3 and the neck interior and lip interior are ground. It has an applied lip on a two piece mold body, rounded shoulder and oblong body shape.

Code: 5-3.3 Total: 3 Figure: 71.
Date Range: 1870-1910 Mean Date: 1890
Group Name: Squared Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Light blue.
Lip Diameter: 1.6 cm Mouth Diameter: 0.8 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on a two piece mold body. This type is similar to Code 5-3 but has a much more constricted mouth and is a small vial bottle with a rounded shoulder and round body.

Whole Bottle Example(s): 3.
Body Style: Round (Slender) Figure: N/A.
Max. Height: N/A. Max. Diameter: 2 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 1.8 cm Mid-Neck Diameter: 1.3 cm.
Comments: N/A.

Code: 5-3.4 Total: 6 Figure: 72.
Date Range: 1870-1910 Mean Date: 1890
Group Name: Squared Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Light Green.
Lip Diameter: 3.1 cm Mouth Diameter: 1.6 cm.
Collar Diameter: N/A.

Collar Diameter: N/A.
Description: Applied and tooled lips on a possible two piece mold body that has a very short neck and somewhat wide mouth for the apparent total size of the body.

Code: 5-2.3 Total: 2 Figure: 67.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Squared Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Cobalt blue.
Lip Diameter: 4.0 cm Mouth Diameter: 2.8 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip, tooled square on a two piece mold body that has a squared shoulder on a tapered square body.

Code: 5-3 Total: 121 Figure: 68.
Date Range: 1870-1910 Mean Date: 1890
Group Name: Squared Bead Lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Light Green, Brown, Clear, Aqua.
Lip Diameter: 3.0 cm Mouth Diameter: 1.4 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on a two piece mold body that included both square and rectangular bodies. The shoulders are usually squared but sloping. The mouth aperature is usually somewhat constricted. This type includes products like "Kemps Stomach, Throat and Liver Cure", and other patent medicine plus "Absorbine JR." bottles.

Whole Bottle Example(s): 18.
Body Style: Square or Rectangular and Round.
Max. Height: 6.4 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 2.5 cm x 2.5 cm.
Neck Height: 1.4 cm Mid-Neck Diameter: 1.9 cm.
Comments: N/A.

Code: 5-3.1 Total: 21 Figure: 69.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Squared Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Brown, Cobalt Blue, Clear, Light Blue.
Lip Diameter: 3.6 cm Mouth Diameter: 1.9 cm.
Collar Diameter: N/A.
Description: Similar to Code 5-3 only machine made. This type includes medicine and "Listerine" bottles.

Square or Rectangular Diameter: 4.7 cm x 4.7 cm.
Neck Height: 2.5 cm Mid-Neck Diameter: 3.8 cm.
Comments: N/A.

Code: 5-2 Total: 3 Figure: 64.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Squared Bead lip.
Product Function(s): Medical?
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Light green, Brown.
Lip Diameter: 3.8 cm Mouth Diameter: 2.6 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on a two piece mold body. The lip is thinner than Code 5-1.1 and the neck is longer. The shoulder slopes more than on the Bromo-Lithic bottle too.

Whole Bottle Example(s): 2.
Body Style: Round Figure: 9.
Max. Height: 13.3 cm Max. Diameter: 5.4 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 2.9 cm Mid-Neck Diameter: 4.0 cm.
Comments: N/A.

Code: 5-2.1 Total: 15 Figure: 65.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Squared Bead Lip.
Product Function(s): Medical? (Personal Care).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Aqua.
Lip Diameter: 4.2 cm Mouth Diameter: 3.0 cm.
Collar Diameter: N/A.
Description: Machine made bottle that is similar to Code 5-2 only the neck is shorter and the lip thinner.

Whole Bottle Example(s): 6.
Body Style: Round (squat wide mouth) Figure: N/A.
Max. Height: 8.8 cm Max. Diameter: 5.1 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 2.6 cm Mid-Neck Diameter: 3 cm.
Comments: N/A.

Code: 5-2.2 Total: 1 Figure: 66.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Squared Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 3.8 cm Mouth Diameter: 1.7 cm.

Side Seam: Full.
Color(s): Clear.
Lip Diameter: 3.0 cm Mouth Diameter: 1.5 cm.
Collar Diameter: 2.8 cm.
Description: Machine made bottle with a molded collar or skirt that is part of and just below the lip. The skirt is two or three times wider than the lip. The neck also has as bead collar about 1/3 of the way up the neck from the shoulder. Probably a "Creomulsion" product (see Hochrein's Code 50).

Whole Bottle Example(s): 2.
Body Style: Rectangular Figure: 13.
Max. Height: 9.9 cm Max. Diameter: 4.7 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 2.6 cm Mid-Neck Diameter: 2.2 cm.
Comments: One made by "Lysol Incorporated".

Code: 5-22 Total: 7 Figure: 104.
Date Range: 1903-1979 Mean Date:1941
Group Name: Square Bead lip.
Product Function(s): Edible (Preserves).
Closure Type: Pry-off or clamped cap?
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 5.4 cm Mouth Diameter: 4.4 cm.
Collar Diameter: N/A.
Description: Machine made bottle with a double squared lip. The lower is tapered in toward the base of the upper squared band. These bands and a indented groove below the lip served to seat and seal a cap that clamped on to the bottle. This is a wide mouth bottle with an extreme slope to the shoulder and round or octagonal body shape.

Whole Bottle Example(s): 1.
Body Style: Octagonal Figure: 14.
Max. Height: 15 cm Max. Diameter: N/A.
Square or Rectangular Diameter: N/A.
Neck Height: 4.0 cm Mid-Neck Diameter: 5 cm.
Comments: N/A.

Code: 5-23 Total: 1 Figure: 105.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Squared Bead lip.
Product Function(s): Edible (Condiment).
Closure Type: Pry-off or Kork-N-Seal.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 4.5 cm Mouth Diameter: 3.6 cm.
Collar Diameter: 5.1 cm.
Description: Machine made bottle that has a squared upper lip with a large lip collar that was used and sealing ring for the closure. Below the lip collar there are two neck collars spaced about 1 cm apart and the upper neck collar's approximately 1 cm below the lip collar.

Code: 5-24 Total: 49 Figure: N/A.
Date Range: N/A Mean Date: N/A
Group Name: Squared Bead lip.
Product Function(s): N/A.
Closure Type: N/A.
Side Seam: N/A.
Color(s): Various.
Lip Diameter: N/A Mouth Diameter: N/A.
Collar Diameter: N/A.
Description: This type classification is for bottle necks that have square bead lips but all other features have been obscured by heat damage.

Code: 6-1 Total: 7 Figure: 106.
Date Range: 1860-1910 Mean Date: 1885
Group Name: Globular Bead lip (Blob top).
Product Function(s): Edible (Water), Edible (Soda), Liquor (Whiskey, etc.).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Light blue, Brown, Clear, Light Purple.
Lip Diameter: 3.1 cm Mouth Diameter: 1.7 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip (somewhat tulip shaped) on a two piece mold body. The neck tapers down to the shoulder area. The shoulders do not protrude, the contour tapers on to the round body form.

Code: 6-2 Total: 1 Figure: 107.
Date Range: 1885-1915 Mean Date: 1900
Group Name: Globular Bead lip (Blob top).
Product Function(s): Edible (Soda).
Closure Type: Baltimore Loop Seal.
Side Seam: Three quarter.
Color(s): Light Green.
Lip Diameter: 2.9 cm Mouth Diameter: 1.3 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on a two piece mold body. The exterior of the lip is shaped similar to Code 6-1 but is rounder. The interior of the lip has an inset interior rim to seat the loop sealing cap or stopper. The body is round and the neck tapers similar to Code 6-1.

Whole Bottle Example(s): None, figure taken from non-site example.
Body Style: Tapered Round Figure: 15.
Max. Height: 21.5 cm Max. Diameter: 6.6 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 9.0 cm Mid-Neck Diameter: 3.5 cm.
Comments: N/A.

Code: 6-3 Total: 10 Figure: 109.
Date Range: 1870-1910 Mean Date: 1890
Group Name: Globular Bead lip (Blob top).
Product Function(s): Liquor (Beer), Edible (Soda), Liquor (Bitters).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Brown, Light Blue, Dark Green, Green.
Lip Diameter: 3.3 Mouth Diameter: 2.3.
Collar Diameter: N/A.
Description: Applied and tooled lip on a two piece mold body. The lip is shorter and rounded more than 6-1 or 6-2. The neck is also shorter and the shoulder is rounded.

Whole Bottle Example(s): 1.
Body Style: Round Figure: 16.
Max. Height: 20.2 cm Max. Diameter: 6.0 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 7.3 cm Mid-Neck Diameter: 2.6 cm.
Comments: N/A.

Code: 6-3.1 Total: 4 Figure: 108.
Date Range: 1870-1910 Mean Date:1890
Group Name: Globular Bead lip (Blob top).
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Dark Brown.
Lip Diameter: 3.3 cm Mouth Diameter: 1.6 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip that is on a two piece mold body and is somewhat similarin shape to 6-3 but the lip bead is larger and rounder and the neck much longer. Labeled "Warners Safe Kidney and Liver Cure, Rochester, N.Y." (see Hochrein's Code 233).

Code: 6-3.2 Total: 11 Figure: N/A.
Date Range: 1880-1915 Mean Date: 1897.5
Group Name: Globular Bead lip (Blob top).
Product Function(s): Edible (Soda).
Closure Type: "Hutchinson" Stopper.
Side Seam: Mid-neck.
Color(s): Clear, Light Blue.
Lip Diameter: 3.2 cm Mouth Diameter: 1.8 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on a two piece mold body, with a perfectly round, large lip that had the inner neck chamber to seat the Hutchinson stopper. The neck stopper similar to Code 6-2 to the rounded shoulder and 6-1.

Whole Bottle Example(s): 1.
Body Style: Round Figure: N/A.
Max. Height: 16.9 cm Max. Diameter: 6.1 cm.

Square or Rectangular Diameter: N/A.
Neck Height: 2.8 Mid-Neck Diameter: 2.7 cm.
Comments: N/A.

Code: 6-4 Total: 1 Figure: 110.
Date Range: 1870-1910 Mean Date: 1890
Group Name: Globular Bead lip (Blob top).
Product Function(s): Edible (Soda).
Closure Type: Stopper.
Side Seam: Base of lip.
Color(s): Light Green.
Lip Diameter: 2.9 cm Mouth Diameter: 1.7 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on a two piece mold body. The lip is more elongated than Code 6-1 or the other blob tops this style is also thinner and slightly squared. The shoulder and body shape are unknown.

Code: 6-4.1 Total: 2 Figure: 111.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Globular Bead lip (Blob top).
Product Function(s): Edible (soda).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 3.6 cm Mouth Diameter: 2.2 cm.
Collar Diameter: N/A.
Description: Machine made bottle similar to Code 6-4 only much larger over-all.

Code: 6-5 Total: 1 Figure: 112.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Globular Bead lip (Blob top).
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Clear.
Lip Diameter: 3.1 cm Mouth Diameter: 1.7 cm.
Collar Diameter: 3.1 cm.
Description: Applied and tooled lip on a two piece mold body. The lip is round with a tapered collar at its base. The neck is short and the shoulder is somewhat squared.

Code: 6-6 Total: 6 Figure: 113.
Date Range: 1840-1870 Mean Date: 1855
Group Name: Globular Bead lip (Blob top).
Product Function(s): Edible (Soda).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Light Blue.

Lip Diameter: 3.0 cm Mouth Diameter: 1.7 cm.
Collar Diameter: 3.1 cm.
Description: Applied and tooled lip on a two piece mold body. The lip flared out some and the neck passage was somewhat constricted. Labeled "Buffum" (see Hochrein's Code 28).

Code: 7-1 Total: 2 Figure: 114.
Date Range: 1850-1890 Mean Date: 1870
Group Name: Tapered lip.
Product Function(s): Liquor (Whiskey, etc.).
Closure Type: Stopper.
Side Seam: none visible.
Color(s): Dark Green.
Lip Diameter: 3.3 cm Mouth Diameter: 2.3 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on a probable two piece mold body though a seam is not visible in any examples. The lip is quite cone shaped (tapered) on a short neck with a squared, slightly sloping shoulder and square body shape.

Code: 7-2 Total: 4 Figure: 115.
Date Range: 1860-1910 Mean Date: 1885
Group Name: Tapered lip.
Product Function(s): Medical (Bitters).
Closure Type: Stopper.
Side Seam: None visible.
Color(s): Blue Green, Light Blue, Light Aqua.
Lip Diameter: 3.1 cm Mouth Diameter: 2.3 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on a probable two piece mold body. The lip is similar to Code 7-1 but the neck is longer and it tapers down to a rounded body and shoulder.

Code: 7-3 Total: 8 Figure: 116.
Date Range: 1860-1910 Mean Date: 1885
Group Name: Tapered lip.
Product Function(s): Liquor (Beer).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Dark Green.
Lip Diameter: 3.5 cm Mouth Diameter: 2.2 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on a two piece mold body with a long neck and rounded shoulder and round body shape.

Code: 7-4 Total: 101 Figure: 117.
Date Range: 1870-1910 Mean Date: 1890
Group Name: Tapered lip.
Product Function(s): Household (Amonia).
Closure Type: Stopper.

Side Seam: Mid-neck to three quarter.
Color(s): Aqua, Clear, Light green, Green.
Lip Diameter: 2.6 cm Mouth Diameter: 1.5 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on a two piece mold body. The lip is tapered more the Codes 7-1, 2 or 3. The body is oval shaped and the shoulder slopes gradually in a flask-like appearance. The inter of the mouth and neck is constricted.

Code: 7-4.1 Total: 26 Figure: 118.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Tapered lip.
Product Function(s): Household (Ammonia).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Clear, Light Blue.
Lip Diameter: 2.7 cm Mouth Diameter: 1.6 cm.
Collar Diameter: N/A.
Description: Identical to Code 7 4 only this style is machine made.

Whole Bottle Example(s): 2.
Body Style: Oval Figure: 17.
Max. Height: 21.0 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 9.0 cm x 5.1 cm.
Neck Height: 5.2 cm Mid-Neck Diameter: 3.5 cm.
Comments: N/A.

Code: 7-4.2 Total: 3 Figure: N/A.
Date Range: 1870-1910 Mean Date: 1890
Group Name: Tapered lip.
Product Function(s): Household (Chemical).
Closure Type: Stopper.
Side Seam: Mid to three quarter neck.
Color(s): Light Blue, Clear.
Lip Diameter: 2.6 cm Mouth Diameter: 1.5 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on a two piece mold body. Similar to Code 7-4 and 7-4.1 but this lip is 1/4" to 1/2" longer than the average 7-4 or 7-4.1. Body shape is oval and shoulder is rounded.

Code: 7-5 Total: 7 Figure: 119.
Date Range: 1870-1910 Mean Date: 1890
Group Name: Tapered lip.
Product Function(s): Edible (Extract).
Closure Type: Stopper.
Side Seam: Mid-neck to three quarter.
Color(s): Clear.
Lip Diameter: 2.5 Mouth Diameter: 1.6 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on a two piece molded body. The lip is less tapered the other Code 7's and is short. The neck is also

shorter and the shoulder is somewhat squared.

Code: 7-5.1 Total: 6 Figure: 120.
Date Range: 1870-1910 Mean Date: 1890
Group Name: Tapered lip.
Product Function(s): Edible (Oils).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Aqua.
Lip Diameter: 2.6 cm Mouth Diameter: 1.9 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on a two piece mold body. Similar to Code 7-5 in lip shape but the neck is much longer. The shoulder is rounded and the body is round.

Code: 7-5.2 Total: 2 Figure: 121.
Date Range: 1870-1910 Mean Date: 1890
Group Name: Tapered lip.
Product Function(s): Edible (Extract).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Light Green.
Lip Diameter: 2.8 cm Mouth Diameter: 1.9 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on two piece mold body that is panel inset on both the front and back. This type is similar to Code 7-5.1 but the lip is wider and the neck length shorter. The body is rectangular with squared shoulders.

Code: 7-6 Total: 17 Figure: 122.
Date Range: 1880-1910 Mean Date: 1896
Group Name: Tapered lip.
Product Function(s): Liquor (Whiskey, etc.).
Closure Type: Stopper.
Side Seam: Three quarter.
Color(s): Clear.
Lip Diameter: 3.0 cm Mouth Diameter: 2.1 cm.
Collar Diameter: 3.2 cm.
Description: Applied and tooled lip on a two piece mold body (possibly a semi-automatic made bottle). The tapered lip is somewhat tulip shaped with a bead collar at the base of the lip. The neck is short and the body rectangular with rounded shoulders.

Code: 7-6.1 Total: 18 Figure: 122.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Tapered lip.
Product Function(s): Liquor (Whiskey, etc.).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Brown, Clear.

Lip Diameter: 3.0 cm Mouth Diameter: 2.1 cm.
Collar Diameter: 3.2 cm.
Description: Machine made bottle that was identical in style to Code 7-6.

Code: 7-6.2 Total: 13 Figure: 123.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Tapered lip.
Product Function(s): Edible (Condiment).
Closure Type: Stopper.
Side Seam: Three quarter.
Color(s): Clear.
Lip Diameter: 2.5 cm Mouth Diameter: 1.6 cm.
Collar Diameter: 2.4 cm.
Description: Applied and tooled lip on a two piece mold body. The lip is similar to Code 7-6 but this style is thinner and more elongated without the tulip shape. It has a bead collar at the base of the lip and a tapered neck. The body and shoulder shape are unknown.

Code: 7-6.3 Total: 2 Figure: 124.
Date Range: 1880-1910 Mean Date: 124
Group Name: Tapered lip.
Product Function(s): Edible (condiment).
Closure Type: Stopper.
Side Seam: Three quarter.
Color(s): Clear.
Lip Diameter: 2.9 cm Mouth Diameter: 2.1 cm.
Collar Diameter: 3.3 cm.
Description: Applied and tooled lip on a two piece mold body. The lip and collar similar to Code 7-6.2 but less pronounced. The lip tapers only slightly. The body has a globular bulge at the base of the neck. The shoulder is tapered and fluted and the body was round. Possibly an early Heinz or other ketsup product.

Code: 7-6.4 Total: 3 Figure: 125.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Tapered lip.
Product Function(s): Liquor (Whiskey, etc.).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 3.1 cm Mouth Diameter: 2.2 cm.
Collar Diameter: 3.4 cm.
Description: Machine made bottle with a tapered lip and collar combination on a squat neck. The body was oval shaped with a slightly square shoulder style. This body is however quite large.

Whole Bottle Example(s): 2.
Body Style: Oval Figure: 18.
Max. Height: 18 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 9.6 cm x 4.0 cm.

Neck Height: 5.0 cm Mid-Neck Diameter: 2.7 cm.
Comments: N/A.

Code: 7-6.5 Total: 3 Figure: 126.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Tapered lip.
Product Function(s): Medical (Personal Care), Edible (Extract).
Closure Type: Stopper.
Side Seam: Three quarter.
Color(s): Clear.
Lip Diameter: 2.6 cm Mouth Diameter: 1.7 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on a two piece mold (possible semi-automatic made bottle) body. The lip has a tulip shaped taper similar to Code 7-6 and a bead collar but the neck is quite short and squat on a flask-like body with rounded shoulders.

Code: 7-6.6 Total: 1 Figure: 127.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Tapered lip.
Product Function(s): Edible (Extract).
Closure Type: Stopper.
Side Seam: Mid-lip.
Color(s): Clear.
Lip Diameter: 2.4 cm Mouth Diameter: 1.8 cm.
Collar Diameter: 2.4 cm.
Description: Machine made bottle (possibly sem-automatic made) with lip style similar to Code 7-6.4 but the lip is even less tapered. Body and shoulder shape are unknown.

Code: 7-6.7 Total: 1 Figure: 128.
Date Range: 1870-1910 Mean Date: 1890
Group Name: Tapered lip.
Product Function(s): Medical (Personal Care), Edible (Extract).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Clear.
Lip Diameter: 2.6 cm Mouth Diameter: 1.8 cm.
Collar Diameter: 2.7 cm.
Description: Applied and tooled lip with a two piece mold body. The lip is similar to Code 7-6.5 but this style also has a mid-neck collar. The neck is short and the body is rectangular with panel inset front and back. The shoulders are squared.

Code: 7-6.8 Total: 1 Figure: 129.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Tapered lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper with a neck cap.
Side Seam: Full.

Color(s): Cobalt Blue.
Lip Diameter: 3.0 cm Mouth Diameter: 2.0 cm.
Collar Diameter: 4.1 cm.
Description: Machine made bottle with a two piece mold body. The lip is similar to Code 7-4.1 but the neck is very short and just above the shoulder there is a wide collar (squared) with lettering on it. Possibly the stopper had a skirt on it that extended down over the lip to seat on the wide collar. The shoulder is squared and the body oval shaped.

Code: 7-6.9 Total: 1 Figure: 130.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Tapered lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Cobalt Blue.
Lip Diameter: 3.2 cm Mouth Diameter: 2.4 cm.
Collar Diameter: 3.6 cm.
Description: Machine made bottle with a two piece mold body. The lip is quite similar to Code 7-6.8 but the neck is lacking the pronounced collar on 7-6.8. This style has a mid-neck bead collar. The body and shoulder shape are unknown.

Code: 7-7 Total: 5 Figure: 131.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Tapered lip.
Product Function(s): Liquor (Whiskey, etc.).
Closure Type: Stopper.
Side Seam: None visible.
Color(s): Green, Clear.
Lip Diameter: 3.1 cm Mouth Diameter: 2.1 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on an apparent two piece mold bottle. The lip tapers only slightly and has a neck that tapers up from the rounded shoulders. The shape was oval.

Code: 7-7.1 Total: 5 Figure: 132.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Tapered Lip.
Product Function(s): Liquor (Whiskey, etc.).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Blue, Clear.
Lip Diameter: 3.2 cm Mouth Diameter: 2.2 cm.
Collar Diameter: N/A.
Description: Machine made bottle that is somewhat similar to Code 7-7 but the lip is even less tapered and the neck longer. The body shape is square and the shoulder is also squared.

Code: 7-8 Total: 1 Figure: 133.
Date Range: 1880-1919 Mean Date: 1895
Group Name: Tapered lip.
Product Function(s): Edible (Malt extract), Liquor?
Closure Type: Stopper.
Side Seam: Three quarter.
Color(s): Brown.
Lip Diameter: 2.9 cm Mouth Diameter: 2.1 cm.
Collar Diameter: 3.7 cm.
Description: Applied and tooled lip on a two piece mold body with a inset neck ring at the base of the lip and two low neck bead collars. The neck is quite long and the shoulder rounded. The body is tapered and round. Labeled "John Wyeth & Bro. Phil. PA" (see Hochrein's Code 242).

Code: 7-9 Total: 1 Figure: 134.
Date Range: 1860-1910 Mean Date: 1885
Group Name: Tapered lip.
Product Function(s): Medical (Bitters).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Light Blue.
Lip Diameter: 3.6 cm Mouth Diameter: 2.0 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on a two piece mold body. The upper half of the lip tapers the lower half is flared, thus creating a beveled somewhat triangular looking lip. The lip is rather thick and the neck is short with a probable oval shaped body and sloping rounded shoulder.

Whole Bottle Example(s): 1.
Body Style: Round Figure: N/A.
Max. Height: 16.3 cm Max. Diameter: 6.4 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 3.4 cm Mid-Neck Diameter: 2.3 cm.
Comments: N/A.

Code: 8-1 Total: 2 Figure: 135.
Date Range: 1820-1870 Mean Date: 1845
Group Name: Double Tapered lip.
Product Function(s): Liquor (Wine?).
Closure Type: Stopper.
Side Seam: None visible.
Color(s): Dark Green.
Lip Diameter: 3.9 cm Mouth Diameter: 2.2 cm.
Collar Diameter: 3.6 cm.
Description: Applied and tooled lip on a probable two piece mold body. The lip consists of a steeply tapered lip laid over another tapered glass band creating the look of a tapered collar directly below the lip. No shoulder or body sections are visible in the two examples.

Code: 8-2 Total: 17 Figure: 136.
Date Range: 1870-1910 Mean Date: 1890
Group Name: Double Tapered lip.
Product Function(s): Liquor (Wine, Whiskey or Beer).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Dark Green, Light Green, Green, Brown, Brown/Green, Yellow/Green.
Lip Diameter: 3-5 cm Mouth Diameter: 2.5 cm.
Collar Diameter: 3.7 cm.
Description: Applied and tooled lip on a two piece mold body. The lip is similar to Code 8-1 only the upper lip section is not tapered as much. The neck also tapers more than the Code 8-1.

Code: 8-2.1 Total: 3 Figure: 137.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Double Tapered lip.
Product Function(s): Liquor (Whiskey, etc.)?
Closure Type: Stopper.
Side Seam: Full.
Color(s): Light Green, Clear, Green.
Lip Diameter: 3.1 cm Mouth Diameter: 2.3 cm.
Collar Diameter: 3.4 cm.
Description: Machine made bottle that's lip is quite similar in style to Code 8-2 but the upper lip section is tapered less and the lower section is more like a lip collar. The neck is quite short and the shoulders sloping into a flask-like shape. The body was probably oval shaped.

Whole Bottle Example(s): 1.
Body Style: Flask Figure: N/A.
Max. Height: 22.3 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 12 cm x 6.5 cm.
Neck Height: 5.7 cm Mid-Neck Diameter: 2.9 cm.
Comments: N/A.

Code: 8-3 Total: 3 Figure: 138.
Date Range: 1860-1910 Mean Date: 1885
Group Name: Double Tapered lip.
Product Function(s): Liquor (Beer or Ale) or Edible (Mineral Water)?
Closure Type: Stopper.
Side Seam: None visible.
Color(s): Dark Green.
Lip Diameter: 3.2 cm Mouth Diameter: 2.3 cm.
Collar Diameter: 3.5 cm.
Description: Applied and tooled lip on a probable two piece mold body. The lip has a lower lip taper that is identical to the one on Code 8-2 but the upper lip section is almost square. It's neck bulges from just below the lip to the shoulder, similar to common ale bottles. The shoulder and body are missing.

Code: 8-3.1 Total: 2 Figure: 139.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Double Tapered lip.
Product Function(s): Liquor (Beer or Ale), Edible (Mineral Water)?
Closure Type: Stopper.
Side Seam: Fall.
Color(s): Dark Green.
Lip Diameter: 3.4 cm Mouth Diameter: 2.5 cm.
Collar Diameter: 3.7 cm.
Description: Identical to Code 8-3 but machine made.

Code: 8-4 Total: 1 Figure: 140.
Date Range: 1870-1910 Mean Date: 1890
Group Name: Double Tapered lip.
Product Function(s): Liquor (Whiskey, etc.).
Closure Type: Stopper.
Side Seam: None visible.
Color(s): Aqua.
Lip Diameter: 3-0 cm Mouth Diameter: 2.0 cm.
Collar Diameter: 3.0 cm.
Description: Applied and tooled lip and tapered collar combination that is similar to Code 8-3 in base form but this lip is much more squat. The upper lip portion is relatively square and not as wide as Code 8-3. Shoulder and body shapes are unknown.

Whole Bottle Example(s): 1.
Body Style: Tapered Round Figure: N/A.
Max. Height: 15.4 cm Max. Diameter: 4.7 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 5.5 cm Mid-Neck Diameter: 2.6 cm.
Comments: N/A.

Code: 8-4.1 Total: 2 Figure: 141.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Double tapered lip.
Product Function(s): Edible (Condiment).
Closure Type: Stopper and Foil.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 3.0 cm Mouth Diameter: 2.0 cm.
Collar Diameter: 3.1 cm.
Description: Machine made version of Code 8-4 but the gap between the upper lip section and the lip collar is more.

Code: 9-1 Total: 27 Figure: 142.
Date Range: 1860-1910 Mean Date: 1885
Group Name: Double Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Aqua, Light Green, Clear.

Lip Diameter: 2.6 cm Mouth Diameter: 1.5 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on a two piece mold body. This lip code is made of two beads close together and in this case the upper bead is slightly larger than the lower bead. The neck on this code is short and attached to a rounded on a oval or flash-like body shape.

Whole Bottle Example(s): 1.
Body Style: Oval. Figure: N/A.
Max. Height: 16.2 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 5.5 cm x 2.9 cm.
Neck Height: 3.6 cm Mid-Neck Diameter: 2.0 cm.
Comments: N/A.

Code: 9-1.1 Total: 1 Figure: 143.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Double Bead lip.
Product Function(s): Medical or Edible?
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Clear.
Lip Diameter: 2.3 cm Mouth Diameter: 1.3 cm.
Collar Diameter: 2.1 cm.
Description: Applied and tooled lip on a two piece mold body. This double bead lip combintion also has a low neck, bead collar. The lip is identical to Code 9-1 but the neck is longer and the shoulder squared. The body shape is rectangular with panel inset front & back.

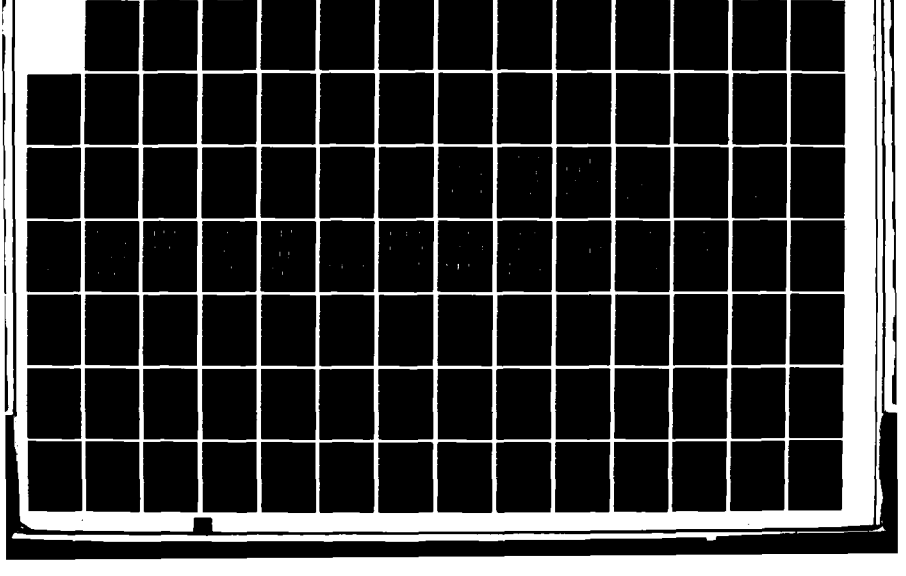
Whole Bottle Example(s): 3.
Body Style: Rectangular Figure: 19.
Max. Height: 13.2 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 4/5 cm x 2/1 cm.
Neck Height: 3.4 cm Mid-Neck Diameter: 1.8 cm.
Comments: N/A.

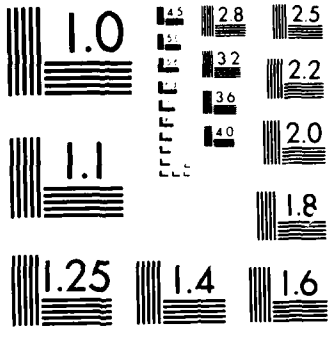
Code: 9-2 Total: 3 Figure: 144.
Date Range: 1860-1910 Mean Date: 1885
Group Name: Double Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Light Blue.
Lip Diameter: 3.1 cm Mouth Diameter: 1.6 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on a two piece mold body. This style is similar to Code 9-1 but the lip is larger and neck somewhat longer. The lower bead is also less defined. The shoulder is rounded and the body rectangular.

Code: 9-2.1 Total: 4 Figure: 145.
Date Range: 1903-1979 Mean Date: 1941

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Group Name: Double Bead lip.
Product Function(s): Household?
Closure Type: Stopper.
Side Seam: Full.
Color(s): Brown, Clear.
Lip Diameter: 2.4 cm Mouth Diameter: 2.1 cm.
Collar Diameter: N/A.
Description: Machine made bottle with a large upper bead and very small lower bead. The neck is short and the shoulder rounded. This style is quite similar to Code 9-2 but the lip shape is more well defined.

Code: 9-3 Total: 1 Figure: 146.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Double Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Clear.
Lip Diameter: 3.7 cm Mouth Diameter: 2.1 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on a two piece mold body. The upper bead is beveled similar to lip on Code 7-9. The lower bead is rather flat in profile. The neck is short and shoulder rounded. The body is round.

Code: 9-4 Total: 2 Figure: 147.
Date Range: 1870-1910 Mean Date: 1890
Group Name: Double Bead lip.
Product Function(s): Household (Ink).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Light Blue.
Lip Diameter: 3.4 cm Mouth Diameter: 2.4 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on a two piece mold body with a neck shoulder bead collar. The lip consists to two small beads close together. The neck is short and the mouth is wide for the body size. The shoulder is rounded and body round.

Code: 9-4.1 Total: 8 Figure: 148.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Double Bead lip.
Product Function(s): Household (Ink).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 3.5 cm Mouth Diameter: 2.4 cm.
Collar Diameter: N/A.
Description: Machine made bottle similar in style to Code 9-4 but without the neck/shoulder collar. This neck tapers down from the lip and drops off to form a little ledge just before the shoulder drops

off. The body is round. Possibly a Carter's Ink bottle.

Whole Bottle Example(s): 1.
Body Style: Square (Squat) Figure: N/A.
Max. Height: 6 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 6.5 cm x 6.5 cm.
Neck Height: 2 cm Mid-Neck Diameter: 3.4 cm.
Comments: N/A.

Code: 9-4.2 Total: 1 Figure: 149.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Double Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Foil.
Side Seam: Full.
Color(s): Cobalt Blue.
Lip Diameter: 5.1 cm Mouth Diameter: 3.8 cm.
Collar Diameter: 5.1 cm.
Description: Machine made bottle with a wide mouth and short neck. The beads are more or less equal in size and separated by a well defined gap. The shoulder slopes slightly and is rounded. The full shoulder and body shape are unknown. Possibly this is a product like Bromo-Seltzer or Bromolithia.

Whole Bottle Example(s): 2.
Body Style: Round Figure: N/A.
Max. Height: 13.6 cm Max. Diameter: 4.3 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 2.6 cm Mid-Neck Diameter: 3.8 cm.
Comments: N/A.

Code: 9-5 Total: 5 Figure: 150.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Double Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Light Blue.
Lip Diameter: 3.5 cm Mouth Diameter: 2.1 cm.
Collar Diameter: 3.3 cm.
Description: Machine made bottle with the lower bead of the double bead lip, beveled to a triangular point and a much larger upper lip. The neck tapers just a little to the squared shoulders. The body is rectangular.

Code: 9-5.1 Total: 2 Figure: 151.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Double Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Full.

Color(s): Clear.
Lip Diameter: 3.0 cm Mouth Diameter: 1.6 cm.
Collar Diameter: 2.6 cm.
Description: Machine made bottle with a slightly flaring double bead lip combination. The upper bead is considerably larger than the lip collar (lower bead). The body is rectangular with a sloping squared shoulder. One example is labeled "O-Cedar" (see Hochrein's Code 166).

Whole Bottle Example(s): 1.
Body Style: Rectangular Figure: N/A.
Max. Height: 15.9 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 7.5 cm x 2.6 cm.
Neck Height: 3.8 cm Mid-Neck Diameter: 2.0 cm.
Comments: N/A.

Code: 9-5.2 Total: 7 Figure: 152.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Double Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 3.5 cm Mouth Diameter: 2.1 cm.
Collar Diameter: 3.2 cm.
Description: Machine made bottle with a lip style similar to Code 9-5.1 but with the addition of a lip skirt (wide flat collar attached to the base of the tip). The neck is slightly fluted, the body rectangular in shape and the shoulders squared and sloping.

Whole Bottle Example(s): 1.
Body Style: Rectangular Figure: N/A.
Max. Height: 22.9 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 8.1 cm x 4.9 cm.
Neck Height: 5.3 cm Mid-Neck Diameter: 2.5 cm.
Comments: N/A.

Code: 9-5.3 Total: 7 Figure: 153.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Double Bead lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 3.3 cm Mouth Diameter: 2.0 cm.
Collar Diameter: 3.1 cm.
Description: Machine made bottle with a two piece molded double bead lip combination and a lip skirt that is flat and squared. This lip style is similar to Code 9-5.2 but not as wide. The neck is also shorter. The shoulders are sloping and squared, and the body is rectangular.

Whole Bottle Example(s): 2.

Body Style: Square Figure: N/A.
Max. Height: 5.4 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 2 cm x 2 cm.
Neck Height: 1.4 cm Mid-Neck Diameter: 1.6 cm.
Comments: N/A.

Code: 9-5.4 Total: 5 Figure: 154.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Double Bead lip.
Product Function(s): Medical (Personal Care), Edible (Extract)?
Closure Type: Stopper.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 3.0 cm Mouth Diameter: 1.7 cm.
Collar Diameter: 2.8 cm.
Description: Machine made bottle which has a lip style identical to Code 9-5.3 but this neck also has a mid-neck bead collar. This neck is also quite long, the shoulder is squared and body rectangular.

Code: 10-1 Total: 34 Figure: 155.
Date Range: 1870-1910 Mean Date: 1890
Group Name: Triple Bead lip.
Product Function(s): Medical (Personal Care), Cosmetic (Perfume)?
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Clear.
Lip Diameter: 3.0 cm Mouth Diameter: 1.4 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on a two piece mold body. The lip consists of an upper bead that is flared somewhat with two beads directly below. These beads each smaller than the first and the lowest bead smaller than the middle one. The neck is relatively straight with a tapered base with a squared square that had a single step at the edge of the shoulder. This is a "May Drug Co" bottle (see Hochrein Code 146).

Whole Bottle Example(s): 2.
Body Style: Rectangular Figure: N/A.
Max. Height: 10.2 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 6.2 cm x 2.5 cm.
Neck Height: 3.5 cm Mid-Neck Diameter: 1.7 cm.
Comments: N/A.

Code: 10-1.1 Total: 1 Figure: 155.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Triple Bead lip.
Product Function(s): Medical (Personal Care), Cosmetic (Perfume)?
Closure Type: Stopper.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 3.4 cm Mouth Diameter: 1.3 cm.

Collar Diameter: N/A.
Description: Similar to Code 10-1 but machine made. The whole example we have is however round rather than rectangular like Code 10-1.

Whole Bottle Example(s): 2.
Body Style: Round Figure: N/A.
Max. Height: 14.8 cm Max. Diameter: 6.0 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 5.8 cm Mid-Neck Diameter: 4.2 cm.
Comments: N/A.

Code: 11-1 Total: 47 Figure: 156.
Date Range: 1870-1910 Mean Date: 1890
Group Name: Flared lip.
Product Function(s): Medical (Personal Care), Edible (Extract).
Closure Type: Stopper.
Side Seam: Mid to three quarter neck.
Color(s): Brown, Light Green, Clear.
Lip Diameter: 3.4 cm Mouth Diameter: 1.3 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on a two piece mold body. The lip is an irregular rounded bead that is flared along the interior rim. Some of these types is slightly squared and flared both on the exterior and interior of the lip. Necks are short and shoulder or body can occur, round or rectangular.

Whole Bottle Example(s): 7.
Body Style: Rectangular Figure: N/A.
Max. Height: 14.4 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 5.0 cm x 3.0 cm.
Neck Height: 3.1 cm Mid-Neck Diameter: 2.0 cm.
Comments: N/A.

Code: 11-1.1 Total: 1 Figure: N/A.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Flared lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Light Blue.
Lip Diameter: 2.1 cm Mouth Diameter: 1.3 cm.
Collar Diameter: N/A.
Description: Machine made version of Code 11-1.

Whole Bottle Example(s): 6.
Body Style: Rectangular Figure: N/A.
Max. Height: 6.9 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 3.2 cm x 2.2 cm.
Neck Height: 1.5 cm Mid-Neck Diameter: 1.8 cm.
Comments: N/A.

Code: 11-1.2 Total: 42 Figure: N/A.
Date Range: 1870-1910 Mean Date: 1890
Group Name: Flared lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Mid-neck to three quarter.
Color(s): Clear, Brown.
Lip Diameter: 3.0 cm Mouth Diameter: 1.6 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on a two piece mold body. The lip is a rounded flaring bead with a skirt collar at the base of the lip. The skirt is part of the lip and are squared in their basic shape. The neck tapers some and the body shape is oval or oblong.

Whole Bottle Example(s): 1.
Body Style: Oblong Figure: N/A.
Max. Height: 9.0 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 4.7 cm x 2.7 cm.
Neck Height: 2.4 cm Mid-Neck Diameter: 1.6 cm.
Comments: N/A.

Code: 11-1.3 Total: 32 Figure: 157.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Flared lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Brown, Clear.
Lip Diameter: 2.7 cm Mouth Diameter: 1.8 cm.
Collar Diameter: N/A.
Description: Machine made version of Code 11-1.2.

Code: 11-2 Total: 181 Figure: 158.
Date Range: 1870-1910 Mean Date: 1890
Group Name: Flared lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Mid to three quarter neck.
Color(s): Brown, Clear, Dark Green, Light Blue.
Lip Diameter: 3.2 cm Mouth Diameter: 1.5 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on a two piece mold body. This is a classic styled "Prescription lip" that is a squared and flared lip. Both the interior and exterior of the lip are flared. The interior of the mouth and neck are often constricted and the bodies are usually rectangular. The shoulders are squared and the bodies are also occasionally panel inset.

Whole Bottle Example(s): 38.
Body Style: Rectangular Figure: N/A.
Max. Height: 11.7 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 4.5 cm x 2.7 cm.

Neck Height: 3.0 cm Mid-Neck Diameter: 1.9 cm.
Comments: N/A.

Code: 11-2.1 Total: 34 Figure: 158.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Flared lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Clear, Light Blue, Light Brown.
Lip Diameter: 3.0 cm Mouth Diameter: 1.9 cm.
Collar Diameter: N/A.
Description: Identical to Code 11-2 but machine made.

Code: 11-2.2 Total: 11 Figure: 159.
Date Range: 1870-1910 Mean Date: 1890
Group Name: Flared lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Clear.
Lip Diameter: 3.4 cm Mouth Diameter: 1.6 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on a two piece mold body. The lip flares and is squared plus it has a short squared skirt. The neck is short and the shoulders are rounded. The body is an oval or rounded shape.

Code: 11-2.3 Total: 1 Figure: 159.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Flared lip.
Product Function(s): Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Brown.
Lip Diameter: 5.4 cm Mouth Diameter: 4.0 cm.
Collar Diameter: 4.4 cm.
Description: Identical to Code 11-2.2 only machine made and the body is rectangular in shape.

Whole Bottle Example(s): 1.
Body Style: Rectangular Figure: N/A.
Max. Height: 9.3 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 3.7 cm x 2.4 cm.
Neck Height: 2.2 Mid-Neck Diameter: 1.6 cm.
Comments: N/A.

Code: 11-3 Total: 17 Figure: 160.
Date Range: 1870-1910 Mean Date: 1890
Group Name: Flared lip.

Product Function(s): Edible (Preserves).
Closure Type: Stopper or Foil.
Side Seam: Three quarter neck.
Color(s): Clear.
Lip Diameter: 5.5 cm Mouth Diameter: 3.2 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on a two piece mold body. The lip is a rounded bead that flares. The mouth wide and so is the neck passage. The neck is rather short and the shoulder slopes down at a steep angle. The body is round.

Whole Bottle Example(s): 5.
Body Style: Rectangular Figure: N/A.
Max. Height: 8.8 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 3.9 cm x 2.5 cm.
Neck Height: 1.9 cm Mid-Neck Diameter: 2.1 cm.
Comments: N/A.

Code: 11-3.1 Total: 9 Figure: 161.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Flared lip.
Product Function(s): Edible (Preserves).
Closure Type: Stopper or Foil.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 5.5 cm Mouth Diameter: 3.9 cm.
Collar Diameter: N/A.
Description: Machine made bottle that is quite similar to Code 11-3, however, this style is quite small in over all body shape and the lip is more rounded and less flared.

Whole Bottle Example(s): 4.
Body Style: Round Figure: N/A.
Max. Height: 11.3 cm Max. Diameter: 4.8 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 3.5 cm Mid-Neck Diameter: 2.1 cm.
Comments: N/A.

Code: 11-3.2 Total: 1 Figure: 162.
Date Range: 1800-1910 Mean Date:1895
Group Name: Flared lip.
Product Function(s): Medical (Personal Care)?
Closure Type: Unknown.
Side Seam: None visible.
Color(s): Clear.
Lip Diameter: 5.0 cm Mouth Diameter: 3.5 cm.
Collar Diameter: N/A.
Description: Applied and tooled or turn mold formed lip on a probably two piece mold body. The lip flares out from the neck just a little and is short and thin. The neck glass is also quite thin with numerous air bubbles in it. Shoulder and body shape are unknown.

Code: 12-1 Total: 69 Figure: 163.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Inset interior lip rim.
Product Function(s): Edible (Preserves).
Closure Type: Wired lid.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 5.3 cm Mouth Diameter: 4.3 cm.
Collar Diameter: N/A.
Description: Machine made bottle with a short squared lip that has an interior rim that served to seat a glass, or ceramic lip that was clamped or wired fastened to the mouth (similar to a lightening closure). The mouth is wide as is the neck passage. The shoulder slopes extremely and the body is round.

Whole Bottle Example(s): 12.
Body Style: Round Figure: 20.
Max. height: 14.5 cm Max. Diameter: 5.2 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 4.2 cm Mid-Neck Diameter: 3.5 cm.
Comments: N/A.

Code: 12-1.1 Total: 18 Figure: 164.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Inset interior lip rim.
Product Function(s): Edible (Preserves).
Closure Type: Wired lip.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 5.3 cm Mouth Diameter: 3.4 cm.
Collar Diameter: 5.0 cm.
Description: Identical to Code 12-1 only with a low neck bead and it is machine made. This style is also, usually much smaller than Code 12-1. Probably a fruit product like cherries. Several examples are cathederal-like bottles.

Whole Bottle Example(s): 2.
Body Style: Roud Figure: 21.
Max. Height: 20.0 cm Max. Diameter: 6.1 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 5.0 cm Mid-Neck Diameter: 4.0 cm.
Comments: N/A.

Code: 12-2 Total: 2 Figure: 165.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Inset interior lip rim.
Product Function(s): Edible (Preserves).
Closure Type: Wired lid?
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 4.8 cm Mouth Diameter: 4.1 cm.

Collar Diameter: N/A.
Description: Machine made bottle with a wide mouth on a small body size. The lid is rounded on the exterior with a squared interior lip rim similar to Codes 12-1 and 12-1.1 but not as well defined. The shoulder is short and rounded the body is round but with numerous small flutes around it.

Code: 12-3 Total: 2 Figure: 166.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Inset interior lip rim.
Product Function(s): Edible (Dairy?).
Closure Type: Stopper or Glass Stopper?
Side Seam: None visible.
Color(s): Aqua.
Lip Diameter: 4.2 cm Mouth Diameter: 3.3 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on a possible two piece mold. The lip is wide and thick and it is slightly squared and applied to the outside of the neck so that half of the lip is above the neck's rim thus creating a interior lip rim. The shoulder is rounded and body shape is round. This bottle contained "Mellins' Infants' Food, Doliber-Goodale Co. Boston" (Adams, 1972).

Code: 12-4 Total: 1 Figure: 167.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Inset interior lip rim.
Product Function(s): Edible?
Closure Type: Stopper.
Side Seam: None visible.
Color(s): Clear.
Lip Diameter: 4.5 cm Mouth Diameter: 3.7 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on a probable two piece mold body (the example is quite small). The lip is similar to Code 12-3 but is much thinner and more of the lip extends up part of the interior lip rim.

Whole Bottle Example(s): 1.
Body Style: Round Figure: N/A.
Max. Height: 14.2 cm Max. Diameter: 5.7 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 3.5 cm Mid-Neck Diameter: 2 cm.
Comments: N/A.

Code: 12-5 Total: 6 Figure: 168.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Inset interior lip rim.
Product Function(s): Household (Dyes or Polish).
Closure Type: Stopper.
Side Seam: Three quarter.
Color(s): Clear, Light Green.

Lip Diameter: 3.0 cm Mouth Diameter: 2.3 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on a two piece mold body. This style is also similar to Code 12-3 butthe lip ismore squared and much smaller and thinner. It also has a interior lip rim that is low in the neck. The shoulder is squared and the body is square.

Whole Bottle Example(s): 1.
Body Style: Square (wide mouth) Figure: N/A.
Max. Height: 8.4 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 3.3 cm x 3.3 cm.
Neck Height: 2.7 cm Mid-Neck Diameter: 2.5 cm.
Comments: N/A.

Code: 12-6 Total: 3 Figure: 169.
Date Range: 1870-1910 Mean Date:1890
Group Name: Inset interior lip rim.
Product Function(s): Liquor (Whiskey, etc.), Medical (Personal Care).
Closure Type: Stopper.
Side Seam: Three quarter.
Color(s): Aqua, Clear.
Lip Diameter: 2.9 cm Mouth Diameter: 2.3 cm.
Collar Diameter: 2.9 cm.
Description: Applied and tooled lip on a two piece mold body. The lip is slightly tapered, has an inset interior lip rim about mid way up the lip and a tapered collar that is located at the base of the lip (tooled together). The neck tapers up from the shoulder which is sloping on a oval (flask-like) body.

Code: 12-6.1 Total: 2 Figure: 170.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Inset interior lip rim.
Product Function(s): Liquor (Whiskey, etc.).
Closure Type: Stopper.
Side Seam: Full.
Color(s): Aqua.
Lip Diameter: 2.9 cm Mouth Diameter: 2.2 cm.
Collar Diameter: 3.1 cm.
Description: Identical to Code 12-6 only machine made.

Code: 12-7 Total: 1 Figure: 171.
Date Range: 1870-1910 Mean Date: 1890
Group Name: Inset interior lip rim.
Product Function(s): Edible (Sauces).
Closure Type: Stopper.
Side Seam: Mid-neck.
Color(s): Aqua.
Lip Diameter: 2.8 cm Mouth Diameter: 1.7 cm.
Collar Diameter: 2.6 cm.
Description: Applied and tooled lip on a two piece mold body. This lip style includes a bead and long skirt combination with a short tapered

collar just below the skirt and an interior lip rim. The neck is long and has rounded shoulders and multi-facted round body. This is a Worchester sauce product bottle.

Code: 12-8 Total: 24 Figure: 172.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Inset interior lip rim.
Product Function(s): Edible (Dairy).
Closure Type: Waxed cardboard stopper.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 5.5 cm Mouth Diameter: 4.1 cm.
Collar Diameter: N/A.
Description: Machine made bottle unknown as a "common sence milk jar" (bottle) (ketchum, 1975:156). The lip is a wide, thick round bead with an interior lip rim to seat a paper or cardboard cap or stopper. The lip was probably also covered over with a foil or paper seal. The shoulder slopes extremely so that the round body just tapers up from the base to the base of the lip.

Code: 12-8.1 Total: 5 Figure: 173.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Inset interior lip rim.
Product Function(s): Edible (Dairy).
Closure Type: Paper or Cardboard Stopper.
Seam: Full.
Color(s): Clear.
Lip Diameter: 5.9 cm Mouth Diameter: 4.3 cm.
Collar Diameter: N/A.
Description: Machine made bottle that has a lip similar to Code 12-8 only this style is not as rounded and it has a short skirt at the base of the lip. This skirt is squared and the body tapers up from its base to the base of the lip with no defined shoulder. Some examples are labeled: "Reick" (see Hochrein's Code 198).

Whole Bottle Example(s): 1.
Body Style: Round Figure: 22.
Max. Height: 14.0 cm Max. Diameter: 6.3 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 4.1 cm Mid-Neck Diameter: 4.6 cm.
Comments: N/A.

Code: 12-9 Total: 6 Figure: 174.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Inset interior lip rim.
Product Function(s): Edible (Dairy).
Closure Type: Paper or Cardboard Stopper.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 5.7 cm Mouth Diameter: 4.3 cm.
Collar Diameter: N/A.

Comments: N/A.

Code: 18-11.1 Total: 1 Figure: 209.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Continuous threading lip.
Product Function(s): Edible (condiments).
Closure Type: Screw-on cap.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 2.7 cm Mouth Diameter: 1.9 cm.
Collar Diameter: 3.2 cm.
Description: Machine made bottle with a lip style that has both a relatively long, bead threaded lip with a base bead collar like Code 18-11 but the lip is not nearly as long and the threading circles the lip three times bring it up close to the edge of the lip. The shoulder and body shape are tapered round from the bodies base.

Whole Bottle Example(s): 2.
Body Style: Flaring Octagon Figure: N/A.
Max. Height: 19 cm Max. Diameter: 6.9 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 5.9 cm Mid-Neck Diameter: 4 cm.
Comments: H.J. Heinz Co. catsup bottle.

Code: 18-11.2 Total: 1 Figure: 210.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Continuous threading lip.
Product Function(s): Edible (preserves/condiments?).
Closure Type: Screw-on cap.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 4.5 cm Mouth Diameter: 3.7 cm.
Collar Diameter: 5.0 cm.
Description: Machine made bottle with a wide mouthed lip that has a rounded bead thread that is quite low on the lip. It also has a lip base, bead collar. The shoulder and body shapes are unknown.

Code: 18-12 Total: 29 Figure: 211.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Continous threading lip.
Product Function(s): Edible (condiment).
Closure Type: Screw-on cap.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 4.0 cm Mouth Diameter: 3.0 cm.
Collar Diameter: 4.7 cm.
Description: Machine made bottle with a lip style some what similar to Codee 18-11 but this style has a rounded bead on the upper edge of the lip (around the mouth). The threading is relatively low on the lip and the lip has a bead collar. The threading circles the lip one and one half times. The neck is long and relatively straight. The shoulder

Code: 18-9.2 Total: 1 Figure: 206.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Continuous threading cap.
Product Function(s): Liquor (whiskey, etc.).
Closure Type: Screw-on cap.
Side Seam: Full.
Color(s): Brown.
Lip Diameter: 2.5 cm Mouth Diameter: 1.8 cm.
Collar Diameter: N/A.
Description: Machine made bottle with a lip style that is identical to Code 18-9.1 but the upper neck is inset to receive a cap with a long decorative skirt to it. The threaded area is quite short and the skirt covered the neck to a point approximately 4 cm below the inset lip area. The neck then tapers down from the inset neck area. The shoulder and body shapes are unknown.

Code: 18-10 Total: 1 Figure: 207.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Continuous threading lip.
Product Function(s): Liquor (whiskey, etc.).
Closure Type: Screw-on cap.
Side Seam: Full.
Color(s): clear.
Lip Diameter: 2.5 cm Mouth Diameter: 1.9 cm.
Collar Diameter: N/A.
Description: Machine made bottle with a threaded inset upper lip section similar to Codes 18-9.1 and 18-9.2 but this lip laso includes a second separate set of threads that are not inset but are below the first set. This threading is actually on the neck. Possibly there was a cap over a cap on this bottle style. The shoulder and body shapes are unknown.

Code: 18-11 Total: 7 Figure: 208.
Date Range: 1880-1910 Mean Date: 1895
Group Name: Continuous threading lip.
Product Function(s): Edible (condiments).
Closure Type: Screw-on cap.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 2.6 cm Mouth Diameter: 1.9 cm.
Collar Diameter: 3.2 cm.
Description: A hand finished or toolded lip on a two piece mold body. This probable ketsup bottle has a wide (long) lip are with round bead threads low on the lip. At the base of the lip area is a round bead collar. The neck tapers gradually down. The body was probably a tapered round or octagonal shape.

Whole Bottle Example(s): 1.
Body Style: Octagonal Figure: N/A.
Max. Height: 20.6 cm Max. Diameter: 6.1 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 9.9 cm Mid-Neck Diameter: 3.3 cm.

Description: Machine made bottle with an extremely small lip that is tapered and constricted. The threading is close to the base of the lip and the top of the lip flares out and tapers bakc to a small mouth, thus forming a beveled or pointed tip to lip. The shoulder and body shapes are unknown.

Code: 18-9 Total: 6 Figure: 204.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Continuous threading lip.
Product Function(s): Unknown.
Closure Type: Screw-on cap.
Side Seam: Full.
Color(s): Aqua, clear.
Lip Diameter: 2.5 cm Mouth Diameter: 1.8 cm.
Collar Diameter: N/A.
Description: Machine made neck and lip forms that have no collars, have straight lips and round bead threading. This code is a catch-all for basically similar styles that have lips inset on their necks and the threading is high in the lips. They are probably personal care (medical) products.

Whole Bottle Example(s): 4.
Body Style: Oval (flask-like) Figure: N/A.
Max. Height: 5.5 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 3.1 cm x 1.9 cm.
Neck Height: 1.6 cm Mid-Neck Diameter: 2 cm.
Comments: N/A.

Code: 18-9.1 Total: 1 Figure: 205.
Date Range: 1932-1979 Mean Date: 1955
Group Name: Continuous threading lip.
Product Function(s): Liquor (whiskey, etc.).
Closure Type: Screw-on cap.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 2.5 cm Mouth Diameter: 1.9 cm.
Collar Diameter: 3.2 cm.
Description: Machine made bottle with a short lip area similar to Code 18-9. The threading is a thin rounded bead that circles the lip one and one half times. The neck is long and tapers slightly and has a bead neck collar approximately 4 cm below the lip. The lip area is inset similar to Code 18-9. The shoulder is rounded and the body is round.

Whole Bottle Example(s): 1.
Body Style: Round. Figure: N/A.
Max. Height: 19.0 cm Max. Diameter: 7.0 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 6.0 cm Mid-Neck Diameter: 3.8 cm.
Comments: N/A.

Code: 18-6 Total: 1 Figure: 201.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Continuous threading lip.
Product Function(s): Cosmetic (powder?).
Closure Type: Screw-on cap.
Side Seam: Full.
Color(s): clear.
Lip Diameter: 3.2 cm Mouth Diameter: 2.6 cm.
Collar Diameter: N/A.
Description: Machine made bottle or small jar has a thin continous bead thread that runs around the lip twice. The neck is very short and is all threaded lip. The shoulder is thin and squared. The body is round and does not taper or flare. The one example we have has a zinc cap with "B & B" embossed on it.

Whole Bottle Example(s): 2.
Body Style: Square (wide mouth) Figure: N/A.
Max. Height: 8.6 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 3.7 cm x 3.7 cm.
Neck Height: 1.4 cm Mid-Neck Diameter: 3.1 cm.
Comments: N/A.

Code: 18-7 Total: 1 Figure: 202.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Continuous threading cap.
Product Function(s): Cosmetic (perfume).
Closure Type: Screw-on cap.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 2.6 cm Mouth Diameter: 1.8 cm.
Collar Diameter: N/A.
Description: Machine made bottle with a short lip/neck combination that is centered in the middel of a relatively large, flat, square body form. The body is a squat square style with rounded shoulders. The bead threading circles the lip one and one half times.

Whole Bottle Example(s): 1.
Body Style: Tapered Round Figure: N/A.
Max. Height: 6.2 cm Max. Diameter:3.4 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 3.4 cm Mid-Neck Diameter: 2.4 cm.
Comments: N/A.

Code: 18-8 Total: 2 Figure: 203.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Continuous threading lip.
Product Function(s): Edible (pepper sauce).
Closure Type: Screw-on cap.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 1.3 cm Mouth Diameter: 0.5 cm.
Collar Diameter: N/A.

that serves as a sealing edge. The body is a tear drop shape and tapers from its base.

Whole Bottle Example(s): 2.
Body Style: Oval Figure: N/A.
Max. Height: 10.6 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 5.5 cm x 3.0 cm.
Neck Height: 4.0 cm Mid-Neck Diameter: 2.5 cm.
Comments: N/A.

Code: 18-4 Total: 5 Figure: 199.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Continuous threading lip.
Product Function(s): Cosmetic (perfume).
Closure Type: Screw-on cap.
Side Seam: Full.
Color(s): Brown, clear.
Lip Diameter: 1.7 cm Mouth Diameter: 1.2 cm.
Collar Diameter: N/A.
Description: Machine made bottle with a small constricted neck and lip on a relatively large cylinder shape round bodied body. It is also found on rectangular body shapes.

Whole Bottle Example(s): 10.
Body Style: Round Figure: N/A.
Max. Height: 7.6 cm Max. Diameter: 3.4 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 1.6 cm Mid-Neck Diameter: 1.3 cm.
Comments: N/A.

Code: 18-5 Total: 1 Figure: 200.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Continuous threading cap.
Product Function(s): Medical (personal care).
Closure Type: Screw-on cap.
Side Seam: Full.
Color(s): Cobalt blue.
Lip Diameter: 3.1 cm Mouth Diameter: 2.1 cm.
Collar Diameter: N/A.
Description: Machine made bottle with a wide mouth lip that has a bead thread that runs twice around the low portion of the lip. The neck is all lip with a stepped collar of sorts, at the base of the lip/neck. The shoulder is rounded and the body is round.

Whole Bottle Example(s): 3.
Body Style: Square Figure: N/A.
Max. Height: 8.3 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 3.3 cm x 3.3 cm.
Neck Height: 1.5 cm Mid-Neck Diameter: 3 cm.
Comments: N/A.

Neck Height: 4.5 cm Mid-Neck Diameter: 3.6 cm.
Comments: N/A.

Code: 18-1.1 Total: 1 Figure: 196.
Date Range: 1850-1900 Mean Date: 1875
Group Name: Continuous thrading lip.
Product Function(s): Medical (personal care) / Edible (salt shaker).
Closure Type: Screw-on cap.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 2.3 cm Mouth Diameter: 1.8 cm.
Collar Diameter: 3.1 cm.
Description: Ground and tooled lip on a two piece mold body. The lip and body were mold formed and the lip was sheared and ground. The threading is a rounded bead that circles the lip one and one half times. Below the threading is a neck bulge that is similar to a collar. The shoulder is an extreme slope in a octagonal body shape. This small bottle looks like a salt shaker.

Whole Bottle Example(s): 1.
Body Style: Flaring Round (wide mouth) Figure: N/A.
Max. Height: 11 cm Max. Diameter: 4.2 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 4 cm Mid-Neck Diameter: 3.2 cm.
Comments: N/A.

Code: 18-2 Total: 2 Figure: 197.
Date Range: 1890-1910 Mean Date: 1900
Group Name: Continous threading lip.
Product Function(s): Cosmetic?
Closure Type: Screw-on cap.
Side Seam: Base of the lip.
Color(s): Clear.
Lip Diameter: 3.9 cm Mouth Diameter: 3.1 cm.
Collar Diameter: 4.3 cm.
Description: A possible turn mold lip on a three piece mold body. The lip is molded but shows no seam lines, it has a bead thread that circles the lip four times. The neck is rather short and the shoulder is rounded. The body is also round.

Code: 18-3 Total: 2 Figure: 198.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Continuous threading lip.
Product Function(s): Household (dyes or polish).
Closure Type: Screw-on cap.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 1.9 cm Mouth Diameter: 1.4 cm.
Collar Diameter: N/A.
Description: Machine made bottle with a constricted lip and neck, a bead thread that circles two and one half times and a high shoulder

Square or Rectangular Diameter: N/A.
Neck Height: 3.3 cm Mid-Neck Diameter: 2.2 cm.
Comments: N/A.

Code: 17.1 Total: 1 Figure: 193.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Interrupted thread lip.
Product Function(s): Liquor (wine).
Closure Type: Screw-on cap.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 3.8 cm Mouth Diameter: 3.0 cm.
Collar Diameter: 4.2 cm.
Description: Machine made bottle with a wide mouth lip that has two sets of double round bead threading lines. The lines of one set are offset from the other set. The neck is long and straight except for a widening taper just at the base of the neck. The shoulder is rounded. The body shape is unknown. The lip also has a bead collar.

Code: 17-2 Total: 1 Figure: 194.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Interrupted threading lip.
Product Function(s): Household?
Closure Type: Screw-on cap.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 2.6 cm Mouth Diameter: 1.9 cm.
Collar Diameter: 3.0 cm.
Description: Machine made bottle with two beads that run at an angle across the side of the lip fromthe bead collar about one half of the way around the lip. One threading bead starts on one side of the neck and one on the other. The neck is short and the shoulder rounded. The body is also round.

Code: 18-1 Total: 1 Figure: 195.
Date Range: 1850-1900 Mean Date: 1875
Group Name: Continuous threading lip.
Product Function(s): Medical (personal care).
Closure Type: Screw-on cap.
Side Seam: Full.
Color(s): Brown.
Lip Diameter: 2.8 cm Mouth Diameter: 2.3 cm.
Collar Diameter: N/A.
Description: A ground lip, two piece molded body and lip with one continuous molded bead that circles the lip twice. The neck/lip combination is short on a sloping rounded shoulder and round body.

Whole Bottle Example(s): 4.
Body Style: Round Figure: N/A.
Max. Height: 15.9 cm Max. Diameter: 4.1 cm.
Square or Rectangular Diameter: N/A.

Code: 16-1.1 Total: 23 Figure: 190.
Date Range: 1903-1979 Mean Date:1941
Group Name: Lugged lip.
Product Function(s): Medical (personal care), Cosmetic (perfume).
Closure Type: Lug cap.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 3.1 cm Mouth Diameter: 2.2 cm.
Collar Diameter: 3.5 cm.
Description: Machine made bottle with a triple lugged lip and a lip bead collar that defines the base of the lip from the neck. Both the lip and the neck are straight. The neck passage and mouth are somewhat constricted. The shoulder is round and sloping and the body is rectangular.

Code: 16-2 Total: 2 Figure: 191.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Lugged lip.
Product Function(s): Medical (ppersonal care).
Closure Type: Lug cap.
Side Seam: Full.
Color(s): Cobalt blue.
Lip Diameter: 4.1 cm Mouth Diameter: 3.3 cm.
Collar Diameter: 4.6 cm.
Description: Machine made bottle with a quadruple lugged lip and a round bead collar a short distance below the lugs. The bottle mouth is wide, the shoulders round and the body round.

Whole Bottle Example(s): 1.
Body Style: Oval (panel inset) Figure: N/A.
Max. Height: 6.3 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 6 cm x 4.5 cm.
Neck Height: 2.8 cm Mid-Neck Diameter: 3.8 cm.
Comments: N/A.

Code: 16-3 Total: 9 Figure: 192.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Lugged lip
Product Function(s): Edible (extract), Medical (personal care), and possibly Household.
Closure Type: Lug cap.
Side Seam: Full.
Color(s): Clear, colbalt blue, light green.
Lip Diameter: 3.5 cm Mouth Diameter: 2.8 cm.
Collar Diameter: 4.3 cm.
Description: Machine made bottle with long double lugs that have squared spurs or catches on them to help lock the cap down. The base neck and body styles vary for this variety of lip closure system.

Whole Bottle Example(s): 3.
Body Style: Round Figure: N/A.
Max. Height: 13.9 cm Max. Diameter: 5.2 cm.

Color(s): Clear.
Lip Diameter: 2.6 cm Mouth Diameter: 1.7 cm.
Collar Diameter: N/A.
Description: Machine made bottle with a lip style smaller and more squat than Code 15-1. Body styles are round and often fluted. The product is usually ketsup. The lip also has a rounded bead at its base.

Whole Bottle Example(s): 1.
Body Style: Round (multi-sided) Figure: 26.
Max. Height: 24.5 cm Max. Diameter: 7.4 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 10.0 cm Mid-Neck Diameter: 4.8 cm.
Comments: N/A.

Code: 15-3 Total: 1 Figure: 188.
Date Range: 1932-1979 Mean Date: 1955
Group Name: Crown top lip.
Product Function(s): Liquor (whiskey, etc.).
Closure Type: Crown cap ?
Side Seam: Full.
Color(s): Light brown.
Lip Diameter: 2.9 cm Mouth Diameter: 1.6 cm.
Collar Diameter: N/A.
Description: Machine made bottle with a crown top lid that has a squared upper lip bead and the lower lip bulb flares from its base to the lip groove. Though this lip style is somewhat similar to a crown top it may not have sealed with a crown cap. It is a liquor bottle with a Federal Stamp on it (post 1932). The body is flask-like.

Code: 16-1 Total: 3 Figure: 189.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Lugged lip.
Product Function(s): Household?
Closure Type: Lug cap.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 3.0 cm Mouth Diameter: 2.4 cm.
Collar Diameter: N/A.
Description: Machine made bottle with a triple lugged lip. This bottle style has a straight neck that continues unbroken to the edges of the lip. The lugs are evenly spaced around the lip. The body is oval shaped and the shoulder is rounded.

Whole Bottle Example(s): 3.
Body Style: Oval Figure: N/A.
Max. Height: 25.0 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 6.7 cm x 2.7 cm.
Neck Height: 5.0 cm Mid-Neck Diameter: 2.6 cm.
Comments: N/A.

lip consists of a round bead upper lip portion with a rounded groove just below it and a bulb-like lip collar just below this groove. The body is round and tapers from the base to the lip.

Whole Bottle Example(s): 22.
Body Style: Round Figure: N/A.
Max. Height: 24.6 cm Max. Diameter: 6.7 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 10.6 cm Mid-Neck Diameter: 3.0 cm.
Comments: N/A.

Code: 15-1.1 Total: 8 Figure: 185.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Crown top lip.
Product Function(s): Edible (soda and water), Liquor (beer), and Medical (personal care).
Closure Type: Crown cap.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 3.4 cm Mouth Diameter: 2.1 cm.
Collar Diameter: N/A.
Description: Machine made bottle that is identical in styling to Code 15-1 but much larger than the standard crown top bottle lip. The body tapers from the base and is round.

Whole Bottle Example(s): 1.
Body Style: Round Figure: 25.
Max. Height: 13.0 cm Max. Diameter: 5.7 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 5.5 cm Mid-Neck Diameter: 2.9 cm.
Comments: N/A.

Code: 15-1.2 Total: 5 Figure: 186.
Date Range: 1903-1979 Mean Date:1941
Group Name: Crown top lip.
Product Function(s): Edible (soda).
Closure Type: Crown cap.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 2.8 cm Mouth Diameter: 1.6 cm.
Collar Diameter: 2.8 cm.
Description: Machine made bottle that has a lip similar to Code 15-1 but it also has a beveled (pointed) collar just below the lower bulb portion of the lip. The body is identical to Code 15-1.

Code: 15-2 Total: 5 Figure: 187.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Crown top lip.
Product Function(s): Edible (condiment).
Closure Type: Crown cap.
Side Seam: Full.

Max. Height: 8.3 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 4.2 cm x 4.2 cm.
Neck Height: 2.2 cm Mid-Neck Diameter: 1.8 cm.
Comments: N/A.

Code: 14-2 Total: 3 Figure: 182.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Kork-N-Seal lip (Fountain and Colcleaser, 1968).
Product Function(s): Medical (personal care) or Edible (soda).
Closure Type: Kork-N-Seal cap.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 3.5 cm Mouth Diameter: 2.5 cm.
Collar Diameter: 3.8 cm.
Description: Machine made bottle with a lip style similar to Code 14-1 but the lower lip portion (or lip collar) is a flaring squared bead not rounded like the Code 14-1. The body is rounded and tapers up from the base.

Code: 14-3 Total: 1 Figure: 183.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Kork-N-Seal lip (Fountain and Colcleaser, 1968).
Product Function(s): Liquor (whiskey, etc) or Edible (condiment).
Closure Type: Kork-N-Seal cap.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 2.6 cm Mouth Diameter: 1.8 cm.
Collar Diameter: 3.0 cm.
Description: Machine made bottle with a lip similar to Code 14-1 but the lower lip portion (or lip collar is a long squared band that does not flare out. Below this squared band is a round bead collar. The neck tapers from the rounded shoulder and the body style is round.

Whole Bottle Example(s): 1.
Body Style: Round Figure: N/A.
Max. Height: 32.9 cm Max. Diameter: 7.9 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 12.0 cm Mid-Neck Diameter: 3.5 cm.
Comments: N/A.

Code: 15-1 Total: 205 Figure: 184.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Crown top lip.
Product Function(s): Edible (soda), Liquor (beer).
Closure Type: Crown cap.
Side Seam: Full.
Color(s): Clear, black, dark green, brown, aqua, light green, green, yellow (amber).
Lip Diameter: 2.8 cm Mouth Diameter: 1.6 cm.
Collar Diameter: N/A.
Description: Machine made bottle that is still quite common today. The

Group Name: Extended lip rim.
Product Function(s): Edible (preserves).
Closure Type: Metal pry-off lid.
Side Seam: Mid-neck.
Color(s): Clear.
Lip Diameter: 3.3 cm Mouth Diameter: 2.6 cm.
Collar Diameter: 3.9 cm.
Description: Applied tooled and ground lip on a two piece mold body. This style is similar to both Code 13-1.1 and 13-2 because it has both a ground lip and low neck/shoulder bulge. The shoulder is rounded, the body style is unknown.

Code: 13-3 Total: 11 Figure: 180.
Date Range: 1903-1949 Mean Date: 1941
Group Name: Extended lip rim.
Product Function(s): Edible (preserves).
Closure Type: Wired or clamped lid.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 7.1 cm Mouth Diameter: 6.6 cm.
Collar Diameter: 8.0 cm.
Description: Machine made bottle with a tiny, thin extended lip rim attached to a large, squared lip collar. The neck is straight and the shoulder and body styling are round or multi-sided.

Whole Bottle Example(s): 1.
Body Style: Round (multi-sided) Figure: 24.
Max. Height: 19.0 cm Max. Diameter: 10.0 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 4.0 cm Mid-Neck Diameter: 7.0 cm.
Comments: There is also a small version of the neck type without the multi-sided body. It is also much smaller.

Code: 14-1 Total: 12 Figure: 181.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Kork-N-Seal lip (Fountain and Colcleaser, 1968).
Product Function(s): Medical (personal care) or Edible (soda).
Closure Type: Kork-N-Seal cap.
Side Seam: Full.
Color(s): Clear, brown, light blue.
Lip Diameter: 3.1 cm Mouth Diameter: 2.2 cm.
Collar Diameter: 3.3 cm.
Description: Machine made bottle with an upper lip that is similar to a crown top bottle. The cap works on the same sealing principle as the crown cap but this cap can be re-attached or seated after initial removal. The lip has a round bead along the upper lip with a smooth rounded groove below it for a Kork-N-Seal attachment wire. Below this groove is a flaring lip collar. The neck is short. The body shapes vary from round to oblong.

Whole Bottle Example(s): 1.
Body Style: Square (constricted neck) Figure: N/A.

lip rim that is inset from the lip collar and is more constricted than the actual neck diameter. The neck and mouth are wide and the neck extends straight down from the lip to the shoulder which is rounded. Body shape is also round.

Whole Bottle Example(s): 2.
Body Style: Round Figure: N/A.
Max. Height: 15.0 cm Max. Diameter: 5.6 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 5.3 cm Mid-Neck Diameter: 4.9 cm.
Comments: N/A.

Code: 13-1.1 Total: 4 Figure: 178.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Extended lip rim.
Product Function(s): Edible (preserves).
Closure Type: Metal pry-off lid.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 3.6 cm Mouth Diameter: 2.8 cm.
Collar Diameter: 4.3 cm.
Description: Machine made bottle with a lip and lip collar identical to Code 13-1, though on the average the mouth diameter of this style is smaller and it has a bead collar low on the neck (approximately 2.5 cm down from the lip collar). There is also a round bulge at the base of the neck. The shoulder is rounded and the body is round.

Whole Bottle Example(s): 1.
Body Style: Round Figure: N/A.
Max. Height: 17.7 cm Max. Diameter: 6.7 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 3.9 cm Mid-Neck Diameter: 3.9 cm.
Comments: N/A.

Code: 13-2 Total: 2 Figure: 179.
Date Range: 1858-1910 Mean Date: 1884
Group Name: Extended lip rim.
Product Function(s): Edible (preserves).
Closure Type: Metal pry-off cap.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 4.6 cm Mouth Diameter: 4.0 cm.
Collar Diameter: 5.7 cm.
Description: Applied and tooled lip on a two piece mold body. The extended lip is shorter than the Code 13-1 and the over-all diameter is larger. A cap attached to one example had a patent date on it of 1858. This style also has a ground lip across the upper edge of the extended lip portion. Shoulder and body shapes are unknown.

Code: 13-2.1 Total: 1 Figure: N/A.
Date Range: 1858-1910 Mean Date: 1884

Description: Machine made bottle with a slightly flaring neck and round bead lip. The lip bead, however, does not protude out much from the contour of the neck. The body tapers up to the lip from its base as with Codes 12-8 and 12-8.1.

Whole Bottle Example(s): 1.
Body Style: Round Figure: 23.
Max. Height: 16.0 cm. Max. Diameter: 8.0 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 5.6 cm. Mid-Neck Diameter: 5.2 cm.
Comments: N/A.

Code: 12-10 Total: 2 Figure: 175.
Date Range: 1870-1910 Mean Date:1890
Group Name: Inset interior lip rim.
Product Function(s): Edible (preserves).
Closure Type: Paper or foil stopper or cap.
Side Seam: Tree quarter.
Color(s): Clear.
Lip Diameter: 5.4 cm Mouth Diameter: 4.0 cm.
Collar Diameter: 4.4 cm.
Description: Machine-made bottle with a lip that flares considerably. The lip is short but quite thick and its interior lip rim is beveled to form a trough that runs around interior edge of the lip. The mouth is wide as is the edge of the lip. The mouth is wide as is the neck passage. The shoulder or body shapes are unknown.

Code: 12-11 Total: 1 Figure: 176.
Date Range: 1880-1915 Mean Date: 1897.5
Group Name: Inset interior lip rim.
Product Function(s): Edibles (preserves)?
Closure Type: Foil? Stopper?
Side Seam: Base of the lip.
Color(s): Aqua.
Lip Diameter: 4.3 cm Mouth Diameter: 3.2 cm.
Collar Diameter: N/A.
Description: Applied and tooled lip on a possible semiautomatic made bottle. The lip is a slightly squared bead with a thin shallow interior lip rim that runs across the top edge of the lip. The neck is rather short and the shoulder is rounded. The body is also rounded.

Code: 13-1 Total: 22 Figure: 177.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Extended lip rim.
Product Function(s): Edible (preserves).
Closure Type: Metal pry-off cap.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 4.5 cm Mouth Diameter: 3.8 cm.
Collar Diameter: 5.6 cm.
Description: Machine made bottle with a squared lip collar and extended

and body shapes are runded and round or octagonal. These are often an early 20th century Heinz product.

Whole Bottle Example(s): 2.
Body Style: Round Figure: 27.
Max. Height: 19.6 cm Max. Diameter: 8.8 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 5.6 cm Mid-Neck Diameter: 4.0 cm.
Comments: This lip style often is found on longer necked tapered round body styles that have a smaller diameter lip. Also a ketsup product.

Code: 18-13 Total: 5 Figure: 212.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Continuous threading lip.
Product Function(s): Edible (perserves).
Closure Type: Screw-on cap.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 3.5 cm Mouth Diameter: 2.7 cm.
Collar Diameter: 3.8 cm.
Description: Machine made bottle with a wide mouthed lip that is short and has a bead thread that only circles the lip once. The neck is short with a rounded shoulder.

Whole Bottle Example(s): 8.
Body Style: Square (wide mouth) Figure: N/A.
Max. Height: 8.5 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 3.7 cm x 3.7 cm.
Neck Height: 1.6 cm Mid-Neck Diameter: 3.1 cm.
Comments: N/A.

Code: 18-13.1 Total: 52 Figure: 213.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Continuous threading lip.
Product Function(s): Medical (personal care).
Closure Type: Screw-on cap.
Side Seam: Full.
Color(s): Blue, aqua, cobalt blue, clear.
Lip Diameter: 2.9 cm Mouth Diameter: 2.2 cm.
Collar Diameter: 2.9 cm.
Description: This machine made bottle type includes various sizes of straight lip styles that all have bad threads and bead collars and were personal care medical products. The illustrated neck is just one size variety. The products include "Milk-a-Magnecia", "Warner" products, "Bayer", "Vicks", and "Squib". Most are relatively small bottles with round bodies.

Whole Bottle Example(s): 67.
Body Style: Tapered Round Figure: N/A.
Max. Height: 6.2 cm Max. Diameter: 3.4 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 2.4 cm Mid-Neck Diameter: 2.1 cm.

Comments: N/A.

Code: 18-13.2 Total: 10 Figure: 214.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Continuous threading lip.
Product Function(s): Medical (personal care) or Cosmetic (perfume).
Closure Type: Screw-on cap.
Side Seam: Full.
Color(s): Clear, brown.
Lip Diameter: 3.6 cm Mouth Diameter: 2.9 cm.
Collar Diameter: 4.2 cm.
Description: Machine made bottle that like Code 18-13.1 are stylistically similar to Code 18-13. This sub-code is again a catch-all category for short, wide mouth lips with bead threading and bead lip base collars. The products include a "Vaseline" product and other creams. This body and lip style is actually more of a jar than a bottle type.

Whole Bottle Example(s): 1.
Body Style: Round Figure: N/A.
Max. Height: 8.8 cm Max. Diameter: 5.1 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 2.6 cm Mid-Neck Diameter: 3 cm.
Comments: "May's DY-IT" of Pittsburgh.

Code: 18-13.3 Total: 7 Figure: 215.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Continuous threading lip.
Product Function(s): Cosmetic (perfume).
Closure Type: Screw-on cap.
Side Seam: Full.
Color(s): Brown, clear.
Lip Diameter: 1.6 cm Mouth Diameter: 1.0 cm.
Collar Diameter: 2.0 cm.
Description: Machine made bottles with bead threads, lip base collars, and oval or rectangular shaped bodies. This style bottle usually seemed to be associated with cologne products though some personal care (medical) products could also have been used with this style too.

Whole Bottle Example(s): 3.
Body Style: Rectangular (with panel inset front) Figure: N/A.
Max. Height: 21.4 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 7.5 cm x 7.5 cm.
Neck Height: 4.8 cm Mid-Neck Diameter: 2.9 cm.
Comments: N/A.

Code: 18-13.4 Total: 1 Figure: 216.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Continuous threading lip.
Product Function(s): Costmetic (perfume).
Closure Type: Screw-on cap.

Side Seam: Full.
Color(s): Clear.
Lip Diameter: 2.9 cm Mouth Diameter: 1.9 cm.
Collar Diameter: 3.3 cm.
Description: Machine made bottle with a bead threaded lip and lip base collar similar to all Code 18-13's. This bottle additionally has a rectangular body that is made of clear thick glass with sharp corners and a 1930's styling. Probably this was a powder or other cosmetic product.

Code: 18-13.5 Total: 11 Figure: N/A.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Continous threading lip.
Product Function(s): Household (cleaning chemical).
Closure Type: Screw-on cap.
Side Seam: Full.
Color(s): Brown, clear.
Lip Diameter: 2.9 cm Mouth Diameter: 2.1 cm.
Collar Diameter: 3.2 cm.
Description: Machine made bottle with a lip similar to Code 18-13.1. The body is oval or flask-like shaped and the product was probably a household cleaning agent like ammonia.

Whole Bottle Example(s): 2.
Body Style: Rectangular Figure: N/A.
Max. Height: 8.1 cm Max. Diameter: N/A.
Square or Rectangular Diameter: N/A.
Neck Height: 2.5 cm Mid-Neck Diameter: 2.5 cm.
Comments: N/A.

Code: 18-13.6 Total: 38 Figure: N/A.
Date Range: 1903-1979 Mean Date:1941
Group Name: Continuous threading lip.
Product Function(s): Household?
Closure Type: Screw-on cap.
Side Seam: Full.
Color(s): Clear, brown.
Lip Diameter: N/A Mouth Diameter: N/A.
Collar Diameter: N/A.
Description: Machine made bottle of various sizes with lip styles quite similar to Code 18-13.5 but of unkown product type.

Whole Bottle Example(s): 35.
Body Style: Oval Figure: N/A.
Max. Height: 9.8 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 4.7 cm x 3.4 cm.
Neck Height: 2.7 cm Mid-Neck Diameter: 2.6 cm.
Comments: N/A.

Code: 18-13.7 Total: 1 Figure: 217.
Date Range: 1903-1979 Mean Date: 1941

Group Name: Continuous threading lip.
Product Function(s): Liquor (wine) and Edible (juice).
Closure Type: Screw-on cap.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 2.6 cm Mouth Diameter: 1.9 cm.
Collar Diameter: 3.3 cm.
Description: Machine made bottle with a handled neck. The lip is identical to Codes 18-13.3 and 18-13.6 but attached to and directly below is a molded glass handle. This bottle was a jug with a probable round, carboy shape body.

Code: 18-13.8 Total: 2 Figure: 218.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Continuous threading cap.
Product Function(s): Edible.
Closure Type: Screw-on cap.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 2.5 cm Mouth Diameter: 2.0 cm.
Collar Diameter: 3.0 cm.
Description: Machine made bottle with a bead threaded lip and lip base collar but the neck is quite long and has three molded bead collar or decorative bands in the middle of the neck. The shoulder is rounded and the body is round.

Whole Bottle Example(s): 1.
Body Style: Round Figure: 219.
Max. Height: 16.0 cm Max. Diameter: 7.0 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 6.7 cm Mid-Neck Diameter: 3.0 cm.
Comments: N/A.

Code: 18-13.9 Total: 3 Figure: 219.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Continuous threading lip.
Product Function(s): Edible (extract).
Closure Type: Screw-on cap.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 2.0 cm Mouth Diameter: 1.3 cm.
Collar Diameter: 2.3 cm.
Description: Machine made bottle with a lip and lip base collar similar to Code 18-13.8 but the neck has a low neck bead collar and the neck is much shorter. It was panel inset on both the front and back sides. The shoulder was squared and the body was rectangular.

Whole Bottle Example(s): 2.
Body Style: Rectangular Figure: N/A.
Max. Height: 22.6 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 7.9 cm x 3.7 cm.
Neck Height: 4.3 cm Mid-Neck Diameter: 2.7 cm.

Comments: N/A.

Code: 18-14 Total: 2 Figure: 220.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Continuous threading lip.
Product Function(s): Cosmetic (tonic).
Closure Type: Screw-on cap.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 2.0 cm Mouth Diameter: 0.5 cm.
Collar Diameter: 2.6 cm.
Description: Machine made bottle with a extremely constricted mouth and a lip base collar that is considerably large in diameter than the lip. The lip has a thin bead thread, slightly sloping squared shoulders and a flaring rectangular body shape. This probably contained a hair tonic.

Whole Bottle Example(s): 7.
Body Style: Rectangular Figure: N/A.
Max. Height: 15.8 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 6.5 cm x 2.8 cm.
Neck Height: 4.0 cm Mid-Neck Diameter: 2.0 cm.
Comments: N/A.

Code: 18-15 Total: Figure: 221.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Continuous threading lip.
Product Function(s): Liquor (Whiskey, etc.).
Closure Type: Screw-on Cap.
Side Seam: Full.
Color(s): Brown.
Lip Diameter: 2.5 cm Mouth Diameter: 1.8 cm.
Collar Diameter: 3.1 cm.
Description: Machine made bottle with a bead thread that circles the lip 1 1/2 times and has a wide squared lip base collar. The neck bulges some towards its base then constricts back in a little; the shoulder is rounded and the body is round. This liquor bottle probably dates to past 1950.

Whole Bottle Example(s): 3.
Body Style: Round Figure: N/A.
Max. Height: 25.9 cm Max. Diameter: 8.8 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 8.3 cm Mid-Neck Diameter: 2.9 cm.
Comments: N/A.

Code: 18-16 Total: 4 Figure: 222.
Date Range: 1932-1979 Mean Date: 1955
Group Name: Continuous threading lip.
Product Function(s): Liquor (Whiskey, etc.).
Closure Type: Screw-on cap with twist off ring.

Side Seam: Full.
Color(s): Brown, Clear.
Lip Diameter: 2.5 cm Mouth Diameter: 1.8 cm.
Collar Diameter: 3.0 cm.
Description: Machine made bottle with a short bead threaded lip. It also has a double lip base collar combination, the upper one is squared, the lower is tapered and squared. The upper could have seated a twist off or snap-off ring that was originally attached to the cap. This bottle type has the remains of the Federal liquor mark on it which dates to past 1932. The neck tapers to a sloping shoulder and slightly oval/round body shape.

Whole Bottle Example(s): 3.
Body Style: Round Figure: N/A.
Max. Height: 29.3 cm Max. Diameter: 6.2 cm.
Square or Rectangular Diameter: N/A.
Neck Height: 10.4 cm Mid-Neck Diameter: 3.7 cm.
Comments: Catsup bottle.

Code: 18-17 Total: 7 Figure: 223.
Date Range: 1903-1979 Mean Date: 1941
Group Name: Continuous threading lip.
Product Function(s): Liquor (Whiskey, etc.).
Closure Type: Screw-on cap with twist-off ring.
Side Seam: Full.
Color(s): 3.0 cm.
Lip Diameter: 2.6 cm Mouth Diameter: 1.9 cm.
Collar Diameter: 3.0 cm.
Description: Machine made bottle with bead threading and a double lip base with collar (similar to 18-16) combination that definately served to seal a twist off cap ring. In fact some examples still had the rings or cap and ring on them when recovered. The neck is short and sloping squared shoulders. Body styles vary from round to flask-like or oval.

Whole Bottle Example(s): 1.
Body Style: Square Figure: N/A.
Max. Height: 21.8 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 7.7 cm x 7.7 cm.
Neck Height: 3.8 cm Mid-Neck Diameter: 2.9 cm.
Comments: N/A.

Code: 18-18 Total: 1 Figure: 224.
Date Range: 1932-1979 Mean Date: 1955
Group Name: Continous threading lip.
Product Function(s): Liquor (Whiskey, etc.).
Closure Type: Screw-on cap.
Side Seam: Full.
Color(s): Brown.
Lip Diameter: 2.5 cm Mouth Diameter: 1.7 cm.
Collar Diameter: 4.4 cm.
Description: Machine made bottle with a double set of threads. One set

is on the upper lip and has a bead thread, that circles the lip once. That lip section also has a lip base collar that is squared. Below the section the lip tapers out to a wide ledge or stepped lip shoulder that is threaded with a bead thread that circles that section once. Below this is a round bead collar. This bottle had a cap over the mouth and a shot glass cap over the entire lip. The neck is short. The shoulder is rounded and sloping and the body is flask shaped (oval). This bottle type has a post-1932 "Federal" label. Probably a prohibition period product (Munsey 1970:133).

Whole Bottle Example(s): 1.
Body Style: Oval Figure: N/A.
Max. Height: 19.8 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 9.5 cm x 4.8 cm.
Neck Height: 4.7 cm Mid-Neck Diameter: 4.2 cm.
Comments: N/A.

Code: 18-19 Total: 3 Figure: 225.
Date Range: 1932-1979 Mean Date: 1955
Group Name: Continuous threading lip.
Product Function(s): Liquor (Whiskey, etc.).
Closure Type: Screw-on cap.
Side Seam: Full.
Color(s): Clear.
Lip Diameter: 2.5 cm Mouth Diameter: 1.8 cm.
Collar Diameter: 3.9 cm.
Description: Machine made bottle that has a lip similar in basic shape to Code 18-18 but without the double threading. It has a short bead threaded lip with a lip base collar and a stepped, squared neck collar. The neck is short and the shoulder rounded. The body shape is flask-like (oval).

Whole Bottle Example(s): 1.
Body Style: Oval Figure: 28.
Max. Height: 23.2 cm Max. Diameter: N/A.
Square or Rectangular Diameter: 10.7 cm x 5.4 cm.
Neck Height: 3.2 cm Mid-Neck Diameter: 3.1 cm.
Comments: N/A.

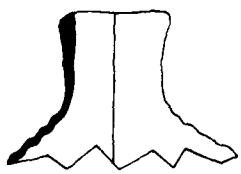


Fig. 1



Fig.2



Fig.3

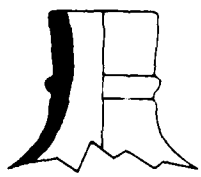


Fig.4



Fig.5



Fig. 6

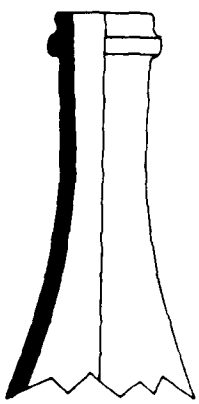


Fig. 7

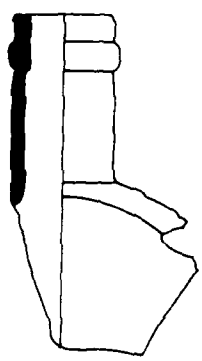


Fig. 8

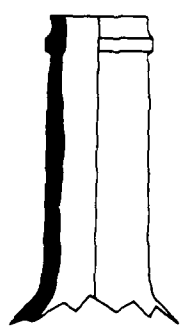


Fig. 9

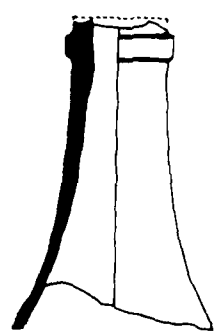


Fig. 10

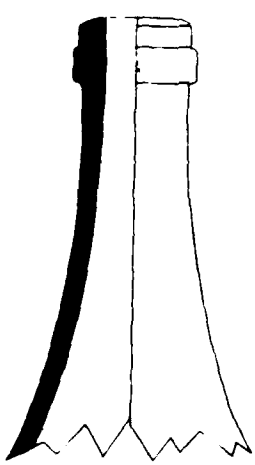


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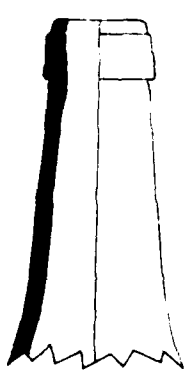


Fig. 12



Fig. 13

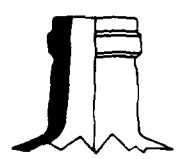


Fig 14

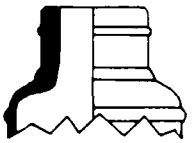


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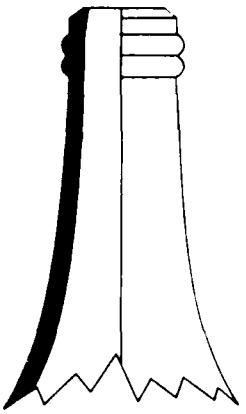


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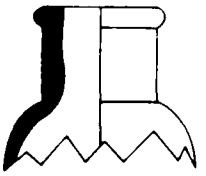


Fig.17

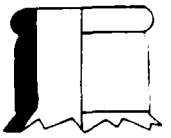


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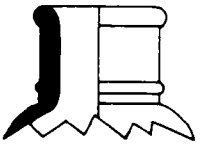


Fig.19

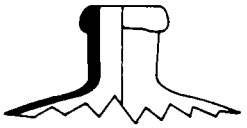


Fig.20

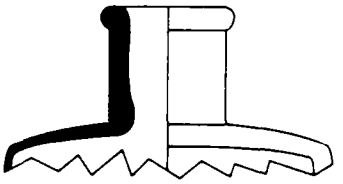


Fig.21

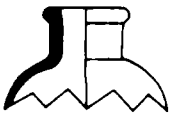


Fig.22



Fig.23



Fig.24

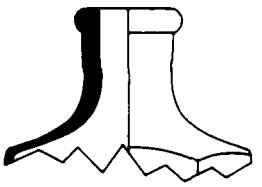


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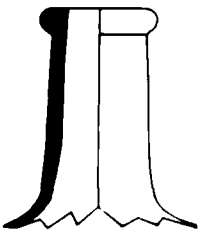


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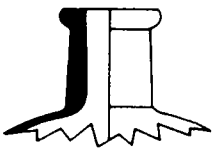


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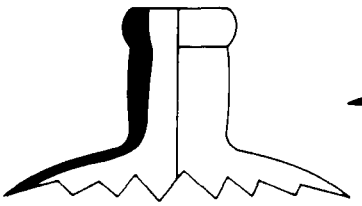


Fig.28



Fig.29

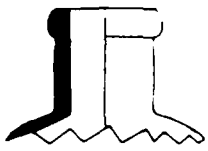


Fig. 30



Fig.31



Fig.32

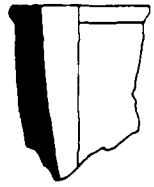


Fig.33

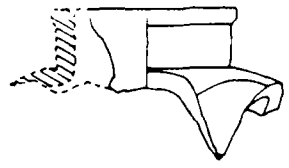


Fig.34

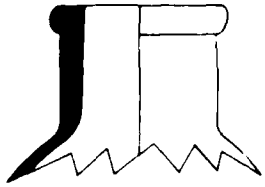


Fig.35

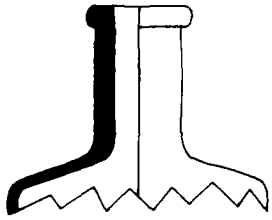


Fig.36

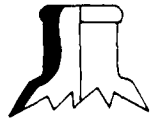


Fig.37

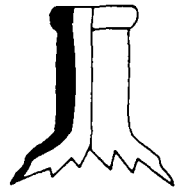


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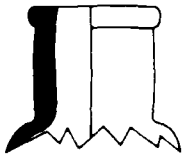


Fig. 39

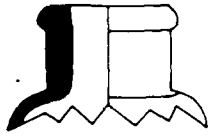


Fig. 40



Fig.41

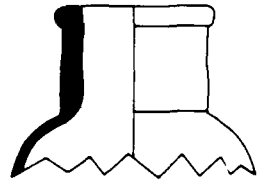


Fig. 42

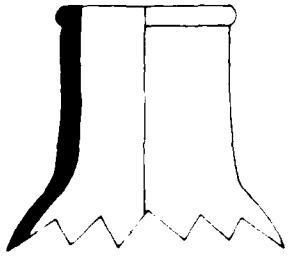


Fig. 43

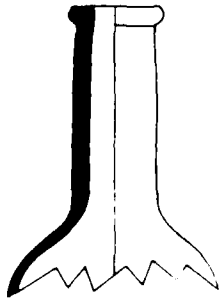


Fig. 44



Fig.45



Fig. 46

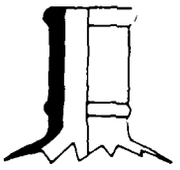


Fig.47



Fig.48

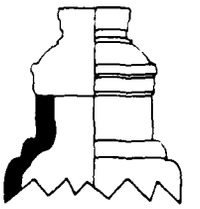


Fig.49

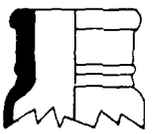


Fig.50

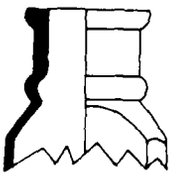


Fig.51

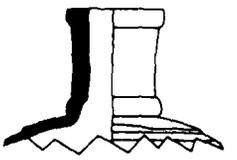


Fig.52

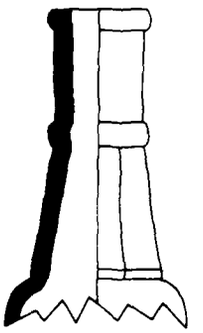


Fig.53

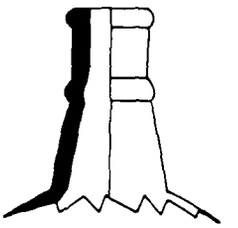


Fig. 54

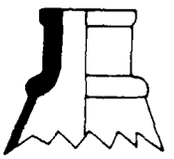


Fig.55

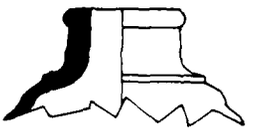


Fig. 56

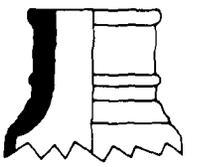


Fig.57

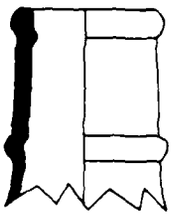


Fig.58

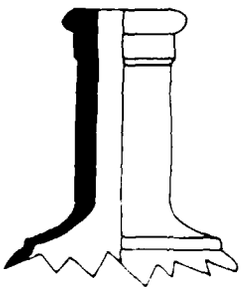


Fig.59

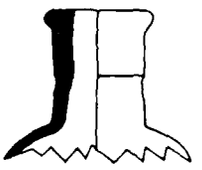


Fig.60

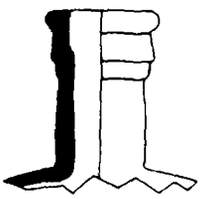


Fig.61



Fig.62

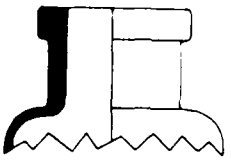


Fig.63

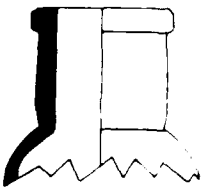


Fig.64



Fig.65



Fig.66

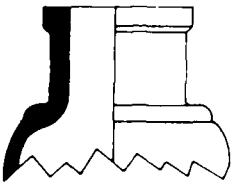


Fig.67

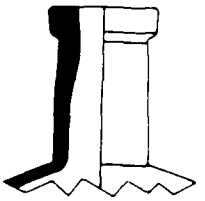


Fig.68

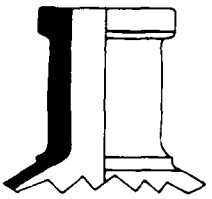


Fig.69

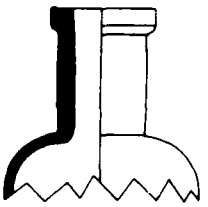


Fig.70

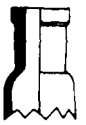


Fig.71

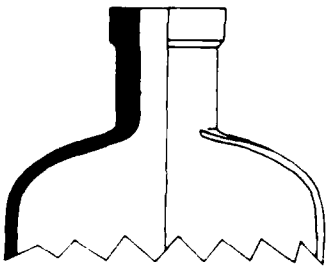


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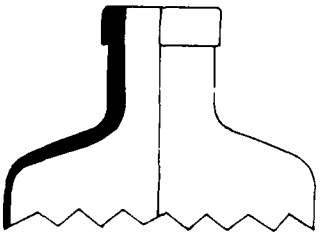


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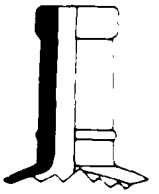


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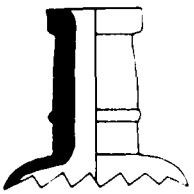


Fig.75



Fig.76

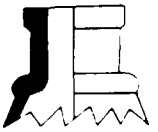


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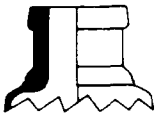


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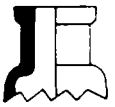


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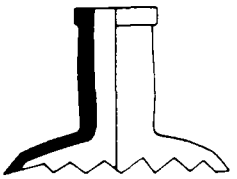


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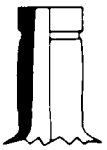


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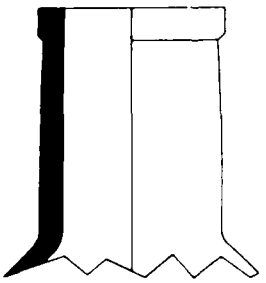


Fig 82

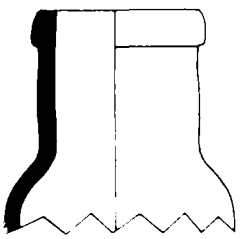


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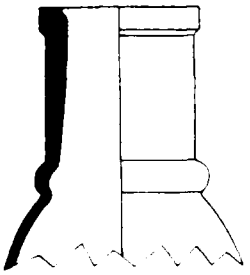


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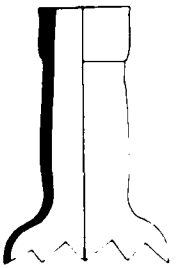


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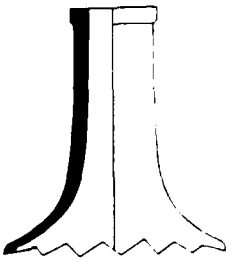


Fig.86



Fig87

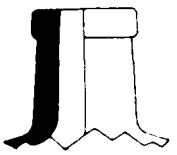


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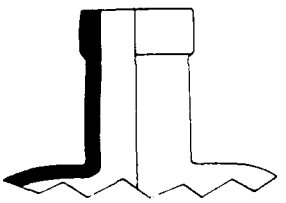


Fig. 89



Fig.90

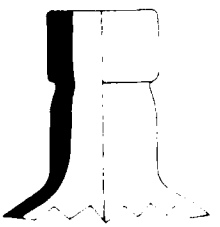


Fig 91

SOME COMPARATIVE STATISTICS ON THE BOTTLE NECK VARIABLES

The bottle neck variables tested for each group created a considerable quantity of data relative to the bottle collection as a whole. This data reveals insight about the basic manufacturing techniques of bottles utilized during the creation of the trash midden and insight about the people that created the midden. Evoluation of variables including product function, closure, side seam classification, glass color and manufacturing techniques for the lip styles produced the following frequency runs:

Product Functions

Functions	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
Medical (Prescription)	101	3.0	3.9
" (Personal Care)	1214	36.0	46.6
" (Other)	12	0.4	0.5
Cosmetic (Perfume)	75	2.2	2.9
" (Creams)	9	0.3	0.3
" (Tonics)	9	0.3	0.3
" (Other)	6	0.2	0.2
Household (Cleaners)	147	4.4	5.6
" (Dyes or Polishes)	18	0.5	0.7
" (Other)	61	1.8	2.3
Edible Prod. (Soda)	126	3.7	4.8
" " (Water)	7	0.2	0.3
" " (Extract)	15	0.4	0.6
" " (Dairy/Juice)	80	2.4	3.1
" " (Condiments)	60	1.8	2.3
" " (Preserves/Canned)	225	6.7	8.6
" " (Other)	15	0.4	0.6
Liquor (Whiskey, etc.)	109	3.2	4.2
" (Beer)	68	2.0	2.6
" (Wine)	62	1.8	2.4
" (Other)	12	0.4	0.5
Tobacco (Snuff)	1	0.4	0.5
Medical or Edible (?)	109	3.2	4.2
Liquor or Soda (?)	65	1.9	2.5
Out of Range*	762	22.6	Missing
Total	3368	100.0	100.0

*The function labelled "Out of Range" is primarily composed of Type 19 (the group of bottle neck fragments that are unclassifiable as to functional product).

It is immediately evident that the specific function personal care, in the function set medical products, had the highest frequency in the trash midden. This function designation previously described includes personal care products like aspirin, anti-acid tablets, cough medicine,

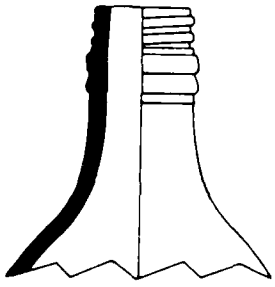


Fig. 222

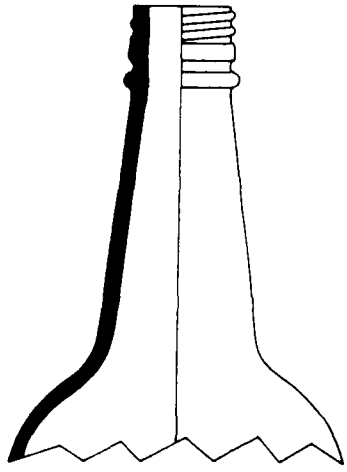


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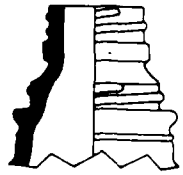


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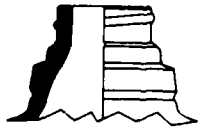


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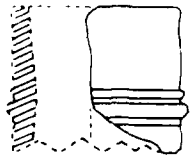


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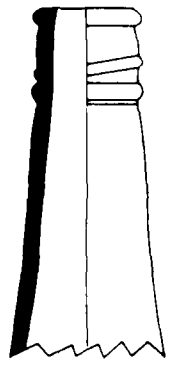


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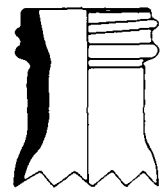


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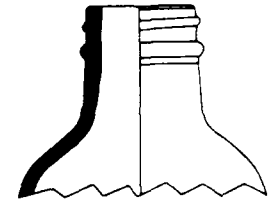


Fig. 213



Fig. 214

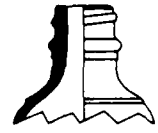


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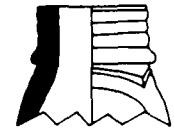


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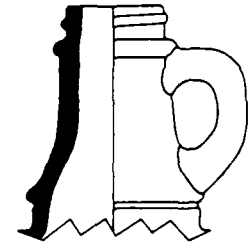


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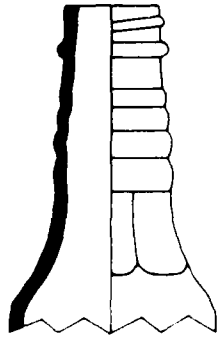


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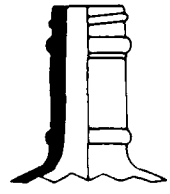


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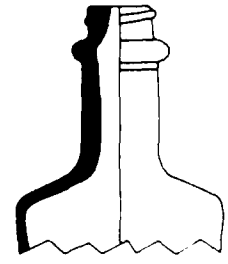


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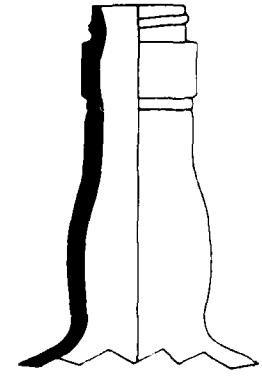


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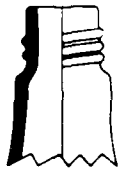


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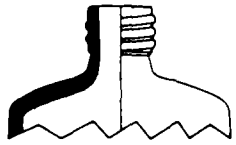


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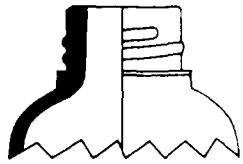


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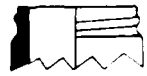


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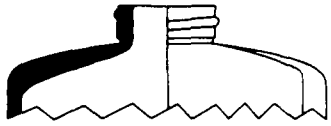


Fig. 202



Fig.203

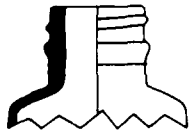


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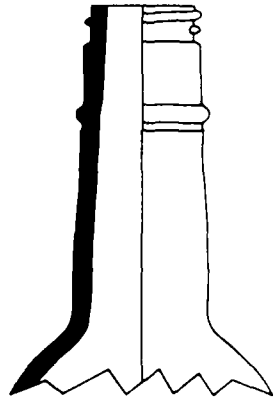


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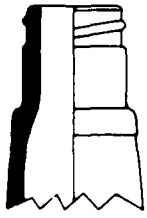


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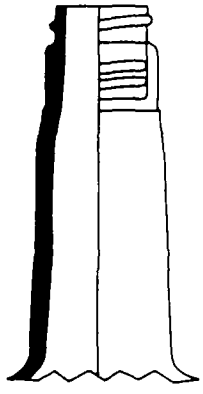


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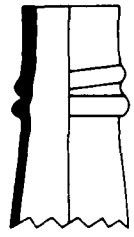


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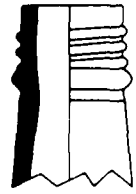


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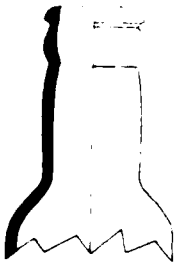


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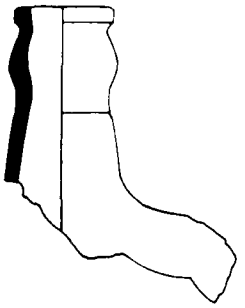


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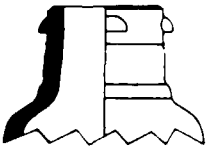


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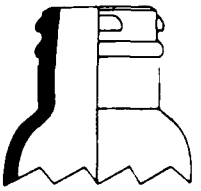


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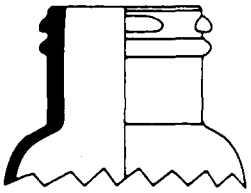


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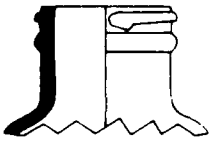


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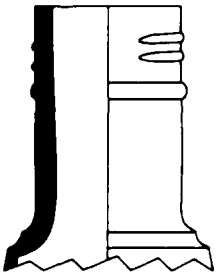


Fig. 193



Fig. 194



Fig 195

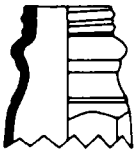


Fig. 196

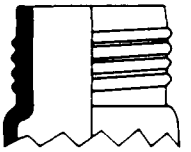


Fig. 197

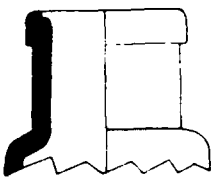


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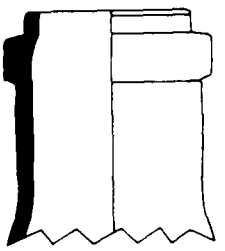


Fig. 177

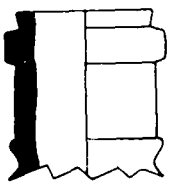


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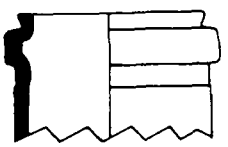


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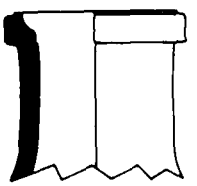


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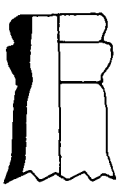


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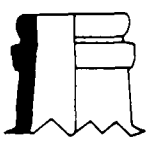


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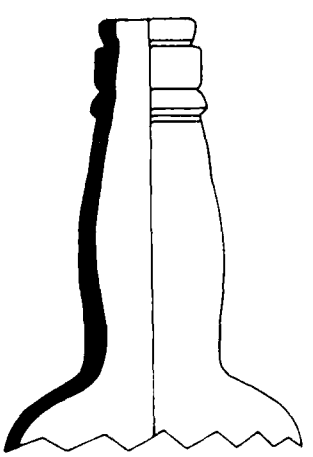


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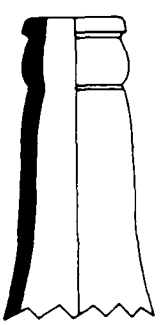


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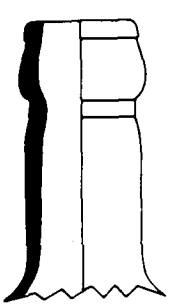


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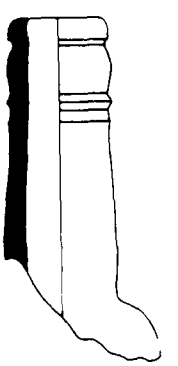


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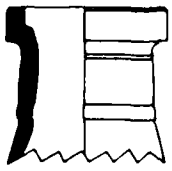


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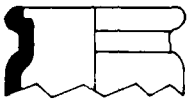


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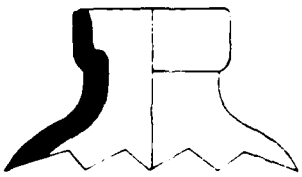


Fig. 166



Fig. 167

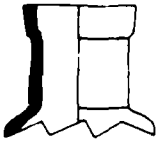


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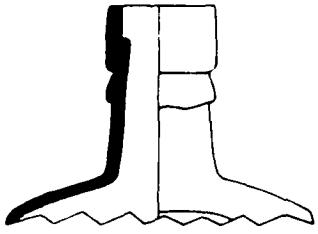


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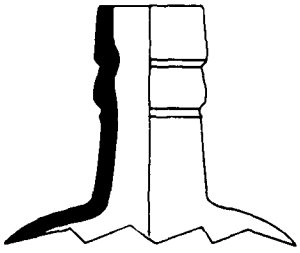


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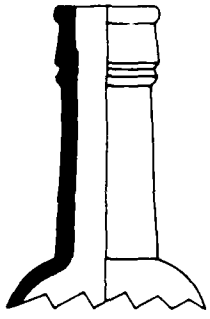


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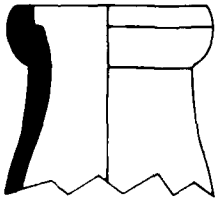


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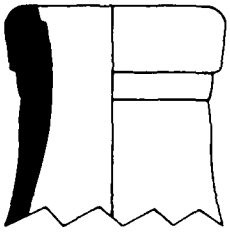


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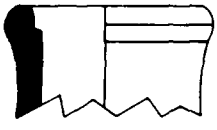


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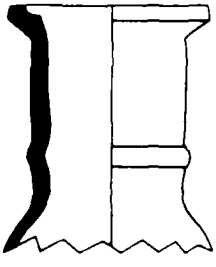


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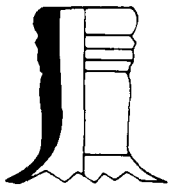


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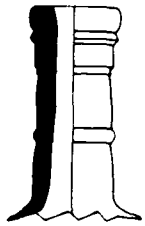


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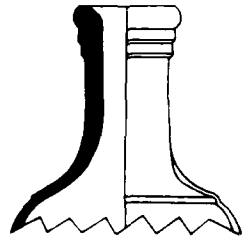


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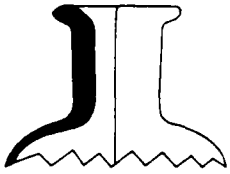


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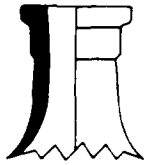


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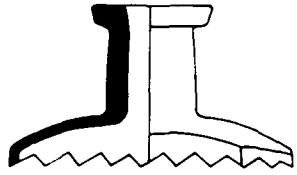


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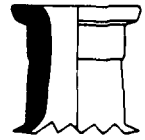


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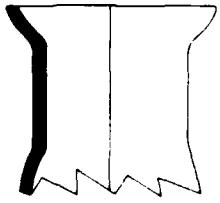


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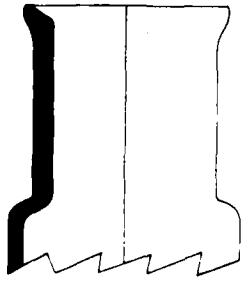


Fig. 161



Fig. 162

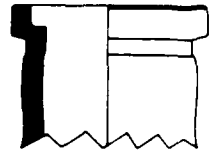


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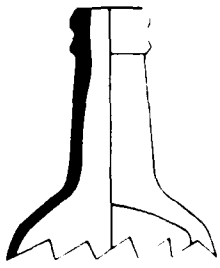


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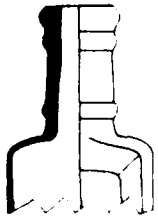


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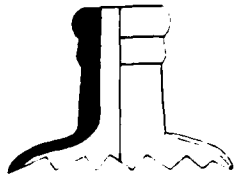


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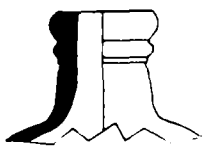


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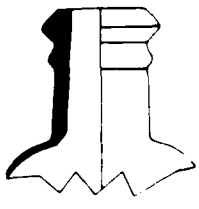


Fig. 146

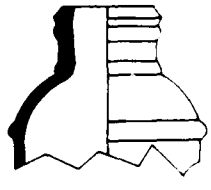


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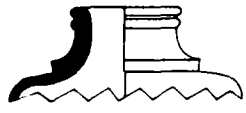


Fig. 148

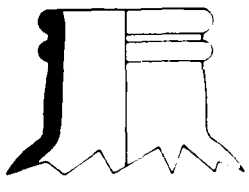


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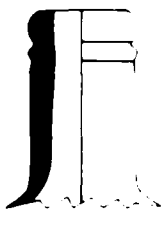


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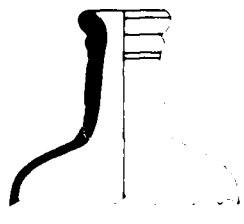


Fig. 151

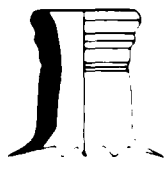


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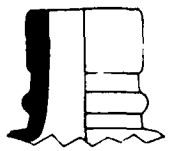


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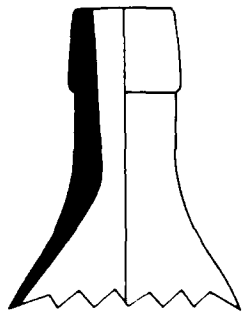


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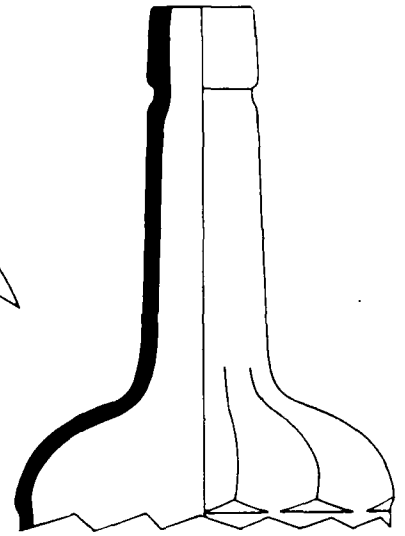


Fig. 132

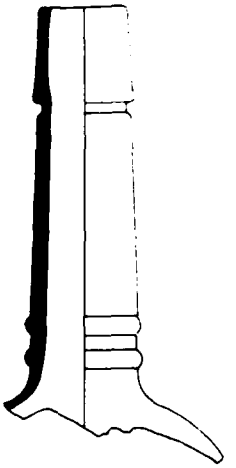


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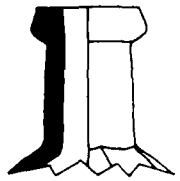


Fig. 134

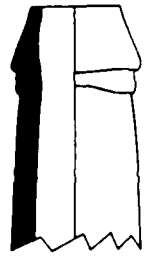


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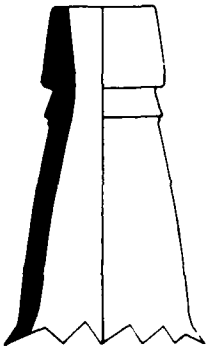


Fig. 136

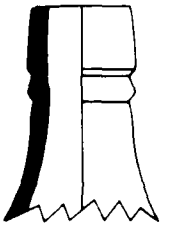


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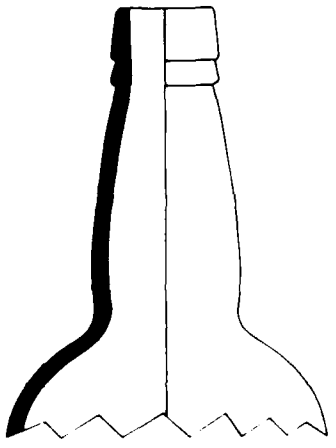


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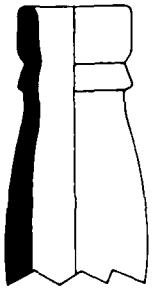


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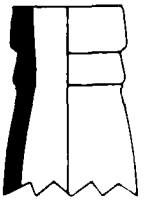


Fig. 140

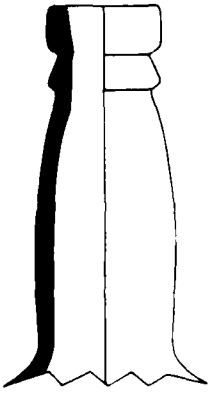


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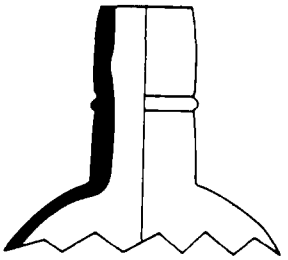


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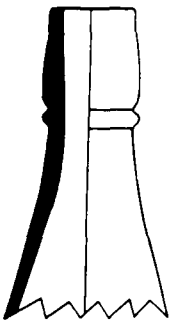


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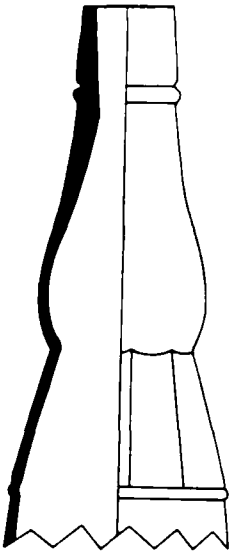


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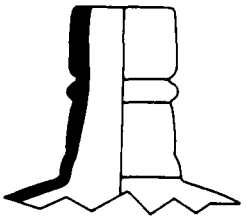


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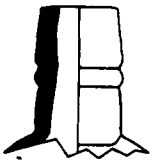


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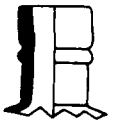


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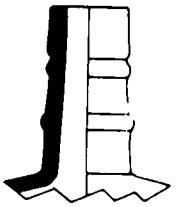


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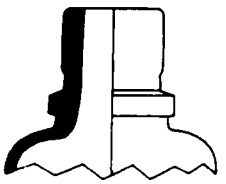


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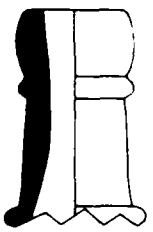


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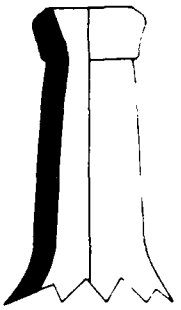


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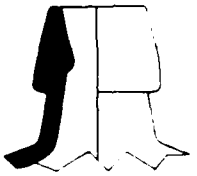


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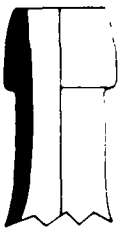


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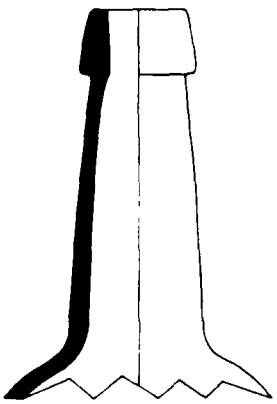


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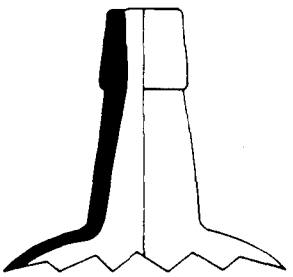


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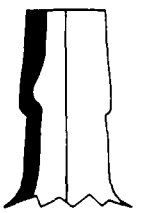


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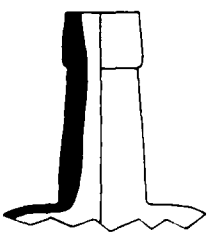


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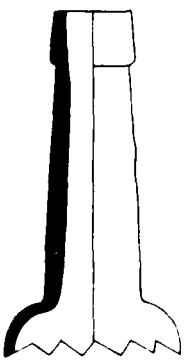


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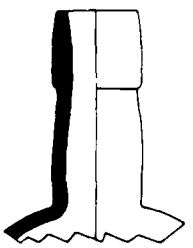


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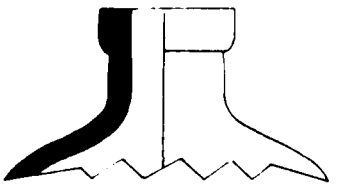


Fig. 100

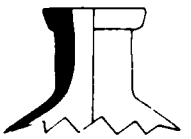


Fig. 101

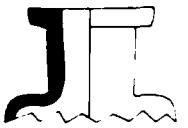


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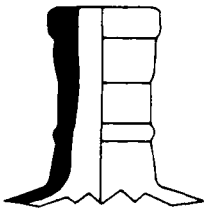


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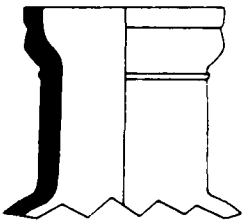


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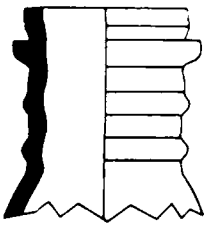


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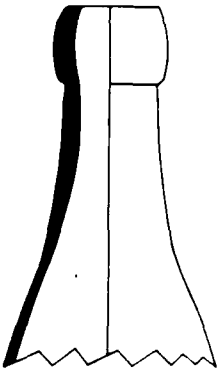


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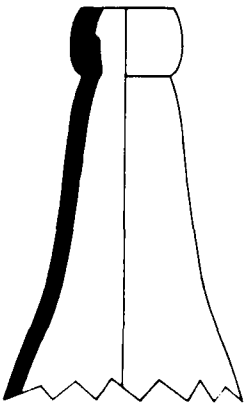


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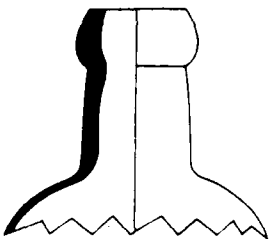


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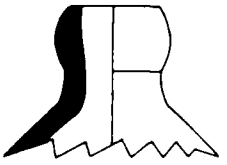


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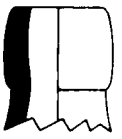


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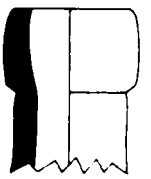


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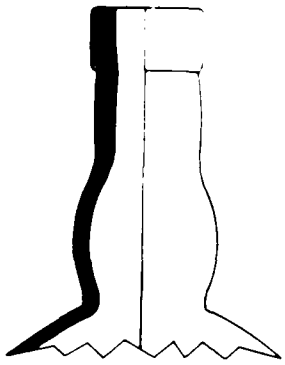


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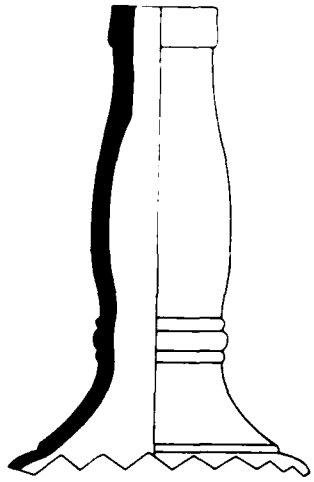


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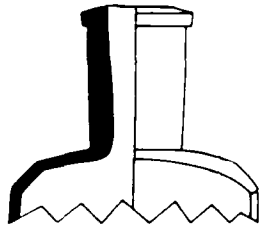


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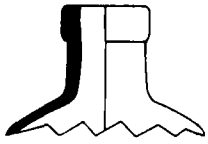


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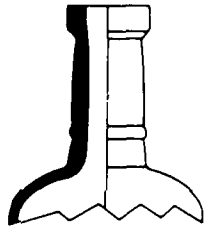


Fig.96

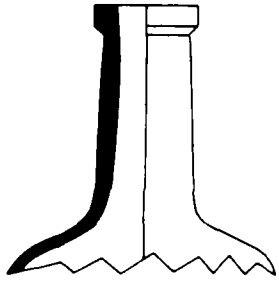


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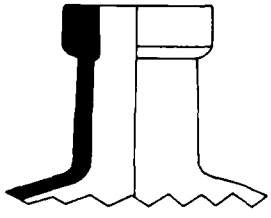


Fig. 98

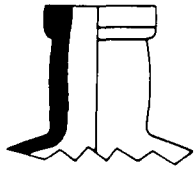


Fig. 99

mouth wash, patent medicines, and other similar products. A large percentage of the bottles with this function were hand finished neck/lip bottle styles which in this case indicates a temporal range of between 1870-1910. Many of the bottles represented under this function were either Bromo-Seltzer and Bromo-Lithia (anti-acid products) or patent medicine products. Considering the alcohol content in most of the old patent medicine products and the other substances, one wonders if the anti-acid products were intended to deaden the effects of the patent medicines. Only a maxium of 12.2% of the bottle necks represented in the midden deposit consisted of liquor products and a large percent of those were modern machine made bottles recovered from the surface or close to the surface. Edible products accounted for 20.3% of the identifiables bottle necks. Soda bottles and preserves or canned goods accounted for a large portion of that percentage. Household cleaning products such as ammonia accounted for a large portion of household function set. Cosmetic products and the single example of a tobacco product container account for very small percentages of the total functions with perfumes and colognes accounting for a mere 2.9%

Closure

Forms	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
Stoppers (cork, rubber, etc.)	1739	51.6	66.3
Glass Stoppers	107	3.2	4.1
Crown Tops	224	6.7	8.5
"Kork-n-Seal"	16	0.5	0.6
Pry-Off Caps	8	0.2	0.3
Foil or Metal Zip-Off Tops	123	3.7	4.7
Paper Caps	35	1.0	1.3
Threaded Caps	216	6.4	8.2
Wire or Clamped Lids	104	3.1	4.0
Hutchinson	11	0.3	0.4
Lugged Caps	37	1.1	1.4
Other (Baltimore-Loop Seals, etc.)	2	0.1	0.1
Out of Range	746	22.1	Missing
Total	3368	100.0	100.0

The variable of closure was divided into eleven main kinds or categories with a twelfth catch-all category. Very few closures were recovered from the midden but lip styles indicate the closure style. The 746 case tested as "Out of Range" are again the bottle necks classed as Type 19 which could not be typed by lip/neck style because of heat damage in the midden. The first category "stopper", includes cork, rubber, plastic, or other cork-like stoppers that were used to plug the mouth of the bottle. Usually these stoppers could be removed and replaced throughout the use of the product. Some stoppers had heads for easy removal. One variation had a glass head and stopper shaft that was surrounded with a cork ring to seal the mouth aperture.

"Crown top" closures were the next largest form. The crown top cap is a familiar closure today with most beer, soda pop, and numerous other products using this style closure. The crown top has been used on bottles since the 1890's on hand finished necks. The Neville House collection, however, has only machine made versions which are characterized by a wide date range (1903-1979) for possible usage and disposal in the midden. This lip style was found in all stratigraphic levels in the midden.

The "Threaded Cap" closure is the next most common closure. This cap was used on the continuous and interrupted threaded lip styles. The threaded cap was in most cases either metal, plastic, or hard rubber. The threaded cap is probably the most common closure on bottles and jars today and represents the latest period of deposition at the Neville House midden. The majority of these threaded lip bottles were found in the eastern third of the site or in surface collection.

Glass stopper, metal or foil cap, zip-off lid, and wired lid forms each account for 4-5% of the closure styles associated with the neck/lip styles. The glass stoppers are primarily used on prescription medical products like those used in Group 5-20.2. The foil/metal caps of zip-off lids were used on canned goods and preserve products and were usually not resealable. The wired or clamped lids (including "lightening" stoppers) were usually associated with preserves in wide mouth bottles or jars. Usually forms with inset lip rims and extended lip rims utilized glass, ceramic, or metal lids that were clamped down.

Side Seams

Forms	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
Mid-Neck	827	24.6	33.0
Three-Quarter Neck	380	11.3	15.2
Base of the Tip	96	2.9	3.8
Full	1197	35.5	47.7
Mid-Tip	7	0.2	0.3
Out of Range	861	25.6	Missing
Totals	3368	100.0	100.0

The most numerous form of side seams on the neck/lip styles is that of the full seams which originally run from the base of the body or base ring to the top of the lip or to a lip ring along the upper lip rim. This seam style indicates a fully machine made bottle dating in this collection somewhere between 1903 and 1979.

The next most frequent form is the mid-neck side seams. This grouping includes some of the earliest bottle types in the Neville House collection. The lips and upper neck portions of these bottles were hand applied and finished and those recovered from the Neville House midden were manufactured between the mid-19th century and

approximately 1925. Most bottle neck/lip types with this mid-neck side seam were temporally classed as 1880-1910. The examples of the "three-quarter" side seam form date somewhat later than the mid-neck form but an exact date for this manufacturing style is unknown. The few "Base of the Lip" and "Mid-Lip" forms are generally associated with the semi-automatic bottling making machine dating: 1880-1915 (1880-1913 by Newman, 1970). The "Out of Range" category includes unclassifiable bottle necks that either have no seam (ie. turn molds or free blown) or they are not visible because of fragment size or damage to them.

Color

Color	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
Clear	2003	59.5	60.4
Dark Brown	7	0.2	0.2
Brown (Amber)	303	9.0	9.1
Dark Green	34	1.8	1.0
Green	167	5.0	5.0
Light Green (Aqua)	45	1.3	1.4
Dark Blue	263	7.8	7.9
Light Blue (Aqua)	466	13.8	14.0
Milk	16	0.5	0.5
Yellow	5	0.1	0.2
Black	9	0.3	0.3
Out of Range	50	1.5	Missing
Totals	3368	100.0	100.0

The variable of color was dominated by clear glass which was used in all product functions and predominated the 1890-1979 period in the midden material. The other colored glasswares were primarily represented in personal care, food, and liquor products. Many products like Bromo-Seltzer (Cobalt Blue) maintained its glass color through-out the production period represented in the midden. Light blue and/or aqua was the second most numerous color under clear glass and this color was primarily used in household chemicals, patent medicines, and preserve containers.

Lip Style
(Method of Manufacture)

Form	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
Applied (Tooled or Hand Finished)	1394	41.1	53.2
Machine Made	1194	35.5	45.5
Ground	9	0.3	0.3
Sheared or Polished	21	0.6	0.8
Rolled Back	4	0.1	0.2

Out of Range		746	22.1	Missing
	Total	3368	100.0	100.0

The two forms applied lips and fully machine made lips predominate in the lip style variable. From the earliest possible date (1785) that the Neville site was occupied, bottles were being manufactured with applied lips, and applied lip examples in the midden give the midden some of its earliest dates (early 1800's). The applied lip examples also range up into the first quarter of the 1900's, thus having the longest range of any of the lip manufacturing techniques. The fully machine made lip styles could date as early as 1904 but a more reasonable date would be 1910 (when the Owens bottle making machines came into common use). These two techniques are fairly evenly divided in representation in the Neville House midden with the applied lip examples having slightly more (53.2% compared to 45.5%). In general, the total population of applied lips maintained an average manufacturing date of 1895 for the Neville House collecton and the machine made lips average a 1941 date. Considering these styles account for 98.7% of the bottle neck types, it is understandable why the total population of bottle neck/lip styles produce an average date of around 1915 for the midden. The other lip manufacturing techniques only account for 1.0% of the total population. The "Out of Range" category has been previously explained.

SOME COMPARATIVE STATISTICS ON THE WHOLE BOTTLES

There were five hundred forty two (542) whole bottles collected from the Neville House trash midden. They were recovered from almost all levels of the dump but a large percentage were recovered from surface finds and the upper levels of F16. The whole bottles recovered from the midden were on average younger than those represented by the neck/lip fragments previously discussed. As mentioned, the mean date for the total population of neck/lip fragments is 1915 with a standard deviation of 56 years. The mean date for the whole bottles is 1924 with a standard deviation of 22 years.

There are two possible explanations for the more modern mean date for the whole bottles. For one, the Neville House midden had been "pot-hunted" or more accurately, bottle hunted a number of times before the archaeological excavations in 1979. This potting was done by bottle collectors looking for old collectable bottles. By the time the midden was professionally excavated, many of the older bottles had, no doubt, been removed, leaving a more modern collection behind for us to recover from the original population. The second explanation involves a question of bottle durability. It is possible that the longer a bottle existed in the midden, the more disturbance it would have been subjected to, with a greater likelihood of breakage. Thus, most specimens from older bottles would be included in the bottle neck/lip count rather than the whole bottle count.

There is a great deal of variation in the products, manufacturing

styles, body shape, and origin points of manufacture characterizing the whole bottles recovered from the Neville House midden. Futher study may clarify how this diversity reflects site occupant, personal consumption choices made within the limits of regional availability of container and products in the context of increasingly mass-production/mass-msrket oriented economic enviroment. The following are categories that examine this diversity:

Closure Types

Form	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)
Stopper	284	52.4	54.3
Glass Stopper	14	2.6	2.7
Crown Tops	23	4.2	4.4
Pry-Off	7	1.3	1.3
Foil or Metal Zip-Offs	12	2.2	2.3
Thread	150	27.7	28.7
Wired Lid	20	3.7	3.8
Hutchinson	1	0.2	0.2
Lugged	7	1.3	1.3
Eye Dropper	5	0.9	1.0
Out of Range	19	3.5	Missing
Totals	542	100.0	100.0

The closure form associated with the whole bottle collection are primarily divided into two major categories: stoppers made of cork, rubber, etc. which account for 45% of the identifiable types and the continuous thread caps which account for approximately 29%. These percentages differ from the collection of bottle neck fragments where 66% were non-glass stoppers and only 8% were continuous thread caps. Continuous threading is a fairly modern feature in bottle manufacturing and this fact helps date those bottles. The high percentage of this lip style was one of the reasons the mean date for whole bottles recovered is more recent than for the bottle neck collection. Many of the whole bottles actually had the closures on or in them when recovered, but most identifications were based on lip style.

Manufacturing Methods

Form	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)	Mean Date Standard Deviation
Handmade (free blown)	1	0.2	0.2	1885/00
Two Piece Mold (Applied Lip)	114	21.0	21.3	1894/13
Three Piece Mold (Applied Lip)	3	0.6	0.6	1881/35
Semi-Automatic	21	3.9	3.9	1901/10
Fully Automatic	386	71.2	72.0	1936/12
Turn Mold	7	1.3	1.3	1889/ 2

Four Piece Mold (Applied Lip)	4	0.7	0.7	1891/ 6
Out of Range	6	1.1	Missing	
Total	542	100.0	100.0	

The major manufacturing methods for the whole bottles are "Two Piece Mold" bodies with applied lips (approximately 21%) and the "Fully Automatic" machine made bottles, accounting for 72% The tremendous number of fully machine made bottles represented in the whole bottle collection also accounts for the 1924 mean date versus the over-all bottle neck collection mean date of 1915.

Body Shape

Form	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)	MeanDate Standard Deviation
Round	217	40.0	40.0	1926/20
Oval	77	14.2	14.4	1916/24
Oblong	33	6.1	6.2	1915/22
Square	64	11.8	11.9	1921/25
Rectangular	61	11.3	11.4	1930/18
Flask-Like	8	3.5	3.5	1937/17
Panel-Inset	19	1.8	1.9	1902/19
Diamond	10	0.2	0.2	1941/ 0
Octagonal	1	2.2	2.2	1917/23
Triangular	12	0.2	0.2	1922/ 0
Flared Wide Mouth	26	4.8	4.9	1936/20
Hexagonal	4	0.7	0.7	1901/12
Fluted (Multi-sided)	3	0.6	0.6	1929/20
Tear Drop Round	8	1.5	1.5	1930/18
Out of Range	6	1.1	Missing	
Total	542	100.0	100.0	

The first five categories for body shape listed above account for approximately 85% of all of the body shapes recovered. Round body shapes account for over 40% and on average date a bit later than the mean date for the whole bottle collection. The dates and their standard deviations listed above only apply to the Neville House collection they are derived from an evaluatio of all data and not only body shape. Round shapes, oval shapes, ect., can date to almost any time but the dates listed reflect averages for the Neville House whole bottle data set only. The round body shapes are mostly personal care or prescription medical products, and edible food product containers. The ovals are quite often household products like ammonia or personal care products. The oblong, rectangular, and panel-insert body styles are usually patent medicines and other personal care medicinal products. The flare wide mouth, fluted, hexagonal, and octagonal shapes are usually edible food products like preserves and canned goods.

Glass Color

Color	Absolute Frequency	Relative Frequency (%)	MeanDate Standard Deviation
Clear	328	60.0	1924/23
Brown	94	17.3	1930/17
Green	5	0.9	.1930/25
Light Green	21	3.8	1916/28
Dark Blue	67	12.4	1925/17
Blue	2	0.3	1941/ 0
Light Blue	21	3.9	1906/27
Milk	1	0.2	1890/ 0
Yellow	2	0.3	1945/31
Red	1	0.2	1923/ 0

The predominant glass color as with the bottle neck collection is clear glass. Brown and dark blue colored glass were the next most prevalent colors represented in the midden for whole bottles and these together account for approximately 30%. Clear glass accounted for over 60%. The clear glass percentage for the whole bottle population is only one tenth of one percent different from that of the bottle neck population. The dates listed are, as with the body shapes, taken from the total data set and are not relative dates for glass colors.

Product Functions

Function	Absolute Frequency	Relative Frequency (%)	Adjusted Frequency (%)	Mean Date Standard Deviation
Prescription (Medical)	8	1.5	1.6	1894/ 7
Personal Care (Medical)	290	53.5	56.5	1923/22
Other (Medical)	2	0.2	0.4	1911/ 0
Perfume (Cosmetic)	30	5.5	5.8	1918/24
Creams (Cosmetic)	1	0.2	0.2	1914/ 0
Tonics (Cosmetic)	5	0.9	1.0	1937/ 8
Other (Cosmetic)	5	0.9	1.0	1941/ 0
Unknown (Household)	5	0.9	1.0	1938/ 5
Cleaners (Household)	8	1.5	1.6	1940/ 8
Polishes & Dyes (Household)	9	1.6	1.7	1921/25
Other (Household)	27	5.0	5.3	1921/24
Unknown (Edible)	2	0.3	0.4	1938/12
Soda (Edible)	18	3.3	3.5	1925/24
Water (Edible)	1	0.2	0.2	1923/ 0
Extracts (Edible)	12	2.2	2.3	1915/21
Dairy (Edible)	5	0.9	1.0	1899/21
Preserves & Canned Goods (Edible)	41	7.6	8.0	1930/23
Condimnets (Edible)	16	3.0	3.1	1929/21

Other (Edible)	5	0.9	1.0	1915/24
Beer (Liquor)	5	0.9	1.0	1941/ 0
Whiskey, etc. (Liquor)	16	3.0	3.1	1940/10
Wine (Liquor)	1	0.2	0.2	1885/ 0
Other (Liquor)	1	0.2	0.2	1941/ 0
Out of Range	29	5.4	Missing	
Totals	524	100.0	100.0	

As was exhibited with the bottle neck collection, the largest category of products is the personal care medical products which include: mouth wash, cough medicine, aspririns, Bromo-Seltzer, and other similar products. This category accounts for 56.5% of the whole bottle collection and 46.6% of the bottle neck collection. Approximately 51.5% of the total glass bottle collection from the Neville House midden were personal care products. Preserves or canned goods, perfumes, and various household products account for another 19 or 20% of the products represented. Whiskey and other hard liquor products account for the largest percentage of liquor products. Throughout the midden liquor products account for only 7% of the glass containers recovered.

Product manufacturers associated with whole bottles and bottle neck fragments discussed in this report by M. Hochrein and need not be discussed in detail here. The following is a list by Code Number of the frequencies of companies represented: (see Hochrein for code identifications).

Code Number	Frequency	Code Number	Frequency	Code Number	Frequency
1	1	68	1	137	1
2	1	73	1	139	1
10	1	76	1	140	1
11	7	77	1	142	1
13	1	83	3	146	4
16	38	101	4	147	1
20	1	106	1	149	1
23	3	110	1	152	1
24	40	121	1	155	4
28	2	128	1	166	2
32	1	129	1	171	1
38	2	131	1	176	3
49	3	134	1	188	1
50	1	135	20	192	1
67	11	136	2	198	1
201	1	272	1	293	1
203	1	273	1	294	2
207	1	274	4	295	1
209	2	275	1	296	1
212	2	277	1	297	1
215	1	278	1	298	1
220	1	279	1	299	1

228	11	281	1	301	1
232	4	282	1	302	1
242	2	283	2	303	1
244	1	284	1	304	1
251	4	285	1	305	1
255	1	286	1	306	1
268	1	287	1	307	1
269	1	289	1	310	2
270	1	291	1	Out of Range	290
271	1	292	1		
				Total	542

The most frequent companies represented in the whole bottle collection are the Bromo-Seltzer Company (#24) of Baltimore, Maryland, whose bottle was commonly manufactured by the Maryland Glass Corp. and the Bell-Ans Company (#16) of New Jersey, New York, and other locations. Bell-Ans used bottles manufactured by numerous container manufactures. Both of these products are anti-acid tablets or crystals. Listerine (mouth wash), Dram Bottles, and Vicks products were also numerous (all classed as personal care medical products). Regrettably over 50% of the whole bottles recovered have no markings on them and could not be identified by product label.

The various glass container manufacturers represented in the Neville House collections have also been discussed by Hochrein (this report) thus they will just be briefly mentioned here for whole bottles:

Code Number	Frequency	Code Number	Frequency	Code Number	Frequency
3	3	106	1	251	10
5	2	110	1	256	1
27	2	116	14	262	1
28	1	123	1	265	3
37	2	124	1	267	3
51	2	144	28	276	1
56	4	149	2	279	1
62	7	164	9	280	1
65	1	172	35	288	2
72	2	173	82	290	1
74	7	176	1	300	3
80	1	183	2	308	1
90	4	221	1	309	1
98	33	236	22	Out of Range	238
101	2	250	2		
				Total	542

The major manufacturer represented by maker's marks in the whole bottle collection is the Owens Illinois Company (1929-1979), through a number of its manufacturing locations. This company's containers accounted for 27% of the marked examples. Owens Bottle Co.

(1911-1929) accounted for 11.5%, the Hazel Atlas Glass Co. (1902-1964) 10.9%, the Maryland Glass Corp. (1907-9179) 9.2%, and the Whitall Tatum and Co./Whitall Bros. and Tatum (1848-1938) with 7.2%. Forty-three point nine (43.9) percent of the bottles had no maker's marks to indicate the bottle manufactures.

The states or countries and cities that these whole bottles came from are as follows:

State or Country	Frequency	Adjusted Frequency(%)
West Virginia	70	25.3
Ohio	49	17.7
Illinios	45	16.2
Maryland	32	11.6
New Jersey	31	11.2
Pennsylvania	27	9.7
Indiana	10	3.6
Arkansas	3	1.1
Scotland	3	1.1
England	2	0.7
Wisconsin	1	0.4
Oklahoma	1	0.4
Michigan	1	0.4
Kentucky	1	0.4
California	1	0.4

Cities	Frequency	Adjusted Frequency(%)
Toledo, OH	44	16.1
Wheeling, WV	33	12.0
Baltimore, MD	32	11.7
Alton, IL	27	9.9
Millville, NJ	22	8.0
Clarksburg, WV	18	6.6
Pittsburgh, PA	14	5.1
Huntington, WV	11	4.0
East St. Louis, IL	9	3.3
Royersford, NY	7	2.6
Fairmount, WV	5	1.8
Charleston, WV	5	1.8
Bridgeton, NJ	4	1.5
Kinghorn, England	3	1.1
St. Jonesboro	3	1.1
West Berkeley, Germany	3	1.1
Chicago, IL	2	1.1
Lancaster, PA	2	0.7
McDonald, PA	2	0.7
Sharpsburg, PA	2	0.7
St. Helens	1	0.4
Glenshaw, PA	1	0.4

Knottingley, England	1	0.4
Knox, TN	1	0.4
Racine, WI	1	0.4
Terre Haute, IN	1	0.4
Bloomfield, NJ	1	0.4
Gas City, IN	1	0.4
Evansville, IL	1	0.4
Detroit, MI	1	0.4
Okmalgee, NJ	1	0.4
Newark, NJ	1	0.4
Salem, WV	1	0.4
Covington, England	1	0.4
Out of Range	268	-
Totals	542	100.0

The vast majority of the whole bottles from the Neville House were manufactured in the central eastern United States. Most manufacturers were located within 500 or 600 miles of Pittsburgh, many within a 200-mile radius. The total area of importation is, however, quite large. The mean date of 1924 for the whole bottles indicates that most were produced in a time period when the systems for production and distribution of goods were greatly expanded in volumne and extent as compared with those of the 19th century. Machine-base mass production and the more efficient distribution systems of the early 20th century increased the availability of products from all over the country and world. Many small local or regional producers were unable to compete with larger national competition and ceased production. A large number of the bottle companies recordered as producing in the Pittsburgh area in the 19th century are not present in the 20th century. If more accurate classification of the early bottle types from the Neville House midden were possible, the archaeological record should reflect this. For the period 1900-1950, 3 major glass manufacturers from the mid-Atlantic, Upper Ohio and central states area are strongly represented in the Neville House midden materials. These manufactures include: The Owens Companies (West Virginia, Ohio, Illinois and Indiania); The Hazel-Atlas Company (West Virginia, Ohio and Pennsylvania); the Maryland Glass Company (Maryland).

BOTTLE DATES AND THE NEVILLE HOUSE MIDDEN STRATIGRAPHY

Using the relative date ranges for the bottle necks and whole bottles, summary statistics were generated that enabled some of the features for the Neville House midden deposit to be dated. The results verified an evalvation developed during excavation that the chronological distribution of artifacts over the site had been disturbed so much over the years that there was no longer strong evidence of vertical chronology. However, there was evidence of horizontal chronology across the midden (see Figure 19, p.1570). There were no concentrations of older bottle types in the lower strata of the midden to indicate an original midden deposition. The mix of early and recent types were found scattered throughout all vertical levels. The mean dates generated for each stratigraphic feature, when considered relative to the complex overlapping and interbedding of the soil strata found in the midden, lead one to conclude that the site's deposits were disturbed prior to archaeological excavation, possibly during both the original deposition and in subsequent years. It is possible that at various times during trash disposal into the midden the material was buried. If users excavated into the midden to bury new trash, this would effectively disturb earlier layers and would redeposit those levels throughout higher strata. Additionally, this would place "new" trash into numerous lower levels. If this hypothesized deposition method was used over a long period of time, the potential for creating chronologically mixed strata would be quite high. Subsequent pot hunting in the last ten or more years has also added to the mix of artifact strata.

There were three strata and six features from which bottle necks were recovered. Feature 21, the main midden deposit, was the most extensive feature excavated. It produced over 2000 bottle necks. The next largest producing feature was F20 with only 193 bottle necks. The rest of the necks were scattered in relatively small numbers throughout the other strata. The mean dates (with standard deviation) produced by the bottle neck data from each strata are as follows:

Strata 2 = 1910 $\pm$ 21 years
Strata 3k = 1908 $\pm$ 19 years
Strata 4 = 1909 $\pm$ 30 years
F 18 = 1915 $\pm$ 31 years
F 20 = 1908 $\pm$ 24 years
F 21 = 1916 $\pm$ 62 years
F 23 = 1904 $\pm$ 29 years
F 25 = 1911 $\pm$ 23 years
F 26 = 1901 $\pm$ 18 years

The surface collected bottle necks produced a mean date of 1916 $\pm$ 25 years.

When reviewing the vertical stratigraphy of the midden and comparing their mean dates, the chronological mixing becomes evident. Feature F20, which was below F21, produced dates 8 years earlier than F21, but strata 2 and 4 also produced mean dates earlier than F21 and they were stratigraphically above it. The difference between the date range and

mean dates associated with features and strata were not found to be statistically significant. Thus, conclusions are difficult to draw about the various soil strata in the midden. It is clear that the midden was used considerably between 1870 and 1940 with frequent mixing of deposits.

The whole bottle data produced mean dates that were more recent than the bottle neck mean dates, but they do not clarify the strata chronology any better. Whole bottles were recovered from one strata aned five features. These features were dated as follows:

Strata 3k = 1947 $\pm$ 0 years
F 18 = 1890 $\pm$ 0 years
F 21 = 1925 $\pm$ 21 years
F 23 = 1941 $\pm$ 0 years
F 25 = 1915 $\pm$ 22 years
F 26 = 1902 $\pm$ 20 years

One stratum and three features produced only one whole bottle each(ie. F26, F23, Stratum 3k, F18). Date ranges and mean dates based on such a small sample could be unrepresentative and unreliable. Sixty-eight whole bottles were collected from the surface of the midden and they produced a mean date of 1922 $\pm$ 23 years. Feature 21 produced 436 whole bottles whereas F26, the next most productive feature, produced only 16 whole bottles. As with the bottle neck collection, the feature dates achieved using the whole bottle collection do not indicate a significantly differentiated vertical chronology in the midden. Again, the artifact mean dates seem to indicate a mixing of all soil features creating a rather homogeneous vertical chronology throughout the midden.

The horizontal distribution of bottles and bottle necks across the midden produced some evidence that the Neville House midden developed or grew from west to east over the years of deposition. There is little evidence that the midden grew much in width (north to south) over time. Bottle trash, along with other trash, was apparently first deposited in the western half of the depressed area just down slope from the northern edge of the Neville House back lawn. As time and deposition continued, the midden grew eastward. Scattergrams, using individual mean artifact dates distributed along the respective northern and western excavation transects, revealed interesting characteristics of both surface and midden collected artifacts. The bottle data suggests that the midden developed or grew over approximately 75 years (1870-1945) from a west central location (approx. N10-20 W125-145) to cover an area extending to the east/southeast (N0-20 W80-125) of the original deposits. The width of the midden basically remained the same (15 or 20 feet) over time, but its length grew from 15 or 20 feet long to 65 or 70 feet long. The bulk of the midden deposit was concentrated between N5-20 and W95-135. There were significantly more modern machine made bottles in the eastern half of the midden than in the western half and this increase across the site is strong evidence of the eastern development or growth of the midden over time.

CONCLUSION

The bottle necks and whole bottles recovered and analyzed from the midden associated with the historic Neville House site reveal interesting facts about the creation of the midden and the cultural period and setting in which it was created. This midden received substantial deposits of broken or whole glass bottles on an apparently regular basis between 1870 and 1945.

A large number of bottles deposited in the midden were disposable containers probably never reused. Products such as patent medicines, household cleaners, chemical bottles, and other products were used and the empty containers quickly disposed of. Mass produced, disposable product containers were a new cultural phenomena in the last quarter of the 19th century. Pittsburgh, because it was a major glass container manufacturing center, probably experienced this new disposable revolution before other areas.

The large number of products represented by the glass specimens from the Neville House may reflect economic position of the site occupants who contributed to the midden. A wealthy family could afford many store bought products thus producing a large number of disposable containers. So few 19th century and early 20th century middens have been professionally excavated, that it is difficult at this time to state whether the Neville House midden is representative of a wealthy family or even an average one in the Pittsburgh area. The variety of bottle forms and products and the large number of individual containers represented in the midden could also reflect the contributions of more than one family in the creation of the midden. The variety of ceramic wares found in the midden might also suggest this possibility. However, a lack of comparative data for the time period prohibits a definite evaluation of such inferences.

Many specimens recovered from the midden indicate a product preference but consumption levels are difficult to determine. For instance, over 250 Bromo-Seltzer bottles characterized by manufacturing techniques representing at least 40 or 50 years of that company's production were recovered from the site. It is difficult, however, to determine whether such a quantity represents utilization and deposition by one individual, one family, or more than one family. The wide date range indicated by the variety of bottle types recovered verifies long-term use of the midden, but there are no characteristic features within the bottle collection that give a clue to the number of individuals that created it.

The bottle types defined in this collection were manufactured primarily within a region around Pittsburgh defined by two or three hundred mile radius. Many of the products contained in the bottles were also of regional origin. For the entire period of utilization of this midden the glass containers reflect some combination of local or regional market availability and preference for local products. This fact is not surprising, however, considering that the vast percentage

Sealing Bead Collar: Yes.
Finish: One continuous thread.
Manufacturing Technique: Machine made semiautomatic pressed.
Lip Style: Smooth.
Neck: Yes. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: From base to finish parting line only. Finish pressed in hone piece ring.
Comments: This jar is generally of the same size, shape and appearance as the previous 3 varieties. It is, however, pressed in manufacture as evident from the side seams and abasence of a parison cutoff scar. This jar was probably made in an early hand operation using machinery not fully automated. It serves as a link in manufacturing techniques between the fully hand produced jar of variety 2.3 and the full machine made jars of variety 2.1 and 2.2, evidentally a petroleum jelly jar. Manufacturer and origin unknown.

Subcategory: 1 Group: 1 Subgroup: 3 Variety: N/A Figure: 5
No. of Examples--Whole: 9. Rim Fragments: 16.
Manufacturing Dates: 1903-1979. Internal Correlation: GMM Code 228.
Product Embossed Label: "Vick's Vaporub" with trade mark triangle on bottom.
Maker's Mark Embossed: N/A.
Color: Cobalt blue. Shape: Round.
Sealing Bead Collar: Yes.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: Yes. Shoulder: Yes. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: Yes.
Side Seams: Full, from base to lip.
Comments: A short, small jar to 2 oz., holding an aromatic, medical salve. Manufacturer and origin, unknown.

Subcategory: 1 Group: 1 Subgroup: 4 Variety: 1 Figure: 6
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1903-1940 Internal Correlation: N/A.
Product Embossed Label: "Physicians Sample" on front panel.
Maker's Mark Embossed: "P L" over a trident in a shield. Unknown.
Color: Clear. Shape: Square.
Sealing Bead Collar: Yes.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: Yes.
Side Seams: Full, from base to lip.
Comments: A square jar with shoulders that taper to finish. Medium size to 6 oz., probably contained drug samples to be administered by a doctor on a trial basis. Manufacturer and origin, unknown.

Subcategory: 1 Group: 1 Subgroup: 4 Variety: 2
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1903-1940. Internal Correlation: N/A.

Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: Yes. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: Yes.
Side Seams: Full, from base to lip.
Comments: Jar in two sizes 2 oz. and 3 oz., short and squat. Held "Vaseline" brand petroleum jelly. Probably manufactured from 1903-1960, since newer "Vaseline" brand jars bear no embossing (1960-1981). Manufacturer and origin of jar, unknown.

Subcategory: 1 Group: 1 Subgroup: 2 Variety: 2
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1903-1960. Internal Correlation: GMM Code 42.
Product Embossed Label: Vaseline, Cheeseborough, New York.
Maker's Mark Embossed: N/A.
Color: Amber. Shape: Round.
Sealing Bead Collar: Yes.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: Yes. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: Yes.
Side Seams: Full, from base to lip.
Comments: Same as previous Variety 2.1 except for color.

Subcategory: 1 Group: 1 Subgroup: 2 Variety: 3
No. of Examples--Whole: 0. Rim Fragments: 1.
Manufacturing Dates: 1880-1910. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear. Shape: Round.
Sealing Bead Collar: Yes.
Finish: One continuous thread.
Manufacturing Technique: Mold blown hand finished.
Lip Style: Ground.
Neck: Yes. Shoulder: Yes. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Run through fragment to lip.
Comments: A partial jar only the base is missing. This item agrees completely with the size, shape, mouth diameter and overall appearance of the two previous Varieties (2.1 and 2.2). Although mold blown, this jar has a sealing bead collar on its finish indicating an early attempt to produce a truly airtight container. This is an unusual piece since sealing bead collars on threaded finishes did not become common until the advent of the automatic bottle blowing machines. An early petroleum jelly jar manufacturer and origin unknown.

Subcategory: 1 Group: 1 Subgroup: 2 Variety: 4 Figure: 4
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1895-1915. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear tinted violet. Shape: Round.

Comments: The interruption and staggering of side seams indicates a vacuum draw process not fully automated. Glass contains numerous seed bubbles and impurities suggesting primitive quality control. A medium jar to 4 oz., probably contained a condiment. Manufacturer and origin unknown.

Subcategory: 1 Group: 1 Subgroup: 1 Variety: 7
No. of Examples--Whole: 0. Rim Fragments: 58.
Manufacturing Dates: 1903-1979. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear. Shape: Mostly round.
Sealing Bead Collar: Yes.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: Yes.
Finish Parting Line: N/A. Parison Scar: N/A.
Side Seams: On fragments run through finish to lip, some more complete fragments have a finish parting line.
Comments: Due to the presence of a sealing bead collar on the finish to insure an airtight seal, it may be assumed that these jar fragments represent containers that held food, aromatics or other perishable items. Fragments of various rim diameters (outside) from 6.0 cm, the largest, to 3.1 cm, the smallest. Manufacturer and origin, unknown.

Subcategory: 1 Group: 1 Subgroup: 1 Variety: 8
No. of Examples--Whole: 0. Rim Fragments: 9.
Manufacturing Dates: 1903-1940. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Light green. Shape: Round.
Sealing Bead Collar: Yes.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: N/A.
Finish Parting Line: N/A. Parison Scar: N/A.
Side Seams: On fragments run through finish to lip, some more complete items have a finish parting line.
Comments: Same as previous variety (1.7) except for color. Since light green containers are uncommon in recent times (1940-1981), it might be assumed that these may have an earlier termination date for their manufacturing sequence. Fragments of rim diameters (outside) from the largest (5.0 cm), to the smallest, (3.1 cm). Manufacturer and origin, unknown.

Subcategory: 1 Group: 1 Subgroup: 2 Variety: 1 Figure: 3
No. of Examples--Whole: 8. Rim Fragments: 10.
Manufacturing Dates: 1903-1960. Internal Correlation: GMM Code 42.
Product Embossed Label: "Vaseline Cheesebrough New York".
Maker's Mark Embossed: N/A.
Color: Clear. Shape: Round.
Sealing Bead Collar: Yes.

Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: Yes.
Side Seams: Full, from base to lip.
Comments: A medium jar to 4 oz., probably contained a condiment. Probably made at one of the Owens plants in Ohio or West Virginia (Toulouse 1971: 393-5).

Subcategory: 1 Group: 1 Subgroup: 1 Variety: 4 Figure: 1
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1903-1915. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: 0 inside a large C, unknown.
Color: Clear tinted violet. Shape: Round.
Sealing Bead Collar: Yes.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: Yes.
Side Seams: Full, from base to lip.
Comments: A tall narrow jar to 6 oz., probably held olives, gerkins, etc. Manufacturer and origin unknown.

Subcategory: 1 Group: 1 Subgroup: 1 Variety: 5
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1903-1979. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear. Shape: Round.
Sealing Bead Collar: Yes.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: N/A. Parison Scar: Yes.
Side Seams: Full, from base to lip.
Comments: A tall jar to 6 oz., probably contained olives, pickles, etc. Manufacturer and origin unknown.

Subcategory: 1 Group: 1 Subgroup: 1 Variety: 6
No. of Examples--Whole: 0. Rim Fragments: 0.
Manufacturing Dates: 1900-1915. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear. Shape: Round.
Sealing Bead Collar: Yes.
Finish: One continuous thread.
Manufacturing Technique: Machine made semi automatic blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes Base Parting Line: Yes
Finish Parting Line: Yes Parison Scar: N/A.
Side Seams: Full from base to lip but staggered to right.

ANALYTICAL GROUPINGS AND DESCRIPTIONS

Subcategory 1: JARS WITH THREADED OR LUGGED FINISHES SEALING WITH A METAL SCREW CAP.

Group 1: JARS WITH A SEALING BEAD COLLAR ON THEIR RESPECTIVE FINISHES.

Subcategory: 1 Group: 1 Subgroup: 1 Variety: 1
No. of Examples--Whole: 2. Rim Fragments: 0.
Manufacturing Dates: 1900-1915. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear tinted violet. Shape: Round.
Sealing Bead Collar: Yes.
Finish: One continuous thread.
Manufacturing Technique: Machine made semi-automatic.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar:
Side Seams: Full, from base to lip, but are staggered to left.
Comments: The interruption and staggering of side seams indicates a vacuum draw process not fully automated. The glass has numerous seed bubbles and other impurities indicating primitive quality control. A medium jar to 4 oz., probably contained a condiment. Manufacturer and origin unknown.

Subcategory: 1 Group: 1 Subgroup: 1 Variety: 2 Figure: 2
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1920-1957. Internal Correlation: N/A.
Product Embossed Label: "Gem Salad Dressing", on bottom.
Maker's Mark Embossed: H over A, is Hazel Atlas Glass Co., Wheeling, West Virginia.
Color: Clear. Shape: Round.
Sealing Bead Collar: Yes.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Full, from base to lip.
Comments: A small jar to 2 oz., held salad dressing. Made either at the Wheeling, West Virginia plant or one of the three Hazel-Atlas plants in Washington, Pa (Toulouse 1971: 239-42).

Subcategory: 1 Group: 1 Subgroup: 1 Variety: 3
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1911-1929. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear. Shape: Round fat hourglass.
Sealing Bead Collar: Yes.
Finish: One continuous thread.

rim diameter (outside), mouth diameter (inside), collar diameter (if present), body diameter, and height (Table 1).

Frequency counts of jars and jar rims were plotted against to manufacturing dates in two graphs (Graphs 1 and 2). These 2 graphs represent items in Subcategory 1: Threaded Finishes, and Subcategory 2: Non-Threaded Finishes, the only Subcategories in these categories of artifacts. Each Subgroup and Variety is noted in Tables 2 and 3, in respect to: chronological time, in terms of manufacturing dates; a short description of that particular Subgroup or Variety; the Subcategory and Group to which that particular Subgroup or Variety belongs and a piece count. Finally Table 4 gives the chronological time sequence and piece count of Subcategories 1 and 2, which is basically equal to Graphs 1 and 2.

Criteria for the identification and dating of jar varieties and terminology for description of various aspects of jar structure and manufacture were derived from numerous published references on glassware and glass container "collecting". These references are cited where pertinent. A number of these aspects of jar structure and manufacture were selected for use in the determination of date ranges for the various forms of jars in the Neville House assemblage. These chronologically significant elements are detailed in the following paragraphs.

The presence or absence of a ground lip on a jar or rim is a sure indication of the item being produced manually (Toulouse 1969:146-7). Manufacturing dates for non-pontiled (See Winters Neville House Pontil Marks) jars with ground lips would be 1850-1910 (Toulouse 1969:146-8). A smooth lip combined with full side seams and a finish parting line indicates a machine made item produced in a semi-automatic or fully automatic process beginning in 1896 for certain Subgroups and continuing until the present for all Subgroups (Toulouse 1969:147-8).

The presence of maganese dioxide as a glass batch bleaching reagent is indicated by a violet tint to clear glass (See Definitions). This was common in glass containers from 1880 to 1915. This condition correlates with lip style and manufacturing date. As previously stated (See Definitions), the manufacturing techniques indicated by mold lines and side seams can be dated.

Glass color other than the violet of manganese dioxide is of secondary consideration. Light green and aqua are the common colors of unbleached glass and can be found in containers produced into the 1930's. Amber is a rare color in jars, especially fruit jars, but is still used (mainly in commercial jars) today. Milk glass seems to have been used mainly for commercial jars from 1900 on. Cobalt blue is another rare color, especially for hand finished jars of any form, and is used only for certain forms of machine made commerical jars even today. Many commerical jars and practically all fruit jars produced since 1940 are made of clear untinted glass.

products or jar manufacturer (Example: brand names, company names, or company logos.

5. Different mouth diameters (Example: midget pint fruit jars vs standard sized fruit jars).

6. A large aggregate of the same style containers or rim fragments.

(Note: Since this report deals only with material recovered at Neville House and not the jar industry as a whole, some Subgroups were solely determined by large aggregations of identical recovered material, while others, possessing similar but not identical characteristics and represented by one or two whole jars or a large quantity of broken non-embossed rim fragments, were lumped into one collective Subgroup.)

Variety: A still narrower concept, within the boundaries of the parental Subgroup. Usually found in association with large collective Subgroups and used to differentiate between jars with similar characteristics but that are non-identical in nature. Also based on change of color, a difference in style of lip, overall size or shape.

In addition to the breakdown, identification and description of these artifacts, they were subjected to various other groupings and processes. Each individual whole jar or rim fragment was given its own numerical designation. This consisted of the Feld Catalog Number, representing the unit and level in which the artifact was recovered, and a piece number in a numerical sequence that varies in accordance with the total amount of recovered material. Each Subgroup and Variety description is accompanied with a sheet listing by field catalogue and piece numbers, those artifacts that correspond to that particular Subgroup or Variety.

In order to computerize the GJ and GJR assemblage, it was necessary to make out a punch card statement for each artifact. This consisted of the field catalogue and piece number, followed by the Subcategory, Group, Subgroup and Variety designations, the manufacturing dates, the condition of the artifact (whole or rim), the function of the artifact (See Denton for Product Function Table), style of lip, type of side seams, presence of a parison cutoff scar, style of finish, presence of sealing bead collar, presence of a shoulder, presence of a neck, color (See Denton for Color Table), and finally, form of closure. The computer punch card statement for each artifact in GJ and GJR occupies 39 spaces on each card.

A selected artifact from each Subgroup was designated for illustration. When artifacts from separate Subgroups and Varieties were found to be very similar it was decided to illustrate just a few pertinent examples and refer the reader back to the written descriptions.

A selected item from each Subgroup and Variety was measured for

Table 1
An Outline of the Artifact Classes GJ and GJR

Subcategory 1. Jars with threaded or lugged finishes that seal with a metal screw cap.

Group 1. Jars with a sealing bead collar on their respective finishes.

A. 19 Subgroup and 36 Varieties.

Group 2. Jars without a sealing bead collar.

A. 30 Subgroups and 36 Varieties.

Subcategory 2. Jars without threaded finishes.

Group 1. Fruit jars that seal with a glass lid and a metal bail locking device.

A. 1 Subgroup and 5 Varieties.

Category 2. Commerical container jars that seal with a metal or paper cap, without a metal bail.

A. 22 Subgroups and 25 Varieties.

The necessary criteria used in determining Subcategories, Groups, Subgroups and Varieties are here defined:

Subcategory: A broad concept united by one overall determining characteristic. (Example: threaded vs. unthreaded finishes).

Group: Also a broad concept but confined within the boundries of the parental Subcategory and united by one overall determining characteristic. Used to further reduce Subgategory into manageable portions. (Example: finishes with sealing bead collars vs. those without).

Subgroup*: The basic grouping of similar recovered artifacts of these categories GJ and GJR. A narrow concept based on any or all of the following:

1. Different styles of jars (Example fruit jars vs. cold cream jars).

2. Different styles of finishes (Example: one continuous thread vs. lugs).

3. Different styles of lips (Example: ground vs. smooth lip).

4. Different embossed letterings pertaining to contained

glass industry. Selenium was used in the container industry until the early 1930's (Munsey 1970:55; Toulouse 1969:146).

Arsenic: By the early 1930's, consumers were demanding more clear glass containers and ones that did not change color on exposure to sunlight. At this time it was found that adding small amounts of arsenic, and pre-washing the glass sand before produced melting, produced a suitable clear glass that would not change color on exposure to sunlight.

Other Terms:

Manufacturing Dates: The total sequence of dates during which a container may have been manufactured. Determined through a combination of manufacturing techniques, condition of lip, length of side seams, presence or absence of a bleaching reagent, and style of container.

Product Embossed Label: A series of raised letters on the jar indicating the contained product and/or its manufacturer. The product embossed label usually has nothing to do with the glass container manufacturer. A noteable exception is fruit jars that advertise the containers manufacturer, in some cases, but not the contents.

Maker's Marks Embossed: Those raised letters, symbols, or logos placed on a container to identify the manufacturer of that particular container. Usually has nothing to do with container's product.

Quality Control: A relatively new idea in jar production, probably beginning with the machine made containers in which a certain standard was set for an individual container to meet. Finally coming of age in the 1940's, when every phase of container production was monitored to consistantly produce a rigidly standardized product of high quality. This is compared to early container production when whatever held water, irregardless of irregularities, was passed on to the consumer.

Seed Bubbles, Blisters, and Other Irregularities: Visible defects in glass containers generally associated with early products. Increasingly rigid quality control methods have almost eliminated these undesirables in container manufacture.

METHODS

By observing and using the preceeding terms, the great mass of artifacts in the classes of Glass Jars (GJ) and Glass Jar Rims (GJR) were broken down into a hierarchy of analytical groupings of similar items and identified, mainly by manufacturing process and style of container.

jar. This happens when the jar is transferred from one phase of production to another manually, causing the partially formed jar to move inside the mold. In fully automated production, vibration may cause the ring forming the finish to jiggle about somewhat, but this only causes non-alignment of the side seams at the finish parting line.

Finish Parting Line: That line left on containers by the ring portion atop the main mold that forms the finish. Mostly associated with jars produced by one of the machine made processes. Most hand produced jars were made in basic two part molds that did not incorporate any one or two piece finishing rings.

Basic Parting Line: That line left at the base of a jar by the closing of the mold over its solid base with the shallow depression that forms the bottom of the jar. Many jars produced both by hand and machine feature this line.

Parison Cutoff Scar: A round irregular line found on the bottom of many machine produced jars, caused by a mechanical knife that cuts a gob of glass from the main molten batch to initiate the machine process of production. After the gob or parison is blown into a full size jar, the nick left by the mechanical knife has expanded into a quite noticeable ring.

Bleaching Reagents: Additives introduced into the molten glass for the purpose of rendering the final product in clear glass, instead of the normal light green or aqua of unbleached glass.

Manganese Dioxide: The addition of small amounts of this mineral oxide to decolorize a glass batch has been known since before the time of Christ. However, the technique was largely ignored until the 1880's when consumer demand for clear glass containers forced manufacturers to produce larger and larger quantities of these see-throug products. Manganese dioxide was the most common bleaching reagent used from 1880 to 1915 until the main source of this material, Germany, was cut off from the rest of the world by a wartime blockade. Manganese dioxide in glass will react with ultraviolet rays from sunlight and change the bleached glass from clear to a violet tint of various intensities depending on length of exposure and the amount of this reagent used. This is a very valuable dating tool (Munsey 1970:55).

Selenium: By 1916, glass manufacturers had turned to selenium, a more stable but more expensive compound, found mainly in Canada, to decolorize their glass. Selenium, on exposure to the ultraviolet rays of sunlight, tints the clear glass with a light amber hue. Although expensive, lesser amounts of selenium were needed to bleach a given batch of glass than maganese dioxide, which never made a comeback in the

Machine Made-Pressed: A fully automated process in which containers are pressed in the mold with a mechanical pluger. (Note: pressed glass containers were also made by the semi-automatic and hand produced processes)

Smooth Lip: In jar production, a smooth lip is an almost certain indicator of a machine process of manufacture especially among later styles (1895 - present). Earlier jars (1800 - 1870) were produced with smooth lips but these were hand applied and irregular. No examples of these early jars were recovered at Neville House.

Basic Two-Piece Mold: Most jars are blown in a two part mold. This mold may be hinged at the base, but most often is hinged on the side. The jar is blown in the closed mold, the mold is opened, the jar stripped out, and the process continued on from this point. Most two part molds close over a solid base with a shallow depression that forms the bottom of the jar.

Cup Mold: A single piece mold mostly associated with the pressed glass method of jar production.

Two Piece Ring: In the machine blown process of manufacture, a two piece ring is added to the basic 2 part mold and forms the lip and finish of a jar before the main body of the jar is mechanically blown. Pressed glass containers may also have two piece rings.

One Piece Ring: A single ring added to the top of a mold in a machine process. Most often associated with pressed glass containers produced in a cup mold and forms the lip and finish of the jar.

Multiple Part Molds: Some specially ordered, highly ornamented, or oddly shaped jars are produced in molds with more than two basic body halves. The most common are three and four part molds. These have been used in glass container production for a long period (1820-1982), however, in jar production, they are rare and seem to be of later times (1880-1982). Mold seams and lines are very helpful in determining by which manufacturing process and in what type of mold a jar was produced.

Side Seams: In all two part mold production the side seams are found opposite each other on the container. In most blown jars they run from the base of the jar through to the lip. In a cup mold, they are non-existent on the body of the jar but may be found on the lip if a two piece ring was used. If a one piece ring is used with a two part mold, the side seams will stop at the finish. In many jars produced in a semi-automatic process there may be two or more almost complete sets of side seams, staggered over the body portion of the

Rim Fragment: Any piece of a jar that contains at least a portion of the finish and lip.

Collar: A raised glass ridge of many different configurations either on the finish or the neck.

Sealing Collar: A raised glass ridge of many different configurations on the finish where the closure device seals the contents of the jar.

Sealing bead collar: A highly specialized raised and rounded strip of glass on the finish where the closure device seals the contents of the jar. Found mostly on jars with threaded finishes.

Thread: Any arrangement of a raised spiral line of glass on the finish of a jar, on which a cap with corresponding grooves or metal catches may be screwed down upon.

Lugs: A series of individually spaced raised ridges of a glass, arranged either in an interrupted horizontal band or individually inclined on the finish of a jar to effect the closing of the jar with a corresponding cap.

Manufacturing Terms:

Mold blown and hand finished: An early (1840-1910) method of producing jars manually. Involves blowing the jar in a hand-held mold with lung power, breaking or cutting the jar from the blowpipe, and finishing each jar individually by manual methods.

Ground lip: A feature of mold blown and hand finished jars by which the lip, after being broken or cut from the blowpipe, is hand ground on a stone grinding wheel. This is accomplished after the jar has been cooled and annealed.

Semi-Automatic: A vacuum process but hand operated method of container production (1895-1920) in which the initial blowing of the jar is accomplished by a compressed air machine manually operated. Also any portion of container production that is accomplished manually, such as stripping the hot jar from the mold and transfering it to the annealing oven or leher by hand, is considered semi-automatic.

Fully Automated Machine Made: A process, developed in 1903 and put into operation by 1904, by which all phases of container production are fully automated, requiring only supervision and maintenance.

Machine Made-Blown: A fully automated process of blowing containers with compressed air blast.

GLASS JARS AND GLASS JAR RIMS

by

Robert Winters

This chapter will deal with the identification and classification of Glass Jars (GJ) and Glass Jar Rims (GJR) recovered at Neville House during the 1979 excavations. This report will include appropriate term definitions in regard to jars, the methods and criteria used to breakdown the jars for identification and classification, and the actual identification and classification of this artifact category. Tables and graphs summarizing the frequencies of various forms, their chronological correlates and various physical dimensions are also present. A chapter summary will discuss the backgrounds of identified containers and their relationships to Neville House.

DEFINITIONS

Basic Terms:

Jar: A wide mouthed container with a shortened neck or none at all as opposed to a bottle with a narrow mouth and long neck.

Fruit Jar: A jar especially manufactued for the home preservation of food items. Often reused again and again.

Commercial Container Jar: A jar manufactured to a particular customer's product for sale to the general public. Often discarded when empty.

Jar Attributes:

Finish: That part of the jar that is contoured to fit whatever closure is being used. In hand glass making it was the last part of the jar to be made or shaped, hence the jar was "finished". In machine-making it is pressed into shape as part of the very first operation (Toulouse 1969:144).

Lip: The terminal edge of the mouth or finish at the very top of the jar.

Neck: If at all present, it is a narrow portion directly below the finish. Most jar necks are very short.

Shoulder: Any widening portion of the jar that joins the finish or neck to the main and wider body of the jar. About 70% of jars have shoulders.

Base: That part of a jar considered the bearing surface or the portion on which the jar rests.

of the glass containers manufactured in the United States in the last 150 years have been produced in western Pennsylvania, northwestern West Virginia, Ohio and Maryland. This may account in part, for the large number and variety of bottles recovered from the midden.

The distribution of bottle necks and whole bottles within the Neville House midden seems to be a function of both trash disposal disturbance. This trash midden received deposits using a landfill method in which trash was continually buried. Small quantities of melted glass indicate the possibility that portions were occasionally burned. The midden expanded eastward over the years of use. The primary midden deposit (F21), along with the other soil features, all contained glass specimens with very similar date ranges and mean dates due to vertical mixing of the strata.

It was not the intention of this author to devise a new classification system for bottle neck types nor were any more precise dating methods devised than are already commonly known. The large and varied collection of bottle neck forms recorded from this Victorian and early 20th century middem may, however, provide a standard for comparative analysis. Future archaeological investigations of Victorian dumps may be able to utilize information from the analysis of the Neville House collection as an aid in the dating of bottle forms, the identification of products and in the classification of the lip style.

Product Embossed Label: N/A.
Maker's Mark Embossed: "P L" over a trident in a shield. Unknown.
Color: Chartreuse. Shape: Square.
Sealing Bead Collar: Yes.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: Yes.
Side Seams: Full, from base to lip.
Comments: Same as previous subtype 4.1, except for color and lack of product embossed label. This chartreuse color of glass is commonly called "Vaseline glass" and was in vogue from the late 19th century until the 1940s. Manufacturer and origin, unknown.

Subcategory: 1 Group: 1 Subgroup: 5 Variety: N/A. Figure: 7
No. of Examples--Whole: 14. Rim Fragments: 12.
Manufacturing Dates: 1903-1930. Internal Correlation: GMM 151.
Product Embossed Label: "Mentholatum Reg. Trade Mark" on bottom.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Round.
Sealing Bead Collar: Yes.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Full, from base to shoulder.
Comments: Small jars in two sizes, 1 oz. and 3 oz., holding an aromatic, medical salve. An early machine made jar style, the pattern being reminiscent of several Whithall-Tatum non-threaded tin top types produced before 1900. Manufacturer and origin unknown, however, it is possibly a Whithall-Tatum product.

Subcategory: 1 Group: 1 Subgroup: 6 Variety: 1 Figure: 8
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1903-1979. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Round.
Sealing Bead Collar: Yes.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Full, from base to lip.
Comments: A squat, medium jar to 4 oz.m probably contained facial cream. Subgroup 6 is more or less a miscellaneous grouping of similar but not identical milk glass jars with one continuous thread and a sealing bead collar on their respective finishes. These jars are different sizes ans shapes, some embossed, some not. All whole jars within this subgroup comprised of 7 whole jar varieties, are only represented by one or two examples. An eighth variety is reserved for

miscellaneous milk glass jar rims. This item in Variety 6.1 is the largest. Manufacturer and origin, unknown.

Subcategory: 1 Group: 1 Subgroup: 6 Variety: 2
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1903-1979. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Round.
Sealing Bead Collar: Yes.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Full, from base to lip.
Comments: This item is similar in style to Subgroup 5, Subcategory 1, Group 1. However, this jar (6.2) is smaller in diameter and unembossed. Probably contained a salve or cream. Manufacturer and origin, unknown.

Subcategory: 1 Group: 1 Subgroup: 6 Variety: 3
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1903-1979. Internal Correlation: N/A.
Product Embossed Label: "Elmo" on bottom, unknown.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Round.
Sealing Bead Collar: Yes.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: Yes.
Finish Parting Line: N/A. Parison Scar: N/A.
Side Seams: Full, from base to lip.
Comments: A squat jar with two indented, horizontal bands around jar that have raised and inclined decorative lines in them. Jar to 3 oz., probably held a facial cream. A newer style of decorative jar for milady's dressing table.

Subcategory: 1 Group: 1 Subgroup: 6 Variety: 4 Figure: 9
No. of Examples--Whole: 1. Rim Fragments: 2.
Manufacturing Dates: 1903-1979. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Round.
Sealing Bead Collar: Yes.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown in fourpart mold.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: N/A. Parison Scar: N/A.
Side Seams: Four, full from base to lip.
Comments: A highly ornate jar with 4 flattened oval panels, interspaced with 4 corded stylized "Doric" columns. The whole effect

is a very kitsch attempt at a container with classic Grecian overtones. Probably the result of the Art Deco influence of the "Times". A cold cream jar, produced in a 4-part mold which is an uncommon mode after 1940. Manufacturer and origin, unknown.

Subcategory: 1 Group: 1 Subgroup: 6 Variety: 5
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1903-1979. Internal Correlation: N/A.
Product Embossed Label: "Mosco" on bottom, unknown.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Round.
Sealing Bead Collar: Yes.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: Yes.
Finish Parting Line: N/A. Parison Scar: N/A.
Side Seams: Full, from base to lip.
Comments: A very small jar, probably held less than an ounce of an ointment or cosmetic. Manufacturer and origin, unknown.

Subcategory: 1 Group: 1 Subgroup: 6 Variety: 6 Figure: 10
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1903-1979. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Round.
Sealing Bead Collar: Yes.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: Yes.
Finish Parting Line: N/A. Parison Scar: N/A.
Side Seams: Full, from base to lip.
Comments: A very small jar, probably containing less than an ounce of an ointment or cosmetic. Manufacturer and origin, unknown.

Subcategory: 1 Group: 1 Subgroup: 6 Variety: 7 Figure: 11
No. of Examples--Whole: 2. Rim Fragments: 0.
Manufacturing Dates: 1903-1979. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Square.
Sealing Bead Collar: Yes.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: N/A.
Finish Parting Line: N/A. Parison Scar: Yes.
Side Seams: Full, from base to lip.
Comments: A squat, small jar to 2 oz., probably contained cold cream. Manufacturer and origin, unknown.

Subcategory: 1 Group: 1 Subgroup: 6 Variety: 8

No. of Examples--Whole: 0. Rim Fragments: 61.
Manufacturing Dates: 1903-1979. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Round.
Sealing Bead Collar: Yes.
Finish: One continuous thread.
Manufacturing Technique: Machine made.
Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: On fragments run through to lip, some more complete items have a finish parting line.
Comments: These fragments have a sealing bead collar on their respective finishes and represent pieces of containers that probably contained cosmetic creams or medical salves and ointments. Fragments of various rim diameters (outside) from 4.9 cm, the largest, to 3.6 cm, the smallest. Manufacturer and origin, unknown.

Subcategory: 1 Group: 1 Subgroup: 7 Variety: N/A. Figure: 12
No. of Examples--Whole: 4. Rim Fragments: 0.
Manufacturing Dates: 1903-1979. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Flat circle.
Sealing Bead Collar: Yes.
Finish: One continuous thread.
Manufacturing Technique: Machine made, pressed.
Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: From base to finish parting line only. Finish pressed in one piece.
Comments: A small very short jar with a dished interior, reminiscent of a lady's compact. Jar in two sizes, 1 oz., and 2 oz., probably contained rouge or deoderant. Manufacturer and origin, unknown.

Subcategory: 1 Group: 1 Subgroup: 8 Variety: 1 Figure: 13*
No. of Examples--Whole: 0 Rim Fragments: 50
Manufacturing Dates: 1925-1979. Internal Correlation: (below).
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear. Shape: Round.
Sealing Bead Collar: Yes.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Run through shoulder on fragments to lip.
Comments: These clear rim fragments represent the ultimate in modern fruit jar types. They could be part of any modern brand name jar such as: Atlas Strong Shoulder Mason, Ball Perfect Mason, and Presto Supreme Mason which are represented by clear body fragments recovered.

MM Nos.: Atlas- 8775-81, 8760-3; Ball- 8815-49; and Presto- 8966-18, 8947-32, 8704-4. The clear rims also could be part of any other modern brand name such as Kerr, Glenshaw, Jeannette, Samco, etc., that may have been dumped at the site but are now too broken and beyond recognition. All of the recovered brand name fruit jars were produced in other colors of glass except for Presto jars which always were made in clear glass. The probable manufacturing dates for the clear jars of the variety are: Atlas Strong Shoulder Mason manufactured by Hazel Atlas Glass Co., Wheeling West, Virginia at the Wheeling plant and the plants in Washington, Pennsylvania, 1930-1964 (Toulouse 1971:239-42); Ball Perfect Mason manufactured by Ball Brothers Glass Co., Muncie, Indiana at the Muncie plant and other plants across the United States (the most recent at Asheville, North Carolina, 1960-on)(Toulouse 1971:66) from 1930-on; and finally, Presto Supreme Mason manufactured at Owens Illinois Glass Co., Toledo, Ohio, at the Toledo plant 1925-1946 (Toulouse 1969:64).
*Figure 13 illustration taken from whole specimen from another collection.

Subcategory: 1 **Group:** 1 **Subgroup:** 8 **Variety:** 2
No. of Examples--Whole: 0. **Rim Fragments:** 20.
Manufacturing Dates: 1920-1940. **Internal Correlation:** (below).
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Deep aquamarine. **Shape:** Round.
Sealing Bead Collar: Yes.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. **Shoulder:** Yes. **Base Parting Line:** N/A.
Finish Parting Line: Yes. **Parison Scar:** N/A.
Side Seams: Run through shoulder on fragments to lip.
Comments: The deep aquamarine color of these fragments indicate that they were produced by the Ball Brothers Glass Co., Muncie, Indian, for only this company used this unusual color in fruit jar manufacture, These rim fragments with a sealing bead collar are parts of "Ball Perfect Mason" jars, not to be confused with "Ball Perfect Mason" jars of aquamarine glass in 1920 (Toulouse 1969:7). They probably dropped this color in favor of clear glass containers around 1940. It has been noted that in recent times (1940-1982), there seems to be no fruit jars being produced in greens, blues, or ambers for the commerical canning market. However, some major glass container manufacturing companies are reproducing some types of fruit jars as novelty items in a variety of colors. No whole examples of Ball Perfect Mason jars were recovered at Neville House, however, embossed container fragments were and are placed in GMM numbers 8733-29 and 8951-32.

Subcategory: 1 **Group:** 1 **Subgroup:** 8 **Variety:** 3
No. of Examples--Whole: 0 **Rim Fragments:** 12
Manufacturing Dates: 1915-1940. **Internal Correlation:** (below).
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Light green. **Shape:** Round.

Sealing Bead Collar: Yes.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Run through shoulders on fragments to lip.
Comments: These light green rim fragments with a sealing bead collar probably represent parts of "Atlas Strong Shoulder Mason" jars , since early examples of this brand jar were produced by Hazel Atlas Glass Co., Wheeling, West Virginia in this color. The hazel Atlas Co., pioneered mass produced fruit jars with a sealing bead collar in 1915 and continued manufacturing them in light green until approximately 1940 (Toulouse 1971:242). Body fragments of light green "Atlas Strong Shoulder Mason" jars were uncovered at Neville House and placed in GMM. GMM numbers 8805-39, 8809-20, 8855-14.

Subcategory: 1 Group: 1 Subgroup: 8 Variety: 4
No. of Examples--Whole: 0. Rim Fragments: 1.
Manufacturing Dates: 1920-1940. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed:N/A.
Color: Amber. Shape: Round.
Sealing Bead Collar: Yes.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Run through fragment to lip.
Comments: All fruit jars rims recovered, irregardless of type, with the single exception of midget pints (Subgroup 12, Subcategory 1, Group 2) are recognizable by their measurements which fall within a consistent range. Rim diameter (outside) 6.5 cm to 7.0 cm, mouth diameter (inside) 5.6 cm to 5.9 cm, and sealing bead collar diameter (where found) 7.5 cm to 7.7 cm. Since amber is such a rare color in fruit jars, it was necessary to measure each type to determine is indeed this single amber rim fragment was part of a fruit jar and it is. It has been noted that only one company with a large national distribution, Ball Brothers Glass Co., Muncie, Indiana, produced amber machine made fruit jars with a sealing bead collar in substantial numbers. This amber fragment probably represents a part of a "Ball Perfect Mason" (Creswick 9177:23).

Subcategory: 1 Group: 1 Subgroup: 9 Variety: N/A. Figure: 14
No. of Examples--Whole: 0. Rim Fragments: 1.
Manufacturing Dates: 1880-1910. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear. Shape: Round.
Sealing Bead Collar: Yes.
Finish: One continuous thread.
Manufacturing Technique: Mold blown, hand finished.
Lip Style: Ground.

Neck: N/A. Shoulder: N/A. Base Parting Line: N/A.
Finish Parting Line: N/A. Parison Scar: N/A.
Side Seams: Run through fragment to lip. No other mold seams.
Comments: The measurements of this rim fragment (rim diameter 7.0 cm, mouth diameter 5.9 cm, and sealing bead collar diameter 7.7 cm) fall with the acceptable range for fruit jars (See Variety 8.4, Subcategory 1, Group 1). Howerver, the lack of a shoulder, a trait common to most fruit jars, and the fact that the portion of this fragment that would be considered the body of the jar, is scallopped with large rounded ribs, precludes its identification as a certain fruit jar type. Nevertheless, it is an importance piece, as it exhibits an early attempt at a sealing bead collar in a hand finished jar, when most fruit jars and commerical jar type containers were manufactured without a sealing bead collar. This fragment probably represents a food container whose purpose was once the product was consumed, the container could be reused as a fruit jar.

Subcategory: 1 Group: 1 Subgroup: 10 Variety: N/A. Figure: 15
No. of Examples--Whole: 0. Rim Fragments: 43.
Manufacturing Dates: 1903-1925. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear, some tinted violet. Shape: Round.
Sealing Bead Collar: Yes.
Finish: One continuous thread that repeats twice in finish.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Run through fragments to lip.
Comments: A large jar that probably contained a food product. Not all fragments are tinted violet, the untinted ones probably being manufactured later thab 1915. All fragments contain various amounts of seed bubbles and impurities that would indicate manufacture before 1930 when stricter quality control methods began eliminating these flaws and blemishes in glass. Manufacturer and origin, unknown.

Subcategory: 1 Group: 1 Subgroup: 11 Variety: 1 Figure: 16*
No. of Examples--Whole: 0. Rim Fragments: 5.
Manufacturing Dates: 1915-1940. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Light green. Shape: Round.
Sealing Bead Collar: Yes.
Finish: 2 threads that interrupt once at one side seam.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: Yes.
Side Seams: Run through shoulder of fragments to lip.
Comments: These fragments agree in every aspect with Variety 8.3, Subcategory 1, Group 1, except for two threads and the interruption. This style of finish has been obaserved on whole "Atlas Strong Shoulder Mason" jars but not recovered at Neville House. Since the presences

of two interrupted threads constitutes a different manufacturing style for the finish these fragments are here split into a seperate type. However, in all probability, they still represent parts of "Atlas Strong Shoulder Mason" jars manufactured by the Hazel Atlas Glass Co., Wheeling, West Virginia.
*Figure 16 illustration taken from whole specimen from another collection.

Subcategory: 1 Group: 1 Subgroup: 11 Variety: 2
No. of Examples--Whole: 0. Rim Fragments: 1.
Manufacturing Dates: 1940-1964. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear. Shape: Round.
Sealing Bead Collar: Yes.
Finish: 2 threads that interrupt once at one side seam.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Run through shoulder of fragment to lip.
Comments: This fragment differs from previous Variety 11.1 only in color which is clear and was probably manufactured later than the light green ones.

Subcategory: 1 Group: 1 Subgroup: 12 Variety: N/A. Figure: 17
No. of Examples--Whole: 4. Rim Fragments: 6.
Manufacturing Dates: 1935-1938. Internal Correlation: (below).
Product Embossed Label: N/A.
Maker's Mark Embossed: W over T in triangle. Whithall Tatum & Co., Millvale, New Jersey,
Color: Light green. Shape: Round.
Sealing Bead Collar: Yes.
Finish: One interrupted thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Full, from base to lip.
Comments: A small jar to 2 oz., probably contained a personal care product. Manufactured at the Whithall Tatum & Co., Millvale, New Jersey, plant for a limited time (Toulose 1971:544-7). There are many fragments of different kinds of containers in GMM with the Whithall Tatum trademark.

Subcategory: 1 Group: 1 Subgroup: 13 Variety: N/A. Figure: 18
No. of Examples--Whole: 3. Rim Fragments: 2.
Manufacturing Dates: 1903-1979. Internal Correlation: GMM 162.
Product Embossed Label: "Mum Mfg. Co., Phila. Pa." on bottom.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Flat circle.
Sealing Bead Collar: Yes.
Finish: 3 elongated inclined lugs.
Manufacturing Technique: Machine made, blown.

Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Full, from base to lip.
Comments: A very small jar, contained about an ounce of "Mum" brand deoderant. Manufacturer and origin, unknown.

Subcategory: 1 Group: 1 Subgroup: 14 Variety: N/A. Figure: 19
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1930-1979. Internal Correlation: N/A.
Product Embossed Label: "Ingram's Shaving Cream" on shoulder.
Maker's Mark Embossed: N/A.
Color: Cobalt blue. Shape: Round.
Sealing Bead Collar: Yes.
Finish: 2 elongated, inclined lugs.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: Yes.
Side Seams: Full from base to lip but stagger right at finish parting line.
Comments: In this case, the staggered effect of the side seams does not indicate an early hand operated vacuum process. The crisp delineation of these seams even though staggered does not correspond to the wavy, sometimes superimposed and practically double embossed, staggered seams that characterize the vacuum process in hand operations. Also, the glass is without seed bubbles and the jar itself is much more modern in appearance than a vacuum process type. Manufacturer and origin, unknown.

Subcategory: 1 Group: 1 Subgroup: 15 Variety: 1 Figure: 20
No. of Examples--Whole: 8. Rim Fragments: 45.
Manufacturing Dates: 1911-1954. Internal Correlation: GMM 102.
Product Embossed Label: "Hellmann's Blue Ribbon Reg." on bottom.
Maker's Mark Embossed: 2 styles of Owens marks (see comments).
Color: Clear. Shape: Round.
Sealing Bead Collar: Yes.
Finish: 4 elongated inclined lugs.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: Yes.
Side Seams: Full, from base to lip.
Comments: Jars recovered in 3 sizes, small to 2 oz., meduim to 4 oz., and large to 8 oz., contained "Hellmann's" brand mayonnaise. Jars were continually produced by Owens Glass Co., Toledo, Ohio, as evidenced by two styles of Owens trademarks. The first, an O in a box with a 3 to the left and a zero to right was used by Owens Glass Co., from 1911-1929, the 2 to the left of the box indicates jar origin at the Fairmont, West Virginia plant. The second Owens mark found on some of the jars is an O and an I in a diamond indicates jar origin at the Huntington, West Virginia plant (Toulouse 1971:393-5).

Subcategory: 1 Group: 1 Subgroup: 15 Variety: 2

No. of Examples--Whole: 0. Rim Fragments: 4.
Manufacturing Dates: 1903-1940. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Light green. Shape: Round.
Sealing Bead Collar: Yes.
Finish: 4 elongated inclined lugs.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Run through shoulders of fragments to lip.
Comments: These fragments are identical to previous Variety 15.1 except for color. manufacturer and origin, unknown. Light green containers not common after 1940.

Subcategory: 1 Group: 1 Subgroup: 16 Variety: N/A. Figure: 21
No. of Examples--Whole: 1. Rim Fragments: 4.
Manufacturing Dates: 1929-1954. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: OI in diamond 2 left 4 right "Design Pat. 80918" on bottom.
Color: Clear. Shape: Squared.
Sealing Bead Collar: Yes.
Finish: 4 elongated inclined lugs, 2 with basal hooks or catches.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: Yes.
Side Seams: Full, from base to lip.
Comments: A uniquely designed jar with 8 pentagonal panels grouped 2 to a side forming the shoulder and base. The corners are rounded and meet with shoulder and base to form 4 large ovals on the body. Two of the lugs 4 lugs on the finish are further modified with basal hooks to catch and hold metal tabs on the rim of a metal lid. A large 8 oz. jar probably contained a food product perhaps coffee. The OI in a diamond is the trademark of Owens Illinois Flass Co., Toledo, Ohio. The 2 to the left of the diamond indicates jar origin at the Fairmont, West Virginia plant (Toulouse 1971:393-5).

Subcategory: 1 Group: 1 Subgroup: 17 Variety: N/A. Figure: 22
No. of Examples--Whole: 0. Rim Fragments: 1.
Manufacturing Dates: 1903-1979. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear. Shape: Round.
Sealing Bead Collar: Yes.
Finish: 4 elongated, inclined lugs, 2 with basal hooks.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Run through fragment to lip.
Comments: The lugs with basal hooks merge with the sealing bead

collar. This fragment probably represents a food product container. Manufacturer and origin, unknown.

Subcategory: 1 Group: 1 Subgroup: 18 Variety: 1 Figure: 23
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1903-1979. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Round.
Sealing Bead Collar: Yes.
Finish: 4 short lugs.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: Yes.
Side Seams: Full, from base to lip.
Comments: A squat jar to 4 oz., probably contained cold cream. Manufacturer and origin, unknown.

Subcategory: 1 Group: 1 Subgroup: 18 Variety: 2 Figure: 24
No. of Examples--Whole: 1. Rim Fragments: 2.
Manufacturing Dates: 1903-1979. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Tapered oval.
Sealing Bead Collar: Yes.
Finish: 4 short lugs.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Full, from base to lip.
Comments: Jar exhibits 2 short side panels and resembles a vase or urn. A small jar to 3 oz., probably contained cold cream. manufacturer and origin, unknown.

Subcategory: 1 Group: 1 Subgroup: 18 Variety: 3
No. of Examples--Whole: 0. Rim Fragments: 1.
Manufacturing Dates: 1903-1979. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Cobalt blue. Shape: Round.
Sealing Bead Collar: Yes.
Finish: 4 short lugs.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Run through fragment to lip.
Comments: This fragment probably represents part of a medical salve or ointment container. Manufacturer and origin, unknown.

Subcategory: 1 Group: 1 Subgroup: 19 Variety: 1 Figure: 25
No. of Examples--Whole: 0. Rim Fragments: 32.

Manufacturing Dates: 1895-1915. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear tinted violet. Shape: Round.
Sealing Bead Collar: Yes.
Finish: 4 spiraled threads that merge with sealing bead collar.
Manufacturing Technique: Machine made semi-automatic.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: Yes.
Side Seams: Full from base to lip but staggered left.
Comments: A crudely made hand operated vacuum drawn jar with numerous whittle marks, seed bubbles and horizontal striations from being rotated in the mold. Jar recovered in 3 sizes, four, six and eight ounces, probably contained a food product. Manufacturer and origin, unknown.

Subcategory: 1 Group: 1 Subgroup: 19 Variety: 2
No. of Examples--Whole: 0. Rim Fragments: 1.
Manufacturing Dates: 1895-1915. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear tinted violet. Shape: Round.
Sealing Bead Collar: Yes.
Finish: 4 spiraled threads that merge with sealing bead collar.
Manufacturing Technique: Machine made semi-automatic.
Lip Style: Smooth.
Neck: Yes. Shoulder: Yes. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Run through fragment to lip and staggered left.
Comments: Same as previous Variety 18.1 but with a long neck. Probably a food container. Manufacturer and origin, unknown.

Subcategory: 1 Group: 1 Subgroup: 19 Variety: 3 Figure: 26
No. of Examples--Whole: 0. Rim Fragments: 2.
Manufacturing Dates: 1895-1915. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear tinted violet. Shape: Round.
Sealing Bead Collar: Yes.
Finish: 4 spiraled threads that merge with sealing bead collar.
Manufacturing Technique: Machine made semi-automatic.
Lip Style: Smooth.
Neck: Yes. Shoulder: Yes. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Run through fragment to finish parting line and stop.
Comments: Same as previous Variety 18.2 but with a shorter neck and 18 panels below shoulder. Probably contained a food product. Manufacturer and origin, unknown.

Subcategory 1. JARS WITH THREADED OR LUGGED FINISHES THAT SEAL WITH A METAL SCREW CAP

Group 2. JARS WITHOUT A SEALING BEAD COLLAR.

Subcategory: 1 Group: 2 Subgroup: 1 Variety: N/A. Figure: 27
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1900-1915. Internal Correlation: N/A.
Product Embossed Label: "Welcome Chemical Works" on bottom.
Maker's Mark Embossed: N/A.
Color: Clear tinted violet. Shape: Round.
Sealing Bead Collar: No.
Finish: One continous thread.
Manufacturing Technique: Machine made, pressed.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: N/A.
Comments: This jar was pressed in manufacture in a cup and one piece ring type mold as there is only a finish parting line present and no other mold seams of lines. An early example of machine pressing, this jar exhibits numerous seed bubbles and impurities in the glass. Possibly this item was produced in a hand operated pressing machine not fully automated. Probably held petroleum jelly or another personal care product. Manufacturer and origin, unknown.

Subcategory: 1 Group: 2 Subgroup: 2 Variety: 1 Figure: 28
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1903-1935. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: "W T Co.,", is Whithall Tatum & Co., Millville, New Jersey.
Color: Clear. Shape: Round.
Sealing Bead Collar: No.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Full, from base to lip.
Comments: A small jar with a very thick base, the possible purpose being to protect the jar from shattering if dropped. Probably contained tablets or pills. The W T Co. trademark was used by the Whithall Tatum Co. from 1857-1935. However, since this item is machine made, the manufacturing dates would be from 1903-1935 (Toulouse 1971:544-7).

Subcategory: 1 Group: 2 Subgroup: 2 Variety: 2
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1914-1930. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear tinted brown. Shape: Round.
Sealing Bead Collar: No.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown. Lip smooth.

Lip Style: Smooth
Neck: N/A. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: N/A. Parison Scar: Yes.
Side Seams: Full, from base to lip.
Comments: The brownish tint exhibited by the glass of this jar indicates an early use of selenium in massive doses as a glass batch bleaching reagent 1914 - 30 (Munsey 1970:55 and Toulouse 1969:146). Probably contained a personal care product. Manufacturer and origin, unknown.

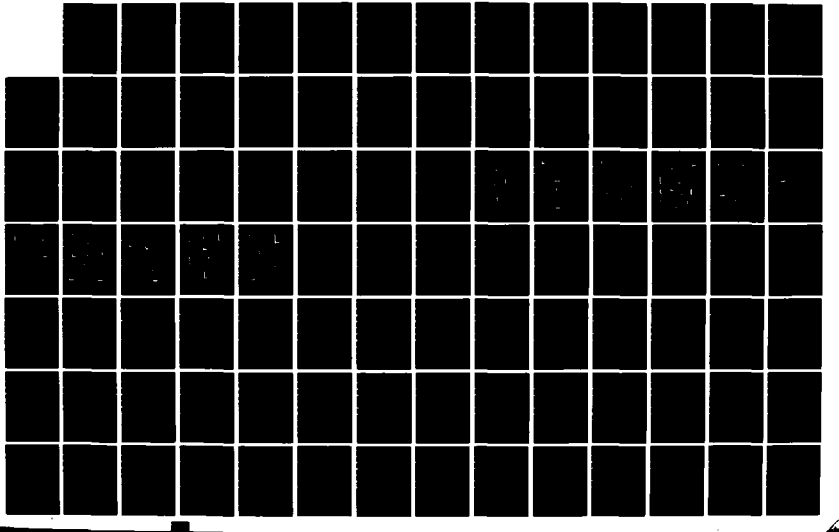
Subcategory: 1 Group: 2 Subgroup: 2 Variety: 3 Figure: 29
No. of Examples--Whole: 1. Rim Fragments: 1.
Manufacturing Dates: 1903-1979. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear frosted. Shape: Tapered oval.
Sealing Bead Collar: No.
Finish: One continuous thread
Manufacturing Technique: Machine made, blown. Lip smooth.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Full, from base to lip.
Comments: A squat jar resembling an urn probably contained cold cream or hand cream. Manufacturer and origin, unknown.

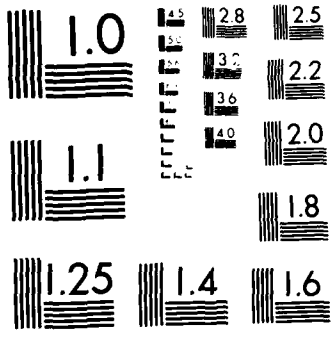
Subcategory: 1 Group: 2 Subgroup: 2 Variety: 4
No. of Examples--Whole: 0. Rim Fragments: 1.
Manufacturing Dates: 1903-1979. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear. Shape: Square.
Sealing Bead Collar: No.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: None in evidence on this broken fragment.
Comments: A partial rim fragment with enough of one side to determine that the whole jar was square. However, any portion that would have exhibited mold seams except for a finish parting line has not been recovered. Possibly a personal care product container. Manufacturer and origin, unknown.

Subcategory: 1 Group: 2 Subgroup: 2 Variety: 5 Figure: 30
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1903-1935. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: "W T Co.", is Whithall Tatum & Co., Millville, New Jersey.
Color: Amber. Shape: Round.
Sealing Bead Collar: No.
Finish: One continuous thread.

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Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: N/A. Parison Scar: N/A.
Side Seams: Full from base to lip.
Comments: A squat, small jar to 3 oz., probably held cream or salve.

Subcategory: 1 Group: 2 Subgroup: 2 Variety: 6
No. of Examples--Whole: 0. Rim Fragments: 25.
Manufacturing Dates: 1903-1979. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear. Shape: Round.
Sealing Bead Collar: No.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Run through all fragments to lip.
Comments: This variety consists of all clear rim fragments with one continuous thread and no sealing bead collar. Fragments represent jars of various rim diameters (outside) from 6.7 cm, the largest to 2.9 cm, the smallest. Manufacturer and origin, unknown.

Subcategory: 1 Group: 2 Subgroup: 2 Variety: 7
No. of Examples--Whole: 0. Rim Fragments: 10.
Manufacturing Dates: 1903-1940. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Light green. Shape: Round.
Sealing Bead Collar: No.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: Yes.
Side Seams: Run through all fragments to lip.
Comments: Same as previous variety except for color which is light green and probably earlier in manufacture as this color became uncommon in commercial containers after 1940. Fragments of various rim diameters (outside) 419 cm, the largest to 3.7 cm, the smallest. Manufacturer and origin, unknown.

Subcategory: 1 Group: 2 Subgroup: 3 Variety: 1 Figure: 31
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1920-1957. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: "H over A" is Hazel Atlas Glass Co., Wheeling, West Virginia.
Color: Milk glass. Shape: Round.
Sealing Bead Collar: No.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.

Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: Yes.
Finish Parting Line: Yes Parison Scar: N/A.
Side Seams: Full, from base to lip.
Comments: This, the largest milk glass container recovered at Neville House, held about 8 oz. of cold cream.

Subcategory: 1 Group: 2 Subgroup: 3 Variety: 2 Figure: 32
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1903-1979. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Round tapered.
Sealing Bead Collar: No.
Finish: Yes.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: From shoulder to lip only.
Comments: The abasence of side seams on the body of this item suggests that it was manufactured in a cup with a two-part ring mold. The jar has ten panels that taper in width from the shoulder to the base giving the effect of a fat seed pod. A medium jar, probably contained cold cream. Manufacturer and origin, unknown.

Subcategory: 1 Group: 2 Subgroup: 3 Variety: 3 Figure: 33
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1903-1979. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Round tapered.
Sealing Bead Collar: No.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: Yes.
Side Seams: Full, from base to lip.
Comments: An ornamented jar with a raised scalloped band below shoulder and 16 tapering panels below. A medium jar to 3 oz., probably contained cold cream. Manufacturer and origin unknown.

Subcategory: 1 Group: 2 Subgroup: 3 Variety: 4
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1920-1957. Internal Correlation:N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: "H over A", is Hazel Atlas Glass Co., Wheeling, West Virginia.
Color: Milk glass. Shape: Round.
Sealing Bead Collar: No.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.

Neck: N/A. Shoulder: Yes Base Parting Line: Yes.
Finish Parting Line: N/A. Parison Scar: N/A.
Side Seams: Full, from base to lip.
Comments: A small jar to 2 oz., probably contained a personal care product.

Subcategory: 1 Group: 2 Subgroup: 3 Variety: 5 Figure: 34
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1903-1979. Internal Correlation:N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Round.
Sealing Bead Collar: No.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: N/A. Parison Scar: N/A.
Side Seams: Full, from base to lip.
Comments: Jar has a shoulder of small raised arches. A small squat jar to 2 oz.m probably contained a personal care product. Manufacturer and origin, unknown.

Subcategory: 1 Group: 2 Subgroup: 3 Variety: 6 Figure: 35
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1903-1979. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Flat circle.
Sealing Bead Collar: No.
Finish: One continuous thread.
Manufacturing Technique: Machine made, pressed.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: N/A. Parison Scar: N/A.
Side Seams: Full, from base to lip.
Comments: A round tire-shaped body serves also as a shoulder for this item. Jar has dished interior and held about one ounce of a deoderant or cosmetic. Manufacturer and origin, unknown.

Subcategory: 1 Group: 2 Subgroup: 3 Variety: 7
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1920-1957. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: "H over A", is Hazel Atlas Glass Co., Wheeling, West Virginia.
Color: Milk glass. Shape: Round.
Sealing Bead Collar: No.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: Yes.
Side Seams: Full, from base to lip.

Comments: Jar like Variety 3.1, Subcategory 1, Group 2; only much smaller, containing less than 1 ounce of a personal care product.

Subcategory: 1 Group: 2 Subgroup: 3 Variety: 8 Figure: 36
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1900-1915. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Square.
Sealing Bead Collar: No.
Finish: One continuous thread.
Manufacturing Technique: Machine made, semi-automatic blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Full, from base to lip but staggered left almost two sets.
Comments: A very ornate jar with a raised flange at shoulder and base. There are 5 vertical ridges on two opposite sides between the flanges. The whole effect of these decorations is to give the jar a resemblance to a small Grecian column, probably a result of the Art Deco flavor of the times. A small jar to 2 oz., probably containing a personal care product. Manufacturer and origin, unknown.

Subcategory: 1 Group: 2 Subgroup: 3 Variety: 9
No. of Examples--Whole: 0. Rim Fragments: 94.
Manufacturing Dates: 1903-1979. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Round.
Sealing Bead Collar: No.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Run through fragments to lip.
Comments: Fragments of various rim diameters (outside) from 5.8 cm, the largest to 4.0 cm, the smallest. These fragments probably represent parts of whole jars that contained personal care products. manufacturer and origin, unknown.

Subcategory: 1 Group: 2 Subgroup: 4 Variety: 1 Figure: 37
No. of Examples--Whole: 5. Rim Fragments: 0.
Manufacturing Dates: 1930-1979. Internal Correlation: GMM 193.
Product Embossed Label: "Ponds" on bottom.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Flat football.
Sealing Bead Collar: No.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Full, from base to lip.

Comments: A small, slightly tapered jar recovered in two sizes, 1 Oz. and 3 oz. Contained "Ponds" brand cold cream. A newer style container for an old, established product line. Manufacturer and origin, unknown.

Subcategory: 1 Group: 2 Subgroup: 4 Variety: 2 Figure: 38
No. of Examples--Whole: 2. Rim Fragments: 0.
Manufacturing Dates: 1903-1930. Internal Correlation: GMM 193.
Product Embossed Label: "Ponds", in two sunken side panels.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Square.
Sealing Bead Collar: No.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Full, from base to lip.
Comments: A small jar with a square flange-like shoulder, contained "Ponds" brand cold cream. An earlier style than previous Variety 4.1. (Also see Subgroup 20, Subcategory 1, Group 2). Manufacturer and origin, unknown.

Subcategory: 1 Group: 2 Subgroup: 5 Variety: N/A. Figure: 39
No. of Examples--Whole: 1. Rim Fragments: 25.
Manufacturing Dates: 1903-1930. Internal Correlation: GMM 71.
Product Embossed Label: "Elcaya", on two sides. "James C. Crane New York", on bottom.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Square.
Sealing Bead Collar: No.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Full, from base to lip.
Comments: A small jar with a raised double-square, flange-like shoulder and rounded corners. Two oblong sunken panels containing brand name, an older style of jar that probably contained cold cream. Manufacturer and origin, unknown.

Subcategory: 1 Group: 2 Subgroup: 6 Variety: N/A. Figure: 40
No. of Examples--Whole: 1. Rim Fragments: 5.
Manufacturing Dates: 1903-1979. Internal Correlation: GMM 164.
Product Embossed Label: "Eagle Brand Nova", on face.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Round.
Sealing Bead Collar: No.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: N/A.

Side Seams: Full, from base to lip.
Comments: A short but very wide mouthed jar probably contained cold cream. Manufacturer and origin, unknown.

Subcategory: 1 Group: 2 Subgroup: 7 Variety: N/A. Figure: 41
No. of Examples--Whole: 3. Rim Fragments: 0.
Manufacturing Dates: 1903-1979. Internal Correlation: GMM 225.
Product Embossed Label: "Valaze", on bottom.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Round.
Sealing Bead Collar: No.
Finish: One continuous thread.
Manufacturing Technique: Machine made, pressed.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: From finish parting line to lip only.
Comments: jar was pressed in manufacturer in a cup and two piece ring mold. A medium jar to 4 oz., probably contained cold cream. Manufacturer and origin, unknown.

Subcategory: 1 Group: 2 Subgroup: 8 Variety: N/A. Figure: 42
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1903-1979. Internal Correlation: GMM 197.
Product Embossed Label: "Resinol Chemical Co., Balt'o.Md.", on bottom.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Round tapered.
Sealing Bead Collar: No.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Full, from base to lip.
Comments: A small jar to 2 oz., probably contained an aromatic, cream, ointment, or salve. Manufacturer and origin, unknown.

Subcategory: 1 Group: 2 Subgroup: 9 Variety: N/A. Figure: 43
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1903-1979. Internal Correlation: GMM 59.
Product Embossed Label: "D and R", logo of Daggett and Ramsdell Co., Chemists.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Round.
Sealing Bead Collar: No.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Full, from base to lip.
Comments: A small squat jar similar to Subgroup 16, Subcategory 1, Group 2; except for embossing, (Subgroup 20 has full company name) size, (Subgroup 16 is larger) and finish (Subgroup 16 has interrupted

threads). Probably contained one ounce of "Daggett and Ramsdell" brand cold cream. This company also had product jars produced in clear glass that are probably older than these produced in milk glass (See Subgroup 22, Subcategory 1, Group 2). Manufacturer and origin, unknown.

Subcategory: 1 **Group:** 2 **Subgroup:** 10 **Variety:** N/A. **Figure:** 44
No. of Examples--Whole: 1. **Rim Fragments:** 0.
Manufacturing Dates: 1903-1930. **Internal Correlation:** GMM 112.
Product Embossed Label: "Harriet Hubbard Ayer New York", on front.
Maker's Mark Embossed: N/A.
Color: Milk glass. **Shape:** Square.
Sealing Bead Collar: No.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. **Shoulder:** Yes. **Base Parting Line:** Yes.
Finish Parting Line: Yes. **Parison Scar:** N/A.
Side Seams: Full, from base to lip.
Comments: A short, small jar very similar to Subgroup 21, Subcategory 1, Group 2; except in size (Subgroup 21 is larger) and finish (Subgroup 21 has one continuous thread that repeats twice). Jar is an older style container. This company also had product jars produced with painted labels that are newer than Subgroups 10 and 21. (See Subgroup 17, Subcategoryl, Group 2). Jar contained an ounce of deoderant. Manufacturer and origin, unknown.

Subcategory: 1 **Group:** 2 **Subgroup:** 11 **Variety:** N/A. **Figure:** 45*
No. of Examples--Whole: 0. **Rim Fragments:** 114.
Manufacturing Dates: 1858-1910. **Internal Correlation:** (below).
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Light green. **Shape:** Round.
Sealing Bead Collar: No.
Finish: One continuous thread.
Manufacturing Technique: Mold blown, hand finished.
Lip Style: Ground.
Neck: N/A. **Shoulder:** Yes. **Base Parting Line:** N/A.
Finish Parting Line: N/A. **Parison Scar:** N/A.
Side Seams: Run through all fragments to ground lip.
Comments: All rim fragments in this type, fall within the accepted range of measurements for fruit jars (See Variety 8.4, Subcategory 1, Group 1 for measurements). These ground lip rims represent parts of Mason screw top fruit jars patented November 30th, 1858 by John Landis Mason. Mason's patent was sold to many fruit jar companies of the day and was produced with a great variety of logos of these many companies. Three of these logos and one ground lip type without a logo were recovered at Neville House as body fragments and placed in GMM. Their GMM numbers and identities are as follows: GMM #8 79-68, 8789-38, 8790-40, body fragments bearing The Hero Fruit Jar Co. embossed cross logo with "H F J Co" in the cross and Mason's Pat. Nov. 30th, 1858 on face. GMM #8695-18, 8714-40, 8726-22, base fragments bearing the patent date "Nov. 26, 67" equals the Hero Fruit Jar Co., Philadelphia, Pa. All these fragments belong to one jar type produced from 1882-1909 (Toulouse 1969:36-8). GMM #8811-6 to 9, 8831-45, 8963-41, body

fragments bearing the "CFJ Co." logo were actually manufactured for Coolidated by the Clyde Glass Works, Clyde, New York from 1871-1882 (Toulouse 1971:123-5) when Consolidated sold its fruit jar product line to Hero Fruit Jar Company. GMM #8714-9, a body fragment bearing the "Marion Fruit Jar" logo of the Marion Fruit Jar and Bottle Co., Marion, Indiana, and the embossed Mason's Patent etc., Marion Co. produced these jars from 1890-1904 at plants in Marion, Connors and Fairmont, Indian (Toulouse 1969:49). GMM #8838-32, 8947-82, body fragments with Mason's Patent etc. but no company logos. These jars could have been produced by many other companies "pirating" the Mason patent or just not using a brand logo, from 1858-1910. Doubtlessly some of these times may be part of other brand name jars produced by other companies not represented in GMM, but broken beyond recognition.
*Figure 45 illustration taken from whole specimen from another collection.

Subcategory: 1 **Group:** 2 **Subgroup:** 12 **Variety:** N/A. **Figure:** 46*
No. of Examples--Whole: 0. **Rim Fragments:** 12.
Manufacturing Dates: 1858-1910. **Internal Correlation:** (below).
Product Embossed Label: N/A.
Maker's Mark Embossed: Some have partical scripts (see below).
Color: Light green. **Shape:** Round.
Sealing Bead Collar: No.
Finish: One continuous thread.
Manufacturing Technique: Mold blown, hand finished.
Lip Style: Ground.
Neck: N/A. **Shoulder:** Yes. **Base Parting Line:** N/A.
Finish Parting Line: N/A. **Parison Scar:** N/A.
Side Seams: Run through all fragments to ground lip.
Comments: These fragments represent parts of fruit jars commonly known as "midget pints" for their small mouth diameters (inside) of 4.3 cm. Most screw top fruit jars produced from 1858 to date have a fairly rigid size range 5.6 cm to 5.9 cm (inside). There are a number of oversized or large mouthed jars currently available or previously made. However, the midget pints because of their smaller openings, are one of the rarest examples of non-standard mouth diameters found. These jars were produced with Mason's Pat. Nov. 30th, 1858 on the face. Since most companies that made the standard size jars also produced midget pints in limited quantities, a great number of brand logos were used on these items. Two brand logos were recovered at Neville House as body fragments and placed in GMM. Their GMM numbers and identities are as follows: GMM #8704-36, 8759-20, body fragments bearing Keystone (not in a cicle) logo of the Mason Fruit Jar Co., Philadelphia, Pa. and the embossed Mason's Pat. etc. These jars were produced by the Mason Fruit Jar Co., from 1885-1900 (Toulouse 1969:53). GMM #8817-37, a base fragment with "Nov. 26, 67" a patent date of the Hero Fruit Jar Co., Philadelphia, Pa. This base is commonly associated with a "Mason's Pat. Nov. 30th, 1858" jar with the "Hero Cross" logo embossed on the face, produced from 1882-1909 (Toulouse 1969:36-8).
*Figure 46 illustration taken from whole specimen from another collection.

Subcategory: 1 **Group:** 2 **Subgroup:** 13 **Variety:** 1 **Figure:** 47
No. of Examples--Whole: 1. **Rim Fragments:** 0.

Manufacturing Dates: 1903-1920. **Internal Correlation:** GMM 143.
Product Embossed Label: "Mason's Patent Nov. 30th, 1858", on face.
Maker's Mark Embossed: N/A.
Color: Light green. **Shape:** Round.
Sealing Bead Collar: No.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. **Shoulder:** Yes. **Base Parting Line:** Yes.
Finish Parting Line: Yes. **Parison Scar:** Yes.
Side Seams: Full, from base to lip.
Comments: This is the only whole screw top fruit jar recovered at Neville house and is a pint example of such. Manufacturer and origin, unknown.

Subcategory: 1 **Group:** 2 **Subgroup:** 13 **Variety:** 2 **Figure:** 48*
No. of Examples--Whole: 0. **Rim Fragments:** 149.
Manufacturing Dates: 1900-1920. **Internal Correlation:** (below).
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Light green. **Shape:** Round.
Sealing Bead Collar: No.
Finish: One continuous thread.
Manufacturing Technique: An early machine made type produced both in a semi-automatic and a fully-automatic process, blown.
Lip Style: Smooth.
Neck: N/A. **Shoulder:** Yes. **Base Parting Line:** N/A.
Finish Parting Line: Yes. **Parison Scar:** N/A.
Side Seams: Run through all fragments to lip.
Comments: These light green, machine made rim fragments without a sealing bead collar represent parts of several different brand name jars and undoubtedly several different jars without brand names, such as Variety 13.1. Two brand name jars that fit this subtype in style of manufacture were recovered at Neville House as body fragments and placed in GMM. Their GMM numbers and identities are as follows: GMM #8726-12 and 13, 8733-19 and 20, 8969-27 and 28, 58 to 61, body fragments embossed with "Atlas Mason's Pat. Nov. 30th, 1858" manufactured by the Atlas Glass Co., Washington, Pa. first on Blue Machine a semi-automatic machine from 1900-1906. In 1906 the Blue Machine was fully automated amd the Atlas Mason Patent type was produced until 1915 when the "Atlas Strong Shoulder Mason" was introduced (Toulouse 1971:242). In 1902 Atlas Glass Co., Washington, Pa. became Hazel Atlas Glass Co., Wheeling, West Virginia (Toulouse 1971:239-42). GMM #8768-23, 8781-61, body fragments embossed with "Ball Mason" manufactured by the Ball Brothers Co., Muncie, Indiana, first on the Blue Machine 1900-1907 and later on the Ball-Bingham Machine, a fully automatic machine from 1907-1920 when the "Ball Perfect Mason" was introduced (Toulouse 1969:103). After 1920 there were few if any screw top fruit jars in production not utilizing a sealing bead collar on their finishes. The unbeaded screw top fruit jar exemplified by Subgroup 13 was a thing of the past.
*Figure 48 illustration taken from whole specimen from another collection.

Subcategory: 1 Group: 2 Subgroup: 13 Variety: 3 Figure: 49*
No. of Examples--Whole: 0. Rim Fragments: 27.
Manufacturing Dates: 1900-1915. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Light blue. Shape: Round.
Sealing Bead Collar: No.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: N/A.
Finish Parting Line: N/A. Parison Scar: N/A.
Side Seams: Run through fragments and lip.
Comments: These rims are identical to previous Variety 13.2 except for the light blue color. This (particular) color is a common color varient of "Atlas Glass Co., Washington, Pa., 1900-1902, and Hazel Atlas Glass Co., Wheeling, West Virginia, 1902-1915 (Toulouse 1977:4).
*Figure 49 illustration taken from whole specimen from another collection.

Subcategory: 1 Group: 2 Subgroup: 13 Variety: 4
No. of Examples--Whole: 0. Rim Fragments: 5.
Manufacturing Dates: 1900-1915. Internal Correlation: (below).
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear tinted violet. Shape: Round.
Sealing Bead Collar: No.
Finish: One continuous thread.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Run through fragments to lip.
Comments: These rims are identical to the previous two Varieties 13.2 and 13.3 except for color which is clear sun colored violet. Body fragments of clear, tinted violet jars embossed with "Altas Mason's Patent Nov. 30th, 1858" have been recovered at Neville House and placed in GMM. Their numbers are GMM #8963-23 to 26, 8969-29. The rim fragments of this subtype are probably of these "Atlas" jars, manufactured by Hazel Atlas Glass Co., Wheeling, West Virginia.

Subcategory: 1 Group: 2 Subgroup: 14 Variety: N/A. Figure: 50
No. of Examples--Whole: 0. Rim Fragments: 2.
Manufacturing Dates: 1903-1979. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear. Shape: Round.
Sealing Bead Collar: No.
Finish: One continuous thread outside with inset interior rim.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: N/A.
Finish Parting Line: N/A. Parison Scar: N/A.
Side Seams: Fun through fragments to lip.

Comments: The inset rim was for placement of another sealing device besides a metal screw on lid. The second sealing device was probably a piece of waxed cardboard. Probably contained a food product. Manufacturer and origin, unknown.

Subcategory: 1 Group: 2 Subgroup: 15 Variety: N/A. Figure: 51*
No. of Examples--Whole: 0. Rim Fragments: 11.
Manufacturing Dates: 1900-1920. Internal Correlation: (below).
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Light green. Shape: Round.
Sealing Bead Collar: No.
Finish: One thread that is interrupted twice at side seams.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Run through all fragments to lips.
Comments: All rims of this type fall within the accepted range of measure for screw top fruit jars (See Variety 8.4, Subcategory 1, Group 2). The main characteristic for inclusion in this type is the interruption of the screw thread at the side seams. On subasequent examinations of fruit jars from outside sources, it was found that "Atlas Mason Patent" type jars and "Ball Mason" type jars already discussed, did not have a single thread, interrupted twice, on their respective finishes. Through further examinations of other type jars, it was found that one consistently had the single thread-twice interrupted style of finish. The jar in question has just "Mason" embossed in its face. A single body fragment, placed in GMM (Number 8969-60) exhibits this style of embossing and agrees in all other aspects i.e. color, manufacturing technique and in with the whole jars from other sources. Therefore, it may be assumed that the distinctive rim fragments of Subgroup 15 are parts of fruit jars represented by GMM numbers 8969-60. However, although this "Mason" jar is listed in Toulouse (1977:50), he does not name a manufacturer for it. Manufacturer and origin, unknown.
*Figure 51 illustration taken from whole specimen from another collection.

Subcategory: 1 Group: 2 Subgroup: 16 Variety: N/A. Figure: 52
No. of Examples--Whole: 2. Rim Fragments: 0.
Manufacturing Dates: 1930-1979. Internal Correlation: GMM Code 59.
Product Embossed Label: "Daggett & Ramesdell, New York D and R", legs on.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Round.
Sealing Bead Collar: No.
Finish: One thread interrupted twice.
Manufacturing Technique: Machine made, pressed.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: From finish parting line to lip only.
Comments: Jar, pressed in cup and 2 piece ring mold. A small squat

jar to 2 oz., contained cold cream. Manufacturer and origin unknown (See Subgroups 9 and 22, Subcategory 1, Group 2).

Subcategory: 1 Group: 2 Subgroup: 17 Variety: N/A.
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1930-1979. Internal Correlation: GMM Code 112.
Product Embossed Label: Harriett Hubbard Ayer, Ayer Dry Deodorant, New York.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Round.
Sealing Bead Collar: No.
Finish: One thread interrupted twice side seams.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Full, from base to lip.
Comments: Very similar to previous Subgroup 16 except for labels; held 1 1/2 oz. of deodorant. Since painted lables were uncommon before 1930 and the other Subgroups (10 and 21, Subcategory 1, Group 2) of Ayers jars are embossed not painted, it may be assumed that this jar is a newer product container of an old established product line. Manufacturer and origin unknown.

Subcategory: 1 Group: 2 Subgroup: 18 Variety: 1 Figure: 53
No. of Examples--Whole: 0. Rim Fragments: 7.
Manufacturing Dates: 1880-1910. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear tinted violet. Shape: Round.
Sealing Bead Collar: No.
Finish: One thread interrupted at side seams.
Manufacturing Technique: Mold blown, hand finished.
Lip Style: Ground.
Neck: N/A. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: N/A. Parison Scar: N/A.
Side Seams: Full, from base to ground lip.
Comments: An early ground lip commercial jar probably contained a food product or personal care product. Manufacturer and origin unknown.

Subcategory: 1 Group: 2 Subgroup: 18 Variety: 2
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1930-1957. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: "H" over "A" is Hazel Atlas Glass Co., Wheeling, West Virginia.
Color: Milk glass. Shape: Round.
Sealing Bead Collar: No.
Finish: One thread interrupted twice at side seams.
Manufacturing Technique: Machine made, pressed. Lip, smooth.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: From finish parting line to lip only.

Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: N/A.
Comments: Same as previous Variety 5.1 except for color.

Subcategory: 2 Group: 2 Subgroup: 6 Variety: N/A Figure: 77
No. of Examples--Whole: 0. Rim Fragments: 4.
Manufacturing Dates: 1850-1880. Internal Correlation: N/A.
Product Embossed Label: A partial script "Piers-- & C-", on face.
Maker's Mark Embossed: N/A.
Color: Light green. Shape: Round.
Sealing Bead Collar: N/A.
Finish: An extended lip from a beaded collar.
Manufacturing Technique: Mold blown, hand finished.
Lip Style: Ground.
Neck: N/A. Shoulder: N/A. Base Parting Line: N/A.
Finish Parting Line: N/A. Parison Scar: N/A.
Side Seams: Run through fragment to ground lip.
Comments: A partial rim composed of four fragments with embossed script in a slug plate circle. This unusual piece is the only example of a wide mouth jar (mouth diameter inside 5.8 cm.), being hand finished with a ground lip, recovered at Neville House. It is sealed with a metal lid and possibly could be an early canning jar although this is not probable since there are no "Pierce" jars to be found in current jar listings. In all probability, this rim is part of a commercial container that well could be the earliest jar example recovered at Neville House. Manufacturer and origin, unknown.

Subcategory: 2 Group: 2 Subgroup: 7 Variety: N/A Figure: 78
No. of Examples--Whole: 0. Rim Fragments: 11.
Manufacturing Dates: 1903-1979. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Round.
Sealing Bead Collar: Yes.
Finish: Extended lip from a square collar with a flared base.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Run through all fragments to lip.
Comments: A small jar to 2 oz., could have contained cheese. manufacturer and origin, unknown.

Subcategory: 2 Group: 2 Subgroup: 8 Variety: N/A Figure: 79
No. of Examples--Whole: 0. Rim Fragments: 17.
Manufacturing Dates: 1900-1940. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear. Shape: Round taper.
Sealing Bead Collar: Yes.
Finish: Extended lip from a beveled collar with a flared base.
Manufacturing Technique: Machine made, pressed.

Finish: Extended lip fram a stepped shoulder.
Manufacturing Technique: Machine made, pressed.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: N/A.
Comments: A highly decorative jar with 4 rows of notched vertical ribs alternating with 4 raised straps dimples with circles. Jar is tapered at base with 4 legs, probably contained a cream or cosmetic. Manufacturer and origin, unknown.

Subcategory: 2 Group: 2 Subgroup: 4 Variety: 4 Figure: 75
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1860-1910. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Cobalt blue. Shape: Round.
Sealing Bead Collar: N/A.
Finish: Extended lip from a stepped shoulder.
Manufacturing Technique: Machine made, hand finished.
Lip Style: Ground.
Neck: N/A. Shoulder: Yes. Base Parting Line: N/A.
Finish Parting Line: N/A. Parison Scar: N/A.
Side Seams: Full from base to ground lip.
Comments: A very small jar less than one ounce, probably contained a salve or cream. An early commerical jar. Manufacturer and origin, unknown.

Subcategory: 2 Group: 2 Subgroup: 5 Variety: 1 Figure: 76
No. of Examples--Whole: 0. Rim Fragments: 5.
Manufacturing Dates: 1903-1915. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear, tinted violet. Shape: Round.
Sealing Bead Collar: N/A.
Finish: Extended lip from a beaded collar.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Run through all fragments to lip.
Comments: The beaded collar on these fragments is not a sealing type as in fruit jars or other commercial containers. Probably contained a food product. Manufacturer and origin, unknown.

Subcategory: 2 Group: 2 Subgroup: 5 Variety: 2
No. of Examples--Whole: 0. Rim Fragments: 1.
Manufacturing Dates: 1903-1930. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Round.
Sealing Bead Collar: N/A.
Finish: Extended lip from a beaded collar.
Manufacturing Technique: Machine made, blown.

Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear. Shape: Round.
Sealing Bead Collar: N/A.
Finish: A straight, flaring lip.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: N/A.
Comments: A small fragment identical to previous Variety 3.1 except for color.

Subcategory: 2 Group: 2 Subgroup: 4 Variety: 1
No. of Examples--Whole: 1. Rim Fragments: 2.
Manufacturing Dates: 1900-1940. Internal Correlation: N/A.
Product Embossed Label: "Menley James New York London", on bottom.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Round.
Sealing Bead Collar: N/A.
Finish: Extended lip from stepped in shoulder.
Manufacturing Technique: Machine made, pressed.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: N/A.
Comments: Small jar to 2 oz., probably contained a cream of salve. Resembles Variety 4.4, Subcategory 2, Group 2. Manufacturer and origin, unknown.

Subcategory: 2 Group: 2 Subgroup: 4 Variety: 2 Figure: 73
No. of Examples--Whole: 3. Rim Fragments: 0.
Manufacturing Dates: 1900-1979. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Flat circle.
Sealing Bead Collar: N/A.
Finish: Extended lip from a stepped shoulder.
Manufacturing Technique: Machine made, pressed.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: N/A. Parison Scar: N/A.
Side Seams: N/A.
Comments: A small jar recovered in two sizes, 1/2 oz. and 1 oz., probably contained a deodorant or cosmetic. Manufacturer and origin, unknown.

Subcategory: 2 Group: 2 Subgroup: 4 Variety: 3 Figure: 74
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1900-1915. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear, tinted violet. Shape: Bulbulous.
Sealing Bead Collar: N/A.

No. of Examples--Whole: 0. Rim Fragments: 7.
Manufacturing Dates: 1903-1979. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear. Shape: Round.
Sealing Bead Collar: No.
Finish: Yes.
Manufacturing Technique: Machine made, pressed.
Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: N/A.
Comments: The band of vertical striations helped catch and hold a metal lid. A small jar to 3 oz., probably held preserved meat or spread. Manufacturer and origin unknown.

Subcategory: 2 Group: 2 Subgroup: 2 Variety: Figure: /1
No. of Examples--Whole: 0. Rim Fragments: 1.
Manufacturing Dates: 1903-1915. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear tinted violet. Shape: Round.
Sealing Bead Collar: No.
Finish: A straight lip with an inset interior rim.
Manufacturing Technique: Probably machine made.
Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: N/A.
Finish Parting Line: N/A. Parison Scar: N/A.
Side Seams: N/A.
Comments: A small fragment with a projected rim diameter (outside) of 7.7 cm., indicating a jar. Probably contained a food product covered with a waxed cardboard seal on the interior rim. Manufacturer and origin unknown.

Subcategory: 2 Group: 2 Subgroup: 3 Variety: 1 Figure: 72
No. of Examples--Whole: 0. Rim Fragments: 1.
Manufacturing Dates: 1903 - 1930. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Round.
Sealing Bead Collar: No.
Finish: Yes.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: N/A.
Comments: Small fragment with a projected rim diameter (outside) of 7.6 cm., indicating a jar. May have been a dairy product jar. Manufacturer and origin unknown.

Subcategory: 2 Group: 2 Subgroup: 3 Variety: 2
No. of Examples--Whole: 0. Rim Fragments: 1.
Manufacturing Dates: 1903-1979. Internal Correlation: N/A.

Subcategory: 2 Group: 2 Subgroup: 1 Variety: 1
No. of Examples--Whole: 0. Rim Fragments: 12.
Manufacturing Dates: 1903-1979. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear. Shape: Round.
Sealing Bead Collar: No.
Finish: Straight lip.
Manufacturing Technique: Machine made, pressed.
Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: N/A.
Finish Parting Line: N/A. Parison Scar: N/A.
Side Seams: N/A.
Comments: Most likely this item was pressed in a full cup mold. Probably these rims represent jelly jars used to hold jellies and preserves. Manufacturer and origin unknown.

Subcategory: 2 Group: 2 Subgroup: 1 Variety: 2
No. of Examples--Whole: 0. Rim Fragments: 4.
Manufacturing Dates: 1903-1979. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear. Shape: Round.
Sealing Bead Collar: No.
Finish: Straight lip.
Manufacturing Technique: Machine made blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: N/A.
Finish Parting Line: N/A. Parison Scar: N/A.
Side Seams: Run through fragments to lip.
Comments: Jar has fluted panels below lip, possibly a fancy condiment container. Manufacturer and origin unknown.

Subcategory: 2 Group: 2 Subgroup: 1 Variety: 3
No. of Examples--Whole: 0. Rim Fragments: 10.
Manufacturing Dates: 1900 - 1915. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear tinted violet. Shape: Round, tapered.
Sealing Bead Collar: No.
Finish: Straight lip.
Manufacturing Technique: Machine made, pressed.
Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: N/A.
Comments: Jar pressed in a cup and ring mold. The finish parting line is raised a bit more than normal. Perhaps the intention here was for the raised line to catch and hold a metal lid. A medium jar to 4 oz., probably contained jelly or preserves. Manufacturer and origin unknown. Possibly made in a semi-automatic process.

Subcategory: 2 Group: 2 Subgroup: 1 Variety: 4 Figure: 70

fragment agrees in construction with whole jars (i.e. the large squared collar and ground lip). Manufactured by the Lyndboro Glass Col, Lyndboro, New Hampshire (Toulouse 1969:47,65). The lightning style closure was patented for fruit jars in 1882 by Henry W. Putnam (Toulouse 1969:126).

Subcategory: 2 **Group:** 1 **Subgroup:** 1 **Variety:** 4
No. of Examples--Whole: 0. **Rim Fragments:** 1.
Manufacturing Dates: 1882-1910. **Internal Correlation:** N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear. **Shape:** Round.
Sealing Bead Collar: Yes.
Finish: An extended lip from a beveled sealing collar.
Manufacturing Technique: Mold blown, hand finished.
Lip Style: Ground.
Neck: Yes. **Shoulder:** Yes. **Base Parting Line:** N/A.
Finish Parting Line: N/A. **Parison Scar:** N/A.
Side Seams: Run through fragment to ground lip.
Comments: Fragment is definitely a fruit jar rim, of the old style lightning closure type. However, there are no clues to its brand name identity. Manufacturer and origin unknown.

Subcategory: 2 **Group:** 1 **Subgroup:** 1 **Variety:** 5 **Figure:** 69*
No. of Examples--Whole: 0. **Rim Fragments:** 0.
Manufacturing Dates: 1896-1930. **Internal Correlation:** GMM Code 008.
Product Embossed Label: "Atlas E-Z Seal", on bottom (See below).
Maker's Mark Embossed: Same as Product Label.
Color: Aqua. **Shape:** Round.
Sealing Bead Collar: N/A.
Finish: N/A.
Manufacturing Technique: N/A.
Lip Style: N/A.
Neck: N/A. **Shoulder:** N/A. **Base Parting Line:** Yes.
Finish Parting Line: N/A. **Parison Scar:** Yes.
Side Seams: N/A.
Comments: There were no rims or whole examples of this fruit jar recovered at Neville House. However, two embossed jar bases representing the "Atlas E-Z Seal", lightning closure type fruit jar were recovered and placed in GMM (Nos. 8775-79, 8902-17). These jars represent the initial production at the Atlas Glass Co. plant in Washington, Pennsylvania, and were produced in aqua glass until the 1930's when predominantly clear containers were introduced to satisfy popular demand (Toulouse 1969:3).
*Figure 69 illustration taken from whole specimen from another collection.

Subcatergory 2. JARS WITHOUT THREADED FINISHES.

Group 2. COMMERCIAL CONTAINER JARS THAT SEAL WITH A METAL OR PAPER CAP WITHOUT A METAL BAIL.

No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1925-1964. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: "H over A", Hazel Atlas Glass Co; Wheeling, West Virginia.
Color: Clear. Shape: Round.
Sealing Bead Collar: Yes.
Finish: An extended lip from a double collar.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: Yes.
Side Seams: Full from base to lip.
Comments: This is the only whole fruit jar with a non-threaded finish, recovered at Neville House. Example is a pint and is one of many different types of glass cap style fruit jars produced by Hazel Atlas. This particular type was manufactured by Hazel Atlas from 1925 - 1964 (Toulouse 1969:36). See Variety 1.5, Subcategory 2, Group 1.

Subcategory: 2 Group: 1 Subgroup: 1 Variety: 2 Figure: 68
No. of Examples--Whole: 0. Rim Fragments: 3.
Manufacturing Dates: 1930-1962. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear. Shape: Square.
Sealing Bead Collar: Yes.
Finish: An extended lip from a round sealing bead collar.
Manufacturing Technique: Machine made, blown. Lip smooth.
Lip Style: Smooth.
Neck: Yes. Shoulder: Yes. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Full from base to lip.
Comments: These rims have long necks and represent parts of "Ball Ideal" fruit jars because of this distinctive style. They were manufactured in clear and "Ball blue" colors by the Ball Brothers Co., Muncie, Indiana from 1915-1962. The clear glass "Ideals" composed most of the production from 1930-1962 (Toulouse 1969:5).

Subcategory: 2 Group: 1 Subgroup: 1 Variety: 3
No. of Examples--Whole: 0 Rim Fragments: 1
Manufacturing Dates: 1882-1900. Internal Correlation: N/A
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Light green. Shape: Round.
Sealing Bead Collar: Yes.
Finish: An extended lip from a square sealing collar.
Manufacturing Technique: Mold blown, hand finished.
Lip Style: Ground.
Neck: Yes. Shoulder: Yes. Base Parting Line: N/A.
Finish Parting Line: N/A. Parison Scar: N/A.
Side Seams: Run through fragment to ground lip.
Comments: A rim fragment of an early glass cap style fruit jar, very possibly part of a "Putnam Lightning" brand jar. This brand was the most common of the old style lightning closure type jars and, the rim

Sealing Bead Collar: No.
Finish: Four short lugs.
Manufacturing Technique: Machine made, pressed.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: From finish parting line to lip only.
Comments: Jar pressed in a cup and two-piece ring mold, probably a display piece for a lady's dressing table that contained cold cream. Manufacturer and origin unknown.

Subcategory: 1 Group: 2 Subgroup: 29 Variety: 2
No. of Examples--Whole: 0. Rim Fragments: 3.
Manufacturing Dates: 1903-1979. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear. Shape: Round.
Sealing Bead Collar: No.
Finish: Four short lugs.
Manufacturing Technique: Machine made, pressed.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: From finish parting line to lip only.
Comments: Much the same as previous Variety 29.1 except for color and shape. Probably contained cold cream. Manufacturer and origin unknown.

Subcategory: 1 Group: 2 Subgroup: 30 Variety: N/A. Figure: 66
No. of Examples--Whole: 1. Rim Fragments: 3.
Manufacturing Dates: 1903-1979. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Flat circle.
Sealing Bead Collar: No.
Finish: Three lugs, two of which are modified with basal hooks.
Manufacturing Technique: Machine made, pressed.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: N/A. Parison Scar: N/A.
Side Seams: Four that run from base to lip.
Comments: Jar pressed in a four-part mold. Basal hooks on lugs caught extended tabs on a metal lid to lock it in place. A small, short jar probably contained a deodorant or cosmetic. Manufacturer and origin unknown.

Subcategory 2. JARS WITHOUT THREADED FINISHES.

Group 1. FRUIT JARS THAT SEAL WITH A GLASS LID AND A METAL BAIL LOCKING DEVICE.

Subcategory: 2 Group: 1 Subgroup: 1 Variety: 1 Figure: 67

Product Embossed Label: "Wrights Silver Cream".
Maker's Mark Embossed: Hazel-Atlas and Owens Illinois.
Color: Clear. Shape: Round.
Sealing Bead Collar: No.
Finish: 4 elongated lugs.
Manufacturing Technique: Machine made - blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: Yes.
Side Seams: Full from base to lip.
Comments: A medium jar to 4 oz., contained polish for silver and silverware. The jars bearing Hazel-Atlas trademarks manufactured at Hazel-Atlas Glass Co. plant, Washington, Pennsylvania. The jars bearing Owens-Illinois trademark manufactued at the Fairmont, West Virginia plant.

Subcategory: 1 Group: 2 Subgroup: 27 Variety: N/A. Figure: 63
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1930-1979. Internal Correlation: N/A.
Product Embossed Label: "Ingrams Milkweed Cream", on shoulder.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Round.
Sealing Bead Collar: No.
Finish: Yes.
Manufacturing Technique: Machine made blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Full from base to lip.
Comments: A small jar to 2 oz.; of a later style; containing a brand name cosmetic cream. Manufacturer and origin unknown.

Subcategory: 1 Group: 2 Subgroup: 28 Variety: N/A. Figure: 64
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1903-1979. Internal Correlation: N/A.
Product Embossed Label: "Marvelous" twice at base.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Round.
Sealing Bead Collar: No.
Finish: Four elongated inclined lugs.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Full from base to lip.
Comments: A small, squat jar to 2 oz., probably contained cold cream. Manufacturer and origin unknown.

Subcategory: 1 Group: 2 Subgroup: 29 Variety: 1 Figure: 64
No. of Examples--Whole: 0. Rim Fragments: 2.
Manufacturing Dates: 1903-1979. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Black amethyst. Shape: Bulbulose.

Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Run through all fragments to finish parting line only.
Comments: Finish made in one piece ring; not a very common technique in tall machine blown jars. Fragments represent a large jar with a wide mouth diameter (inside 6.5 cm) but not a fruit jar. Probably contained tobacco or a tobacco product (See Munsey 1970:72 illus. top right). Manufacturer and origin unknown.

Subcategory: 1 Group: 2 Subgroup: 24 Variety: 2
No. of Examples--Whole: 0. Rim Fragments: 1.
Manufacturing Dates: 1900-1930. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Light green. Shape: Round.
Sealing Bead Collar: No.
Finish: One continuous thread that repeats 3 times.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Run through fragment to lip.
Comments: A rim fragment much like previous Variety 24.1, except for color (24.1 is clear), and a larger mouth diameter (inside) 7.0 cm (24.1 is 6.5 cm). Evidently not a fruit jar as the mouth diameter is larger than the normal range of 5.6 cm to 5.9 cm for standard fruit jars (See Variety 8.4, Subcategory 1, Group 2). May have been a tobacco jar. Manufacturer and origin unknown.

Subcategory: 1 Group: 2 Subgroup: 25 Variety: N/A. Figure: 61
No. of Examples--Whole: 0. Rim Fragments: 6.
Manufacturing Dates: 1903-1979. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear. Shape: Round.
Sealing Bead Collar: No.
Finish: Two complete screw threads, one superimposed above the other.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Run through all fragments to the lip.
Comments: An uncommon and unusual style of finish, the top portion is smaller than the second portion which steps out below (the top portion) and continues to the shoulder. Both threads are one and continuous, the top thread merging with the stepped out portion of the second. Probably these rims represent parts of jars that contained a food product. Manufacturer and origin unknown.

Subcategory: 1 Group: 2 Subgroup: 26 Variety: N/A. Figure: 62
No. of Examples--Whole: 8. Rim Fragments: 48.
Manufacturing Dates: 1920-1957. Internal Correlation: GMM Code 241.

of manganese dioxide as reagent, while others are tinted brown indicating selenium as reagent. Since manganese dioxide was scarce after 1915, selenium was used in massive doses until the late 1920's and early 30's (Munsey 1970:55). After the 1930's, Daggett and Ramsdell products were sold in milk glass containers (See Subgroups 9 and 16, Subcategory 1, Group 2). Jar recovered in 3 sizes; small, medium, and large. Manufacturer and origin unknown.

Subcategory: 1 **Group:** 2 **Subgroup:** 23 **Variety:** 1 **Figure:** 58
No. of Examples--Whole: 1. **Rim Fragments:** 0.
Manufacturing Dates: 1903-1930. **Internal Correlation:** GMM Code 110.
Product Embossed Label: "Horlicks", twice on shoulder.
Maker's Mark Embossed: "K" over "D", unknown, possibly English.
Color: Clear. **Shape:** Round.
Sealing Bead Collar: Yes.
Finish: One continuous thread that repeats 3 times.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. **Shoulder:** Yes. **Base Parting Line:** N/A.
Finish Parting Line: Yes. **Parison Scar:** Yes.
Side Seams: Full from base to lip.
Comments: A late sample container of "Horlick's Malted Milk" additive. Jar possibly was made in England as Horlike's was a London based company with a major outlet in Racine, Wisconsin (See next Variety 23.2). Manufacturer and origin unknown.

Subcategory: 1 **Group:** 2 **Subgroup:** 23 **Variety:** 2 **Figure:** 59
No. of Examples--Whole: 0. **Rim Fragments:** 13.
Manufacturing Dates: 1870-1910. **Internal Correlation:** GMM Code 110.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Aqua. **Shape:** Round.
Sealing Bead Collar: No.
Finish: One continuous thread that repeats 3 times.
Manufacturing Technique: Mold blown, hand finished.
Lip Style: Ground.
Neck: Yes. **Shoulder:** Yes. **Base Parting Line:** N/A.
Finish Parting Line: N/A. **Parison Scar:** N/A.
Side Seams: Run through all fragments to ground lip.
Comments: Although these rim fragments are unembossed, they can be identified as Horlick jar parts, because of their distinctive shape and finish style (one thread repeating 3 times). Also there are numerous embossed body fragments of "Horlick's jars in GMM. Jar rims recovered in 2 sizes representing the pint (most common) and the gallon (2 only). Manufacturer and origin unknown.

Subcategory: 1 **Group:** 2 **Subgroup:** 24 **Variety:** 1 **Figure:** 60
No. of Examples--Whole: 0. **Rim Fragments:** 2.
Manufacturing Dates: 1903-1915. **Internal Correlation:** N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear tinted violet. **Shape:** Round.
Sealing Bead Collar: No.
Finish: One continuous thread that repeats 3 times.

probably contained a personal care product of the Woodbury Co. Manufacturer and origin unknown.

Subcategory: 1 Group: 2 Subgroup: 20 Variety: N/A.
No. of Examples--Whole: 6. Rim Fragments: 0.
Manufacturing Dates: 1903-1930. Internal Correlation: GMM Code 193.
Product Embossed Label: "Ponds", vertically in two sunken panels.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Square.
Sealing Bead Collar: No.
Finish: One continuous thread that repeats twice.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Full from base to lip.
Comments: Jar closely resembles Variety 4.2, Subcategory 1, Group 2; another "Ponds" jar. Variety 4.2 has one continuous thread that does not repeat and is smaller than this jar. Jar large to 8 oz., contained "Ponds" brand cold cream. Manufacturer and origin unknown.

Subcategory: 1 Group: 2 Subgroup: 21 Variety: N/A.
No. of Examples--Whole: 1. Rim Fragments: 1.
Manufacturing Dates: 1920-1957. Internal Correlation: GMM Code 112.
Product Embossed Label: "Harriett Hubbard Ayer, New York" on front.
Maker's Mark Embossed: "H" over "A" is Hazel Atlas Glass Co., Wheeling, West Virginia.
Color: Milk glass. Shape: Square.
Sealing Bead Collar: No.
Finish: One continuous thread that repeats twice.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: Yes.
Side Seams: Full from base to lip.
Comments: Very close to Subgroup 10, Subcategory 1, Group 2. (See also Subgroup 17, Subcategory 1, Group 2).

Subcategory: 1 Group: 2 Subgroup: 22 Variety: N/A. Figure: 57
No. of Examples--Whole: 6. Rim Fragments: 40.
Manufacturing Dates: 1903-1930. Internal Correlation: GMM Code 59.
Product Embossed Label: Daggett and Ramsdell's Perfect Cold Cream, on bottom.
Maker's Mark Embossed: N/A.
Color: Clear tinted violet. Shape: Round.
Sealing Bead Collar: No.
Finish: One continuous thread that repeats twice.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: From base to finish parting line.
Comments: This series of jars shows a definite glass batch bleaching reagent changeover. Some of the jars are tinted violet indicating use

widemouthed and probably contained a powder or granulated substance, such as seasoning, bath powder or bath salts. Manufacturer and origin unknown.

Subcategory: 1 Group: 2 Subgroup: 19 Variety: 2 Figure: 56
No. of Examples--Whole: 0. Rim Fragments: 15.
Manufacturing Dates: 1880 - 1910. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear. Shape: Round.
Sealing Bead Collar: No.
Finish: One continuous thread that repeats twice.
Manufacturing Technique: Mold blown, hand finished.
Lip Style: Ground.
Neck: N/A. Shoulder: Yes. Base Parting Line: N/A.
Finish Parting Line: N/A. Parison Scar: N/A.
Side Seams: Run through all fragments to ground lip.
Comments: Whole jars with this style of finish were frequently used as tobacco containers for snuff, cigars, and pipe tobacco. Manufacturer and origin unknown.

Subcategory: 1 Group: 2 Subgroup: 19 Variety: 3
No. of Examples--Whole: 2. Rim Fragments: 0.
Manufacturing Dates: 1930 - 1979. Internal Correlation: N/A.
Product Embossed Label: An embossed metal lid, "Colgate"
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Fat football.
Sealing Bead Collar: No.
Finish: One continuous thread that repeats twice.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Full from base to lip.
Comments: Jar very much like Variety 4.1, Subcategory 1, Group 2, except Variety 4.1 is embossed "Ponds" on the jar bottom and has one continuous thread only on its finish. A small jar to 1 oz., probably contained a personal care product of the Colgate Palmolive Co. Manufacturer and origin unknown.

Subcategory: 1 Group: 2 Subgroup: 19 Variety: 4
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1930-1979. Internal Correlation: N/A.
Product Embossed Label: An embossed metal lid "Woodbury".
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Oval.
Sealing Bead Collar: No.
Finish: One continuous thread that repeats twice.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Full from base to lip.
Comments: A small, squat jar with two sunken rectanglar panels,

Comments: This jar looks very much like Subgroup 16, Subcategory 1, Group 2, except for the lack of an embossed product label. A small, squat jar to 2 oz., probably held a deodorant or cosmetic.

Subcategory: 1 Group: 2 Subgroup: 18 Variety: 3 Figure: 54
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1903-1935. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: "W.T. Co" is Whithall Tatum, Millville, New Jersey.
Color: Milk glass. Shape: Square.
Sealing Bead Collar: No.
Finish: One thread interrupted twice at mold seams.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Full from base to lip.
Comments: An ornamented jar with a raised square flange at shoulder and base. An older style cosmetic or cold cream jar.

Subcategory: 1 Group: 2 Subgroup: 18 Variety: 4
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1903-1930. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Square.
Sealing Bead Collar: No.
Finish: One thread interrupted twice at side seams.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Full from base to lip.
Comments: Jar identical to Variety 3.8, Subcategory 1, Group 2, except for finish (Variety 3.8 has one continuous thread). A small, ornate jar to 2 oz., probably contained a personal care product. Manufacturer and origin, unknown.

Subcategory: 1 Group: 2 Subgroup: 19 Variety: 1 Figure: 55
No. of Examples--Whole: 0. Rim Fragments: 5.
Manufacturing Dates: 1903-1915. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear tinted violet. Shape: Round.
Sealing Bead Collar: No.
Finish: One continuous thread that repeats twice.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Run through all fragments to lip.
Comments: Some rims of this Variety still have attached metal lids all of which are perforated suggesting utilization as "shakers". Items are

Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: N/A.
Comments: A large jar rim diameter (outside) 7.5 cm, probably contained a food product. Most likely an early example of a pressed jar produced in a automatic process, as fragments have numerous seed bubbles in the glass. Manufacturer and origin, unknown.

Subcategory: 2 Group: 2 Subgroup: 9 Variety: 1 Figure: 80
No. of Examples--Whole: 1. Rim Fragments: 25.
Manufacturing Dates: 1903-1915. Internal Correlation: GMM Code 14.
Product Embossed Label: "J.W. Beardsleys Sons New York", on bottom.
Maker's Mark Embossed: A patent date "Feb. 10.03", on bottom also.
Color: Clear, tinted violet. Shape: Round, tapered.
Sealing Bead Collar: Yes.
Finish: Extended lip from a tapered collar.
Manufacturing Technique: Machine made, pressed.
Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: N/A.
Comments: A large jar to 8 oz., probably containing a food or personal care product. There is not a listing for this patent date of "Feb 10.03" in Toulouse (1969:111). Evidently, this patent date has something to do with container production for the next Variety 9.2 has the same date but with a different product label and product company. Manufacturer and origin, unknown.

Subcategory: 2 Group: 2 Subgroup: 9 Variety: 2
No. of Examples--Whole: 1. Rim Fragments: 19.
Manufacturing Dates: 1903-1915. Internal Correlation: GMM Code 6.
Product Embossed Label: "Armour and Company", on bottom.
Maker's Mark Embossed: a patent date "Feb.10.03" on bottom.
Color: Clear, tinted violet. Shape: Round, tapered.
Sealing Bead Collar: Yes.
Finish: Extended lip from a tapered collar.
Manufacturing Technique: Machine made, pressed.
Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: N/A.
Comments: Jar identical in construction to previous Variety 9.1 except for size. These jars are smaller (to 4 oz.) and have a different product embossed label. Manufacturer and origin, unknown.

Subcategory: 2 Group: 2 Subgroup: 10 Variety: N/A.
No. of Examples--Whole: 0. Rim Fragments: 2.
Manufacturing Dates: 1903-1915. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear, tinted violet. Shape: Round.
Sealing Bead Collar: N/A.
Finish: Extended lip from a tapered collar.

Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: Yes. Shoulder: Yes. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Run through fragment to finish parting line only.
Comments: Finished formed in one piece ring. Probably contained a food product. Manufacturer and origin, unknown.

Subcategory: 2 Group: 2 Subgroup: 11 Variety: N/A Figure: 81
No. of Examples--Whole: 0. Rim Fragments: 6.
Manufacturing Dates: 1906-1955. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: A patent date "June 23.03", on bottom.
Color: Clear. Shape: Round, tapered.
Sealing Bead Collar: Yes.
Finish: Extended lip from a square collar.
Manufacturing Technique: Machine made, pressed.
Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: Yes.
Finish Parting Line: N/A. Parison Scar: N/A.
Side Seams: N/A.
Comments: A medium jar to 4 oz., probably contained a food product. The patent date of "June 23.03" is ascribed to Julius A. Landsberger of Alameda, California, for a spring clip to hold a metal lid on this type of jar (Toulouse 1969:111). Alexander Kerr of the Kerr Fruit Jar Co., secured the patent from Landsberger and began producing fruit jars and commercial containers that sealed in this fashion (Toulouse 1969:130). These fragments fall into the latter group of commercial containers. They were probably manufactured for Kerr by Hazel Atlas Glass Co., Wheeling, West Virginia, for Kerr turned to Hazel Atlas in 1906 for jar production and eventually ended up owning 2 Hazel Atlas plants (Toulouse 1971:306-8).

Subcategory: 2 Group: 2 Subgroup: 12 Variety: 1 Figure: 82
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1930-1940. Internal Correlation: GMM Code 173.
Product Embossed Label: N/A.
Maker's Mark Embossed: "OI" in a diamond , 2 left, 0 right, on bottom.
Color: Clear. Shape: Round.
Sealing Bead Collar: N/A.
Finish: A square beaded lip.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: Yes. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: Yes.
Side Seams: Full from base to lip.
Comments: This is the only whole jar of this type recovered at Neville House, probably contained a condiment. The maker's mark is Owen's Illinois Glass Co., Toledo, Ohio. The 2 to the left of the diamond indicates manufacture at the Huntingdon, West Virginia, plant and the 0 to the right of the diamond indicates the year 1930 or 1940 (Toulouse 1971:395).

Subcategory: 2 Group: 2 Subgroup: 12 Variety: 2
No. of Examples--Whole: 0. Rim Fragments: 25.
Manufacturing Dates: 1903-1979. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear. Shape: Round.
Sealing Bead Collar: N/A.
Finish: Square beaded lip.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: Yes. Shoulder: Yes. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Run through all fragments to lip.
Comments: These fragments are similar to previous Variety 12.1 but with various rim diameters (outside) from 6.0 cm, the largest to 4.0 cm, the smallest. Manufacturer and origin, unknown.

Subcategory: 2 Group: 2 Subgroup: 12 Variety: 3 Figure: 83
No. of Examples--Whole: 0. Rim Fragments: 4.
Manufacturing Dates: 1903-1979. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Round.
Sealing Bead Collar: N/A.
Finish: Square beaded lip.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: Yes. Shoulder: Yes. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Full from base to lip on several larger fragments.
Comments: Jar has flangelike base and probably contained cheese or cold cream. Manufacturer and origin, unknown.

Subcategory: 2 Group: 2 Subgroup: 12 Variety: 4
No. of Examples--Whole: 0. Rim Fragments: 3.
Manufacturing Dates: 1900-1915. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear, tinted violet. Shape: Round.
Sealing Bead Collar: N/A.
Finish: Square beaded finish.
Manufacturing Technique: Machine made, pressed.
Lip Style: Smooth.
Neck: Yes. Shoulder: Yes. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: N/A.
Comments: A small jar to 2 oz., probably contained a personal care product. Manufacturer and origin, unknown. Could have been made in a semi-automatic process.

Subcategory: 2 Group: 2 Subgroup: 13 Variety: N/A Figure: 84
No. of Examples--Whole: 0. Rim Fragments: 10.
Manufacturing Dates: 1900-1930. Internal Correlation: GMM Code 138.
Product Embossed Lable: "Maclaren's Imperial Cheese", on bottom.

Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Round, tapered.
Sealing Bead Collar: N/A.
Finish: Square beaded lip.
Manufacturing Technique: Machine made, pressed.
Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: N/A.
Comments: A medium jar to 4 oz., containing cheese. Manufacturer and origin, unknown.

Subcategory: 2 Group: 2 Subgroup: 14 Variety: N/A Figure: 85
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1900-1915. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear, tinted violet. Shape: Round.
Sealing Bead Collar: N/A.
Finish: Square beaded lip.
Manufacturing Technique: Machine made, pressed.
Lip Style: 3 raised ridges.
Neck: N/A. Shoulder: N/A. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: N/A.
Comments: A wide but short jar that seals by pressing a metal lid with a soft rubber ring over the raised ridges of the square lip. May have contained pimentoes. Manufacturer and origin, unknown. Could have been made in a semi-automatic process.

Subcategory: 2 Group: 2 Subgroup: 15 Variety: N/A Figure: 86
No. of Examples--Whole: 1. Rim Fragments: 4.
Manufacturing Dates: 1900-1940. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear. Shape: Round, tapered.
Sealing Bead Collar: N/A.
Finish: Tapered beaded lip with 2 lugs at base of bead.
Manufacturing Technique: Machine made, pressed.
Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: N/A.
Comments: The lugs at the base of the tapered finish caught and held a metal lid. A medium jar to 4 oz., probably contained a food product. Manufacturer and origin, unknown.

Subcategory: 2 Group: 2 Subgroup: 16 Variety: 1
No. of Examples--Whole: 0. Rim Fragments: 3.
Manufacturing Dates: 1900-1940. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear. Shape: Round.
Sealing Bead Collar: N/A.

Finish: Round beaded lip.
Manufacturing Technique: Machine made, pressed.
Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: N/A.
Comments: A large jar, probably contained a food product. Much like Variety 13.1, Subcategory 2, Group 2, except for the lip (13.1 has a square beaded lip). Manufacturer and origin, unknown.

Subcategory: 2 Group: 2 Subgroup: 16 Variety: 2
No. of Examples--Whole: 0. Rim Fragments: 1.
Manufacturing Dates: 1900-1940. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Round.
Sealing Bead Collar: N/A.
Finish: Round beaded lip.
Manufacturing Technique: Machine made, pressed.
Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: N/A.
Comments: Same as previous Variety 13.1 except for color. Manufacturer and origin, unknown.

Subcategory: 2 Group: 2 Subgroup: 17 Variety: N/A Figure: 87
No. of Examples--Whole: 2. Rim Fragments: 2.
Manufacturing Dates: 1903-1930. Internal Correlation: GMM Code 6.
Product Embossed Label: "Armour & Co., Packers Chicago", on bottom.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Round.
Sealing Bead Collar: N/A.
Finish: Round beaded lip.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: Yes.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: From base to finish parting line only.
Comments: A small jar to 2 oz., probably contained a preserved meat or cheese. Manufacturer and origin, unknown.

Subcategory: 2 Group: 2 Subgroup: 18 Variety: N/A Figure: 88
No. of Examples--Whole: 0. Rim Fragments: 5.
Manufacturing Dates: 1903-1979. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear. Shape: Round.
Sealing Bead Collar: Yes.
Finish: Square beaded lip with flaring collar.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: Yes. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.

Side Seams: Run through all fragments to lip.
Comments: Jar probably contained a condiment. Manufacturer and origin, unknown.

Subcategory: 2 Group: 2 Subgroup: 19 Variety: N/A Figure: 89
No. of Examples--Whole: 0. Rim Fragments: 1.
Manufacturing Dates: 1903-1915. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear, tinted violet. Shape: Square.
Sealing Bead Collar: N/A.
Finish: Tapered beaded lip with flaring collar.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Run through fragment to lip.
Comments: Probably contained jelly or fruit preserves. Manufacturer and origin, unknown.

Subcategory: 2 Group: 2 Subgroup: 20 Variety: N/A Figure: 90
No. of Examples--Whole: 0. Rim Fragments: 11.
Manufacturing Dates: 1900-1940. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Milk glass. Shape: Round, tapered.
Sealing Bead Collar: N/A.
Finish: Square beaded lip, inset interior rim.
Manufacturing Technique: Machine made, pressed.
Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: N/A.
Comments: Probably contained cheese, with a waxed cardboard cover on the interor rim and a metallid over this. Manufacturer and origin, unknown.

Subcategory: 2 Group: 2 Subgroup: 21 Variety: N/A Figure: 91
No. of Examples--Whole: 0. Rim Fragments: 3.
Manufacturing Dates: 1903-1979. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear. Shape: Round.
Sealing Bead Collar: N/A.
Finish: Flared and rounded lip with an inset interior rim.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: N/A.
Comments: Whole jar would have been quite large as the mouth diameter (inside) is 13.0 cm. Probably contained pickles, pickled pigs feet, etc. Manufacturer and origin, unknown.

Subcategory: 2 Group: 2 Subgroup: 22 Variety: 1 Figure: 92
No. of Examples--Whole: 1. Rim Fragments: 0.
Manufacturing Dates: 1903-1915. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear, tinted violet. Shape: Round.
Sealing Bead Collar: N/A.
Finish: Square beaded lip and a tapered head with a square base below.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: Yes.
Side Seams: From base to finish parting line only.
Comments: Jar has a band of 16 oval panels below finish and again at the base. A tall jar to 8 oz., probably contained jelly or fruit preserves. Manufacturer and origin, unknown.

Subcategory: 2 Group: 2 Subgroup: 22 Variety: 2
No. of Examples--Whole: 0. Rim Fragments: 1.
Manufacturing Dates: 1903-1979. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear. Shape: Squared.
Sealing Bead Collar: N/A.
Finish: Square beaded lip and a tapered bead witha square base below.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: Yes. Shoulder: Yes. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Run through fragment to lip.
Comments: Probably contained a condiment. Manufacturer and origin, unknown.

Subcategory: 2 Group: 2 Subgroup: 22 Variety: 3
No. of Examples--Whole: 0. Rim Fragments: 6.
Manufacturing Dates: 1903-1915. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear, tinted violet. Shape: Round.
Sealing Bead Collar: N/A.
Finish: Square beaded lip and a tapered bead with a flared base below.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: N/A. Shoulder: N/A. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Run through all fragments to lip.
Comments: The whole jar would have been large as the mouth diameter (inside) is 7.4 cm. Probably contained a facial cream or food product. Manufacturer and origin, unknown.

Subcategory: 2 Group: 2 Subgroup: 22 Variety: 4
No. of Examples--Whole: 0. Rim Fragments: 4.
Manufacturing Dates: 1903-1979. Internal Correlation: N/A.
Product Embossed Label: N/A.

Maker's Mark Embossed: N/A.
Color: Clear. Shape: Round.
Sealing Bead Collar: N/A.
Finish: Two square beads are atop the other.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: Yes. Shoulder: Yes. Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Run through all fragments to lip.
Comments: Probably contained a condiment. Manufacturer and origin, unknown.

Subcategory: 2 Group: 2 Subgroup: 22 Variety: 5 Figure: 93
No. of Examples--Whole: 0. Rim Fragments: 1.
Manufacturing Dates: 1903-1979. Internal Correlation: N/A.
Product Embossed Label: N/A.
Maker's Mark Embossed: N/A.
Color: Clear. Shape: Round.
Sealing Bead Collar: N/A.
Finish: Two round beads one atop the other.
Manufacturing Technique: Machine made, blown.
Lip Style: Smooth.
Neck: Yes. Shoulder: Yes Base Parting Line: N/A.
Finish Parting Line: Yes. Parison Scar: N/A.
Side Seams: Run through fragment to lip.
Comments: Probably contained a condiment. Manufacturer and origin, unknown.

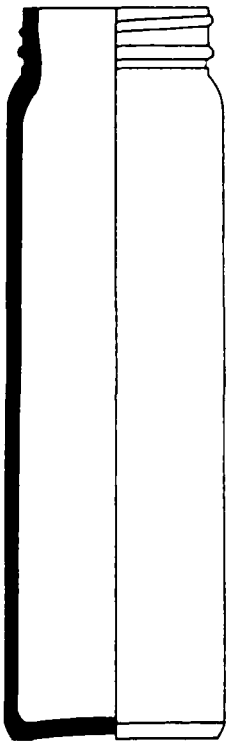


Fig. 1

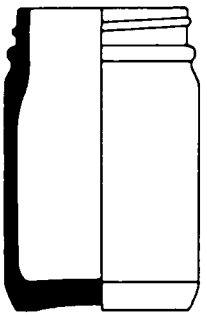


Fig. 2



Fig. 3

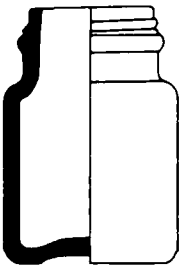


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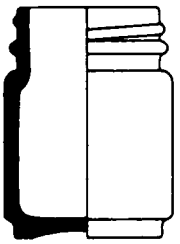


Fig. 5

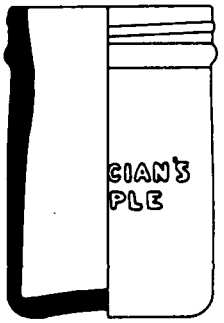


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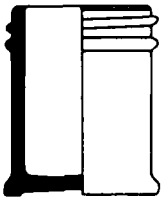


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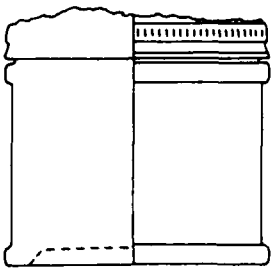


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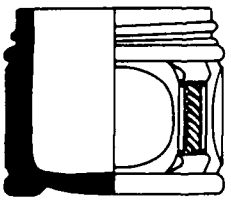


Fig. 9

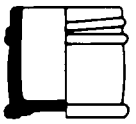


Fig.10

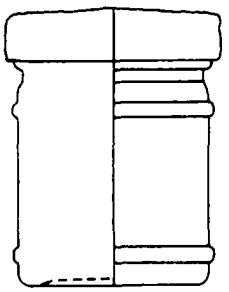


Fig. 11



Fig. 12

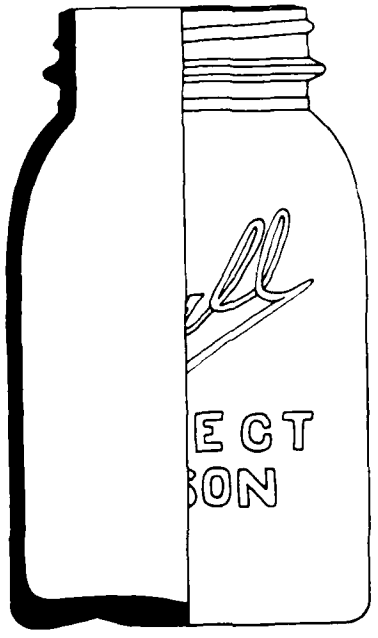


Fig. 13

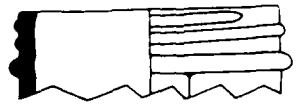


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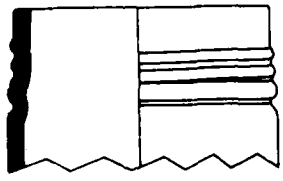


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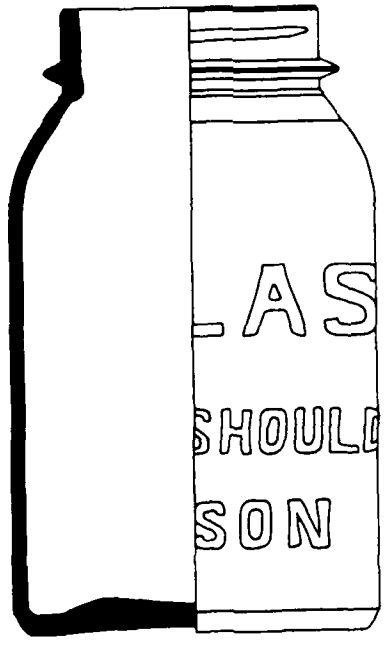


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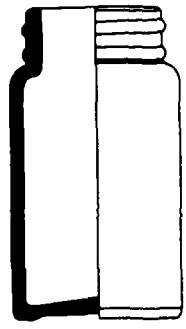


Fig. 17

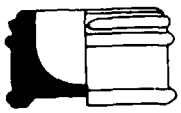


Fig. 18



Fig. 19

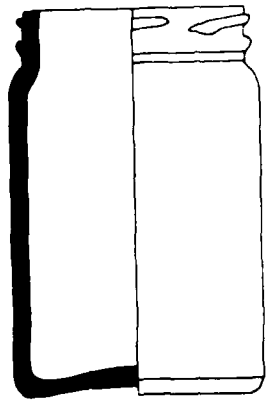


Fig. 20

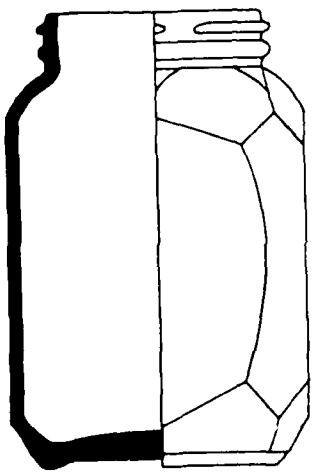


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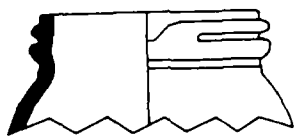


Fig. 22

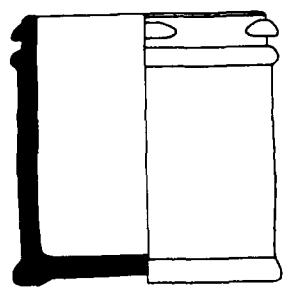


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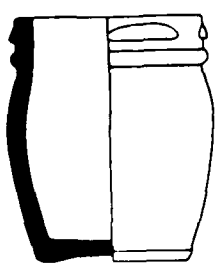


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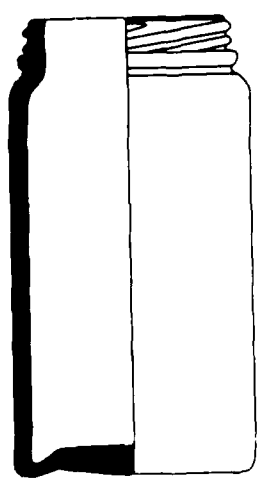


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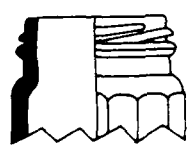


Fig. 26

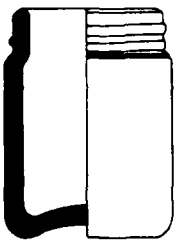


Fig.27



Fig.28



Fig. 29

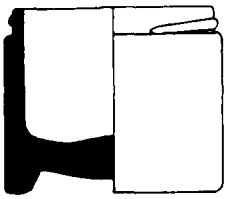


Fig. 30

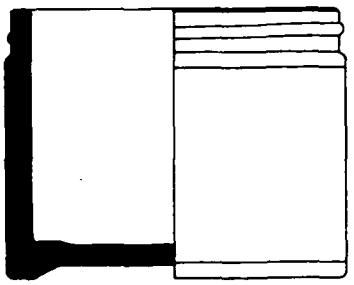


Fig. 31

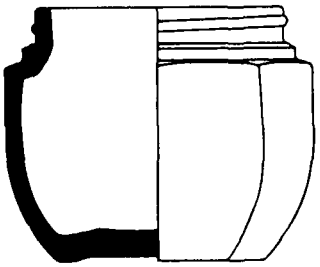


Fig. 32

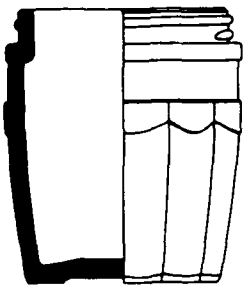


Fig. 33

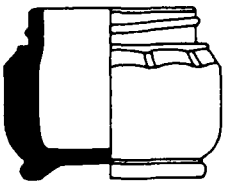


Fig. 34



Fig. 35

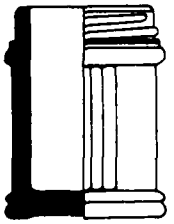


Fig.36

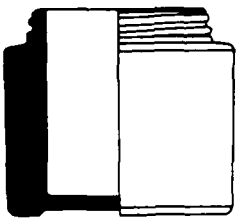


Fig. 37

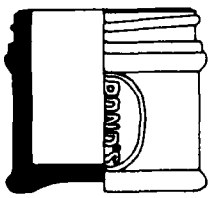


Fig.38

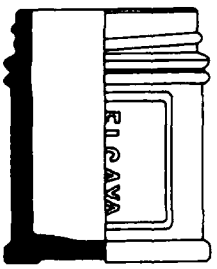


Fig. 39

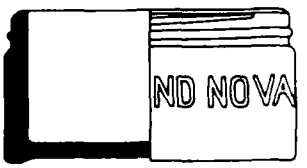


Fig. 40

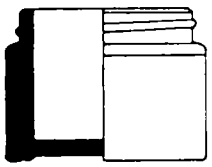


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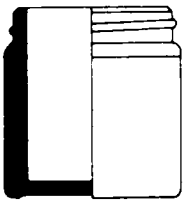


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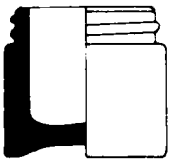


Fig. 43



Fig. 44

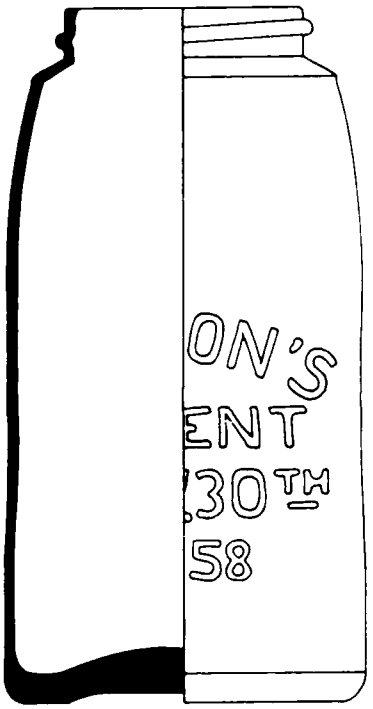


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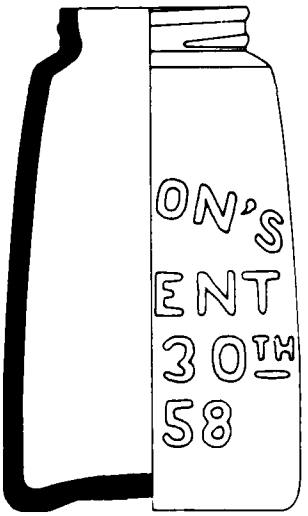


Fig. 46

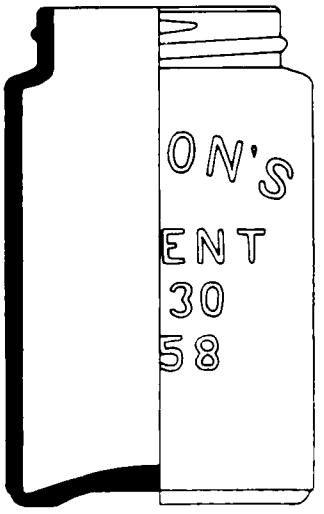


Fig. 47

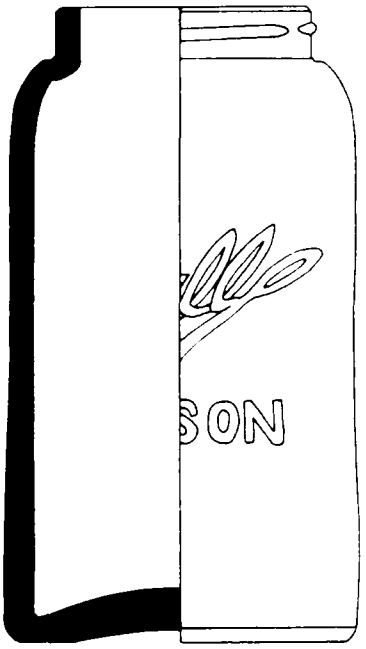


Fig. 48

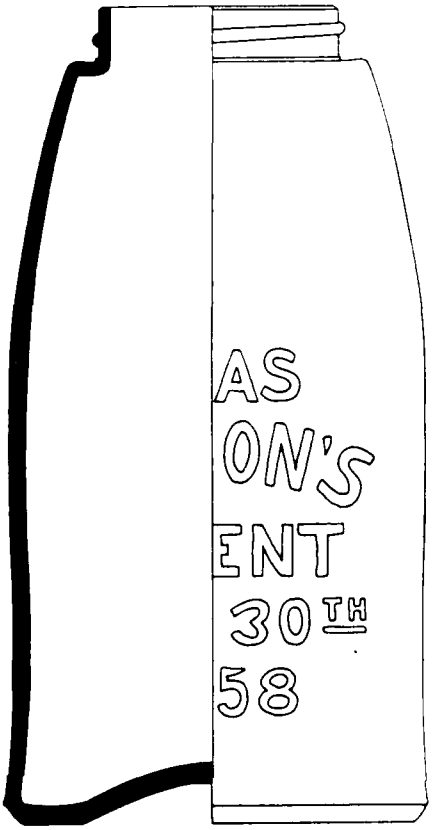


Fig. 49

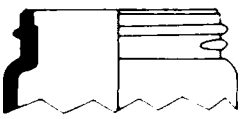


Fig 50

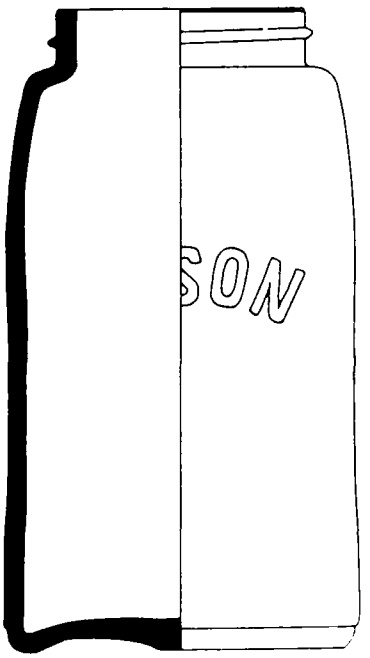


Fig. 51

GLASS MAKER'S MARKS AND PRODUCT LABELS

by

Michael Hochrein

INTRODUCTION

"Trademarks, whether registered or not, brand names, and other marks and symbols of identification found on bottles are datum points in determining the history and ages of the collectors' bottles. When the owner of the mark is known, and when more exact dates can be assigned to its use, the mark becomes a means of dating the piece upon which it appears. If the mark was used for many years, we may have to rely on other considerations in order to date the piece within the marks span of years. If the period of use of the mark was short, the age of the bottle may be pinpointed to a short period of time." (Toulouse 1971:7)

The history of marking bottles in order to identify the containers' manufacturers or contents can be traced to the first century A.D. when the glassblowers Ennion and Aristeas identified themselves with letters in the sides of molds (Toulouse 1971:8). In 1630 John Colnett, and later Sir Kenelm Digby, was granted a glass manufacturing patent which included a provision for the mandatory marking of his products (Ibid 1971:8). During the late seventeenth century the glass seal was developed as a means of identification (Ibid 1971:8). The development of marking vessel bases can be attributed to the invention of the snap case circa 1850. By the 1880's beer bottles, pharmaceutical bottles, and some preserve jars were manufactured with basal marks when they would have previously been side marked (Ibid 1971:10).

The practice of labeling bottles in the 19th century ranged from extravagant gold foil labels to embossment. The permanency of the label was an important characteristic, especially, for apothecary and pharmaceutical bottles. Various labeling methods were devised to achieve this characteristic. William N. Walton of New York patented the recess label in 1862. This label was applied to an indented portion of the bottle and then covered by a curved piece of glass. Labels made of gold foil and related materials served similar purposes because they were both durable and reusable. In the late 1800's the method of embossing bottles created even more durable labels.

"Beginning in the late 1800's the large glass manufacturing firms had bottle molds of standard shapes into which they inserted the customer's personalized plate and then blew a supply of bottles. This was an inexpensive means of obtaining the necessary prescription bottles, and almost all drugstores took advantage of it. Large drugstores and chains of drugstores usually had their own exclusive molds made and did not use plate-molded bottles." (Munsey 1970:174).

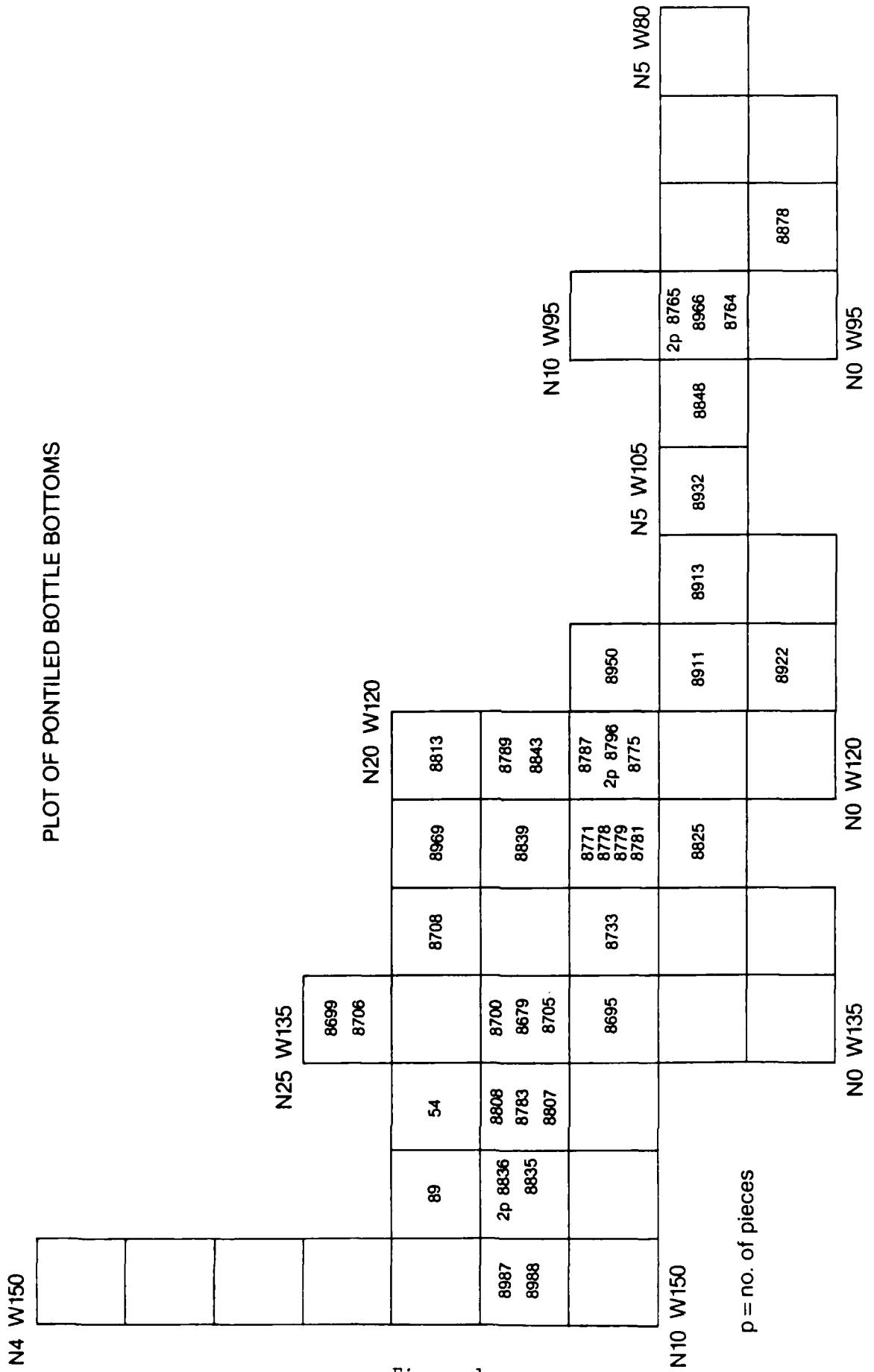

PLOT OF PONTILED BOTTLE BOTTOMS
N4 W150
N10 W150
N25 W135
N20 W120
N5 W105
N10 W95
N5 W80
N0 W135
N0 W120
N0 W95
8987
8988
89
2p 8836
8835
8808
8783
8807
54
8699
8706
8700
8679
8705
8695
8708
8733
8969
8839
8825
8813
8789
8843
8787
2p 8796
8775
8771
8778
8779
8781
8950
8911
8913
8932
8848
8922
2p 8765
8966
8764
8878
p = no. of pieces

Figure 1

conjuction with intensive future background research, may provide for a more comprehensive evaluation of the operation of personal consumption choices in the context of the changes in product and container manufacture and marketing during the use-life period for the site. A few of the most meaningful of these statistics and evaluation are listed below.

1. 85% of the specimens were produced after 1900.
2. 2% were produced before 1860 and none before 1850.
3. Most jars, 872 specimens or 62.3% of the total, contained food or were for food preservation.
4. 218 specimens or 15.6% contained a feminine beauty product, ie., cold cream, cosmetics, etc.,
5. 128 or 9.1% specimens were personal care products.
6. 67 specimens or 4.8% were medical in nature.
7. 56 specimens or 4.0% contained silver polish.
8. 16 specimens or 1.2% contained a tobacco product.
9. 40 specimens or 2.9% were too fragmented to be identified.
10. All of the identified jars were made outside of the city of Pittsburgh.
11. Hazel-Atlas Glass Co., Wheeling, West Virginia was associated with the highest frequency of identified specimens 191.
12. The occupants canned fresh food into recent times, throughout the first half of the twentieth century.
13. The occupants were quite appearance conscious.
14. The occupants evidentally had a large collection of silver items, 1920-1957.
15. There is some evidence that the occupants of the site maintained certain product loyalities over extended periods (Daggett & Ramsdell, etc.).
16. The occupants of the site seem not to have had a strong preference for the form of tobacco sold in glass jars (ie., snuff and pipe tobacco).

Fruit jars have the longest continual usage of any jar at Neville House. Seven Subgroups and 14 Varieties of fruit jars were recovered at the site all dating after 1858. These represent fruit jars of various manufacturing methods, finish styles, brand names and colors (See Definitions and Descriptions).

Another set of jars, having a long time span in the Neville House midden, is associated with the Harriett Hubbard Ayers Company of New York. This set consisted of three different types of cold cream, cosmetics or deodorants, all in milk glass containers.

Machine made petroleum jelly containers, especially those of the Cheesebrough Manufacturing Company New York, were found at Neville House (1903-1960), both in clear and amber glass (Subgroups 2.1 and 2.2, Subcategory 1, Group 1). Further comparisons yielded two more petroleum jelly jars. One was a hand finished ground lip jar (Subgroup 2.3, Subcategory 1, Group 1) dating from 1880 to 1910 and the other was a semi-automatic machine made jar (Subgroup 2.4 Subcategory 1, Group 1), dating from 1895 to 1915. These two jars, although non-embossed, were so similar to the Cheesebrough jars that they were included with the Cheesebrough jars in Subgroup 2. Petroleum jelly must have been used at Neville House from 1880 on (see Descriptions).

One food product has a lengthy association with Neville House. Horlick's Malted Milk Extract of Racine Wisconsin and London, England, are represented by one Subgroup and two Varieties Type 23.2 (Subcategory 1, Group 2) is found in three sizes of ground lip rims from pints to gallons. These items were produced from 1870 to 1910. Subgroup 23.1 is a machine made sample size produced from 1903 to 1930. These two date ranges give Horlick's a potential 60-year association with the site (see Descriptions).

Jars identified with container makers' marks exhibit a similar duration of association with Neville House. The container manufacturer associated with the highest frequency of specimens is the Hazel-Atlas Glass Company of Wheeling, West Virginia. This company is represented by nine Subgroups and 13 Varieties that include fruit jars and commercial jars dating from 1896 to 1964. Jars bearing the trade mark of the Whithall-Tatum Glass Company Millville, New Jersey, are represented by three Subgroups and three Varieties dating from 1903 to 1938. Owens Glass Company of Toledo, Ohio, is represented by jars of three Subgroups and two Varieties dating from 1911 to 1954. And finally, Ball fruit jars of the Ball Brothers Company of Muncie, Indiana, are represented by three Subgroups and four Varieties dating from 1903 to 1979 (see Hochrein GMM and Descriptions GJ).

CONCLUSIONS AND SUMMARY

The analysis of the Glass jar and Glass Jar Rim categories from the Neville House midden has enable the derivation of a number of summary statistics and inferences as presented above. These, in

product to be found at Neville House. Evidently, the occupants had a large collection of silver, perhaps contained in tea services, dinnerware, tableware, etc., that was polished frequently during the period 1920-1957. This would indicate the occupants may have remained affluent during the 1930's Depression Era.

Last on the product content list, with the fewest recovered examples, are the tobacco jars, numbering 16 or 1.2% of the total. These jars probably held pipe tobacco or snuff. The occupants of Neville House appear to have had little use for either.

There are 40 rim specimens too fragmentary to be assigned a product function or probable content. These were assigned a Subcategory, Group, Subgroup and Variety by manufacturing method and style of finish.

A few companies' products were used by the occupants over a lengthy period of time. The product containers that these brands came in changed considerably over the years. By observing the changes in these identified containers over time, a norm was established for other non-embossed containers.

Daggett and Ramsdell, located in New York was a firm of chemists who marketed a facial cream under the brand name Daggett & Ramsdell Perfect Cold Cream. Several forms of product containers from this company were recovered at Neville House. These specimens date to the period after 1903. The earliest examples (Subgroup 22, Subcategory 1, Group 2) were clear glass machine made jars produced with two types of bleaching reagents, manganese dioxide and selenium. Manganese dioxide turns violet in sunlight and tints the clear glass. These jars were produced between 1903 and 1915. Selenium was used after 1915 to produce a clear glass (see Definitions) and turns light brown in the presence of sunlight. The brownish jars of Subgroup 22 were produced from 1915 to 1930. During the 1930's Daggett and Ramsdell decided to market their product in a smaller milk glass container (Subgroup 16, Subcategory 1, Group 2) and add an embossed and stylized D R Company logo. A third type of jar associated with Daggett and Ramsdell is a small milk glass jar with just the D R Company logo.

This latter jar is probably the latest version, representing the current trend toward subsitution of painted labels for embossment. It is cheaper to paint a semi-permanent label on a container than to cut embossing into metal molds. This is the reason so many modern glass containers are non-embossed. Use of paper labels also allows the container manufacturer to utilize one set of molds for many different customers with a resulting reduction in production costs. The savings may be passed on to container buyers and perhaps serves as an incentive for the use of similar jars by different manufactures of related consumer products. The end result is that, in today's market place, the consumer is seeing less and less of the highly individualistic containers produced solely for one company's products. Standardization of containers has become so commonplace that the consumer instinctively knows an olive jar from a pickle jar without reference to brand name or content.

the twentieth century and smaller replacement purchases of newer jars in succeeding years.

The screw threaded fruit jars far outnumber the glass capped ones 407 to 6. This definitely indicates a personal preference by the inhabitants for threaded jars over glass capped jars. Both were readily available to the consumer from 1880 on. Some people preferred the glass capped "Lightning" jars to the threaded metal capped "Mason's", especially for the canning of highly acidic foods. However, the threaded jars proved to be the top competitors, due to a 20-year marketing headstart and to their extremely tight seal as compared with the often not so secure bail clamp of the Lightnings. American production of glass capped jars ceased in 1964. Thus, it might be inferred that the Neville House midden users believed the threaded jars to be a superior product if both were readily available. The frequencies of these jar forms might also indicate a regional preference, since the people of New England preferred the glass capped "Lightning" forms over the screw top "Mason" forms.

The rest of the jar assemblage, some 984 items, can be subdivided by product content. These commercial jars represent 70.5% of the total 1,397 pieces. There are 320 examples of food product jars or 22.9% of the total. Condiment jars form the next largest group of 139 examples or 9.9% of the total. The food containers are subdivided into fruit jars (413), food product jars (320), and condiment jars (139). These 872 items (62.3% of the total) functioned to preserve and contain food.

An interesting sidelight in the eating habits of the Neville House occupants was indicated by their choice of mayonnaise. Fifty-three examples of Hellmann's Blue Ribbon Mayonnaise were recovered at Neville House while neither Kraft nor any other brand was in evidence. It seems the Neville House occupants (1911-1954) preferred the "high priced spread", for Hellmann's product was touted as being superior to any others in taste, ingredients and price.

Cold creams of many different brands and varieties account for 133 items or 9.5% of the total. The ladies of Neville House (1900-1979) must have taken good care of their complexions and been very concerned with their appearances. There are 73 additional items concerned with feminine cosmetics and 12 feminine deodorants. Personal care products, not related to feminine cosmetics or medical items, compose 128 items or 9.1% of the total. These are the salves, ointments, shaving creams and other products used by most members of the household.

Medical items such as tablet jars and jars to hold medical salves, ointments, drugs and other medicinals account for 67 items or 4.8% of the total. This relatively small frequency of medical product jars maybe contrasted with the high frequency of medicinal container specimens noted in the category glass bottle from Neville House as analyzed by Denton (this volume).

Fifty-six jars that contained Wrights Silver Polish were recovered at Neville House. Even though this is a small amount of the total (4%), it is the largest amount of any brand name, commercial jar

Pittsburgh lost its prominence in the glass container industry because of a reluctance to give up antiquated methods of manufacture. During the late 1890's and early 1900's when modern glass container factories were being buit in Washington, Pa., Wheeling, West Virginia, Toledo, Ohio and elsewhere, the small independent glass houses of Pittsburgh were still hand-blowing their products. One by one, these small houses closed down, forced out of business by the over whelming competition from the larger, more modern glass factories. At the present, there is only one company in Pittsburgh, Glenshaw Glass Works, still producing glass jars.

Once again, the glass jar assemblage from Neville House reflects a basic change in the attitudes of American consumers. Early settlers had to be content with local products or do without, unless they were able to purchase imported items. As time progressed, greater amounts of goods were being produced. This, coupled with increasingly better and faster transportation, made it possible to buy goods manufactured anywhere in the U.S.A. As regionalism gave way to a national market, manufacturers, however centrally located, could ship their products anywhere. The jars of Neville House were shipped in from five states: Indiana, New York, Ohio, New Jersey, West Virginia as well as from areas of Pennsylvania.

A number of inferences about the consumption choices of the Neville House occupants can be derived from an analysis of jar function and product content. The greatest number of specimens assignable to any one function were the fruit jars. They are of several different subgroups in three groups, in both threaded and non-threaded subcategories, with 413 examples or 29.5% of the total of 1,397 items. Early ground lip types (1858-1910) account for 129 examples, while those produced with smooth lips in a machine process but without a sealing bead collar equal 193 items. These 193 machine made fruit jars could have been produced either in a semi-automatic or a fully automatic process. Their production method and the absence of a sealing bead collar dates them from 1900 to 1920. Lastly there are 91 fruit jars produced after 1915, as indicated by the presence of a sealing bead collar and by method of manufacture in a fully automated process.

The occupants of Neville House must have considered canning fresh foods an essential labor. An interesting point can be discussed by observing the chronological order and numbers of associated items. When glass fruit jars became available in the 1860's, the occupants of Neville House were soon to respond to this method of preserving consumable products. By the turn of the twentieth century forty years later, many of these ground lip jars had probably been broken and consigned to the dump. However, in a relatively short time span, 1900-20, a large number (193) of machine made jars were brought to Neville House. Did the inhabitants then discard the old ground lip jars that were left in favor of the newer models, thus augmenting the refuse of the last 40 years with one large deposit? Perhaps, since there is a smaller number (91) of still newer model jars that were procured over a longer time span, 1915-1979. These frequencies may indicate a major purchase of jars sometime within the first 20 years of

actually made before 1900 and only 2% were manufactured before 1860.

First and foremost, the jars from the Neville House midden give an insight into an increasingly industrialized America, with advancing consumerism and the beginnings of the "Disposable Society". The old Yankee homily "Use it up, wear it out, make it do or do without" is very much in evidence in the early portion of this assemblage. The very fact that only 2% of the total jars date before 1860 points not only to the scarcity of glass jar products but also points out that maybe they were maximally utilized. Among early families, even well to do families, little was thrown out until it was broken or of absolutely no further use. Before the industrial revolution, beginning in 1860 and escalating still, all manufactured goods were produced by hand and therefore were at a premium. If an item came in a jar, even a commercial jar, the contents were consumed and the jar saved. In the case of fruit jars, they were handed down from generation to generation (This researcher has seen hand finished fruit jars in use by a third generation of canners).

Once the industrial revolution got under way, increasingly sophisticated and faster manufacturing modes began to produce an abundance of consumer goods. Machinery made more products, and products became cheaper, especially glass containers. What was scarce in 1860 suddenly became abundant 20 years later, and, in the processe, these superfluous items found their way to the dump. After the turn of the century, a number of fully automated glass container blowing machines came into production. One machine could do in one hour what it took 200 men all day to produce. With this new capacity to create a superabundancy of glass jars and containers, the stage was set for the beginning of the American "Disposable Society". The virtual avalanche of cheap disposable containers guaranteed that even the most frugal of Americans began throwing away their excess jars, especially commercial containers. In Milwaukee it is estimated that each person generates 25 pounds of garbage and rubbish each week (Thompson and Rathje 1982:459). The Neville House midden offers graphic evidence of this increasing abundance of containers which were quickly disposed of after their contents were consumed.

Information about the use-life of the site can be derived from the jar category of the Neville House assenblage as it reflects the changing nature of production, marketing and transportation of glass containers fo consumer products. Pittsburgh was long a leader in glass container production. The first real heavy industry in Pittsburgh requiring considerable mechanical skills was a glass house. It was started by Thomas O'Hara in the 1790's, on the South Side or the old Birmingham section of Pittsburgh. Throughout the first half of the nineteenth century about 50% of all bottles and jars manufactured in the United States were produced in Pittsburgh. However, no examples of these products have been found at Neville House. Virtually all the identified glass jars and rims recovered at Neville House were made outside of the city of Pittsburgh.

With the introduction of threaded fruit jars by John Landis Mason in 1858, the jar industry began moving away from Pittsburgh.

DISCUSSION OF GLASS JARS AND RIMS

Glass jar containers, especially the commercial types, were not produced in quantity in the United States until after 1815. At that time food preservation according to the Frenchman Nicolas Appert's method became popular (Toulouse 1969:97). Appert discovered in 1806 that food could be preserved by sealing it in glass jars and boiling the filled jars. He published his findings in 1810 and, soon after that worldwide production of glass jars began in earnest (Toulouse 1969:97-8). Glass jar containers in the Neville House midden could not then be associated with the earliest occupation of the site, for they must necessarily make their appearance after 1815.

The 1,397 artifacts, composing the catagories GJ and GJR, were grouped into similar container analytical groupings according to a dated manufacturing technique.

One of the first results of this procedure was evidence of an apparent absence of constant chronological stratification in the Neville House midden. The mixing of early and late objects in any level is noticable in all artifact classes. Machine made clear glass jars produced in 1960 are found side by side with ground lip rim fragments of jars produced 80 to 100 years earlier.Using manufacturing techniques to date the jars and jar rims it was determined that 85% or 1,189 of the total 1,397 artifacts, of these categories were manufactured after 1900. This is significant since it demonstrates that the Neville House midden was most actively utilized after the turn of the century. There is an absence of early jar forms produced from 1815-1850. These were the corker and wax sealing forms, typified by their wide flaring mouths with rolled or double ringed lips. No examples of these items were recovered during the 1979 excavations. The earliest jar recovered is Subgroup 6, Subcategory 2, Group 2, represented by one partial rim. This jar, a commercial variety, was probably produced 1850-1880, certainly not before.

The largest number of early hand finished jars recovered at Neville House are fruit jars assigned to Subgroup 11 (114 examples) and Subgroup 12 (12 examples) of Subcategory 1, Group 2. These are the so-called "Mason Jars" with a screw thread and ground lip produced for the home canning industry and manufactued from 1858-1910. These 126 items, and 40 additional artifacts representing commercial jars and glass-capped fruit jars produced before 1900, comprise 12% of the total 1,397. The use of ground lip fruit jars to date the midden can be misleading, for they were manufactured well into the first decade of the twentieth century. In addition, fruit jars were repeatedly reused again until they were broken (or until a model was developed.) The remaining 3% or 42 artifacts are those that were manufactured in a semiautomatic process and are thought to have been produced before 1900.

Only 15% of the glass jars and jar rims were produced before 1900. Many of these, however, have overlapping manufacturing dates, well into the twentieth century, and it is estimated that only 5 to 7% were

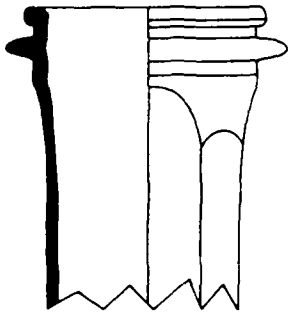


Fig. 89

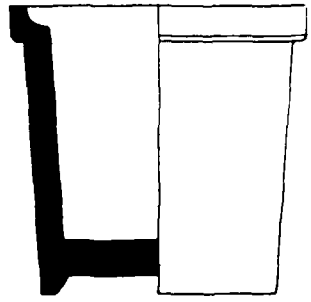


Fig. 90

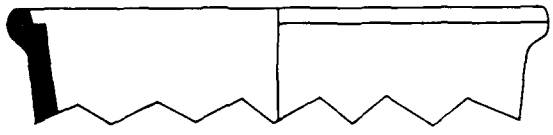


Fig. 91

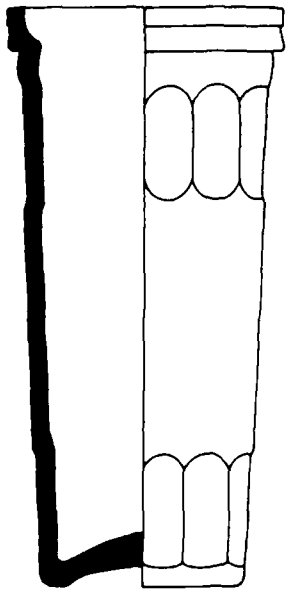


Fig. 92

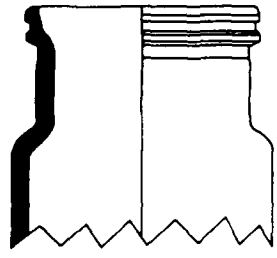


Fig. 93

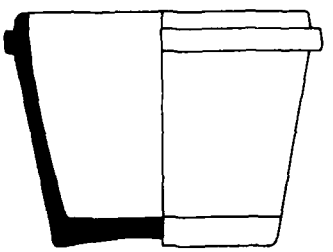


Fig. 81

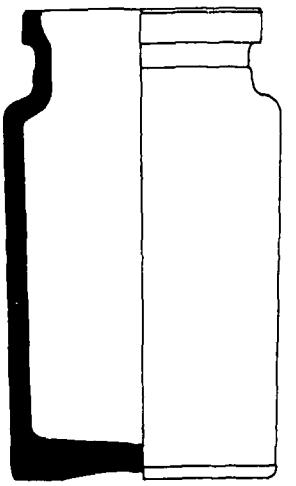


Fig. 82

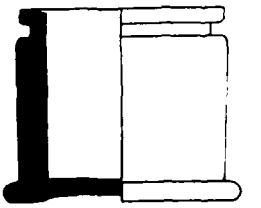


Fig. 83

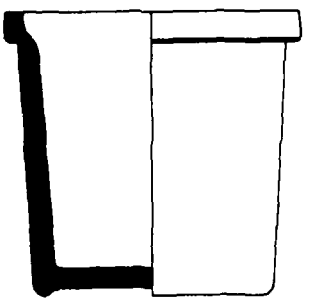


Fig. 84

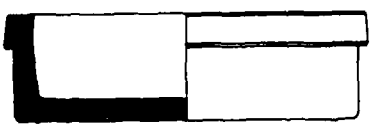


Fig. 85

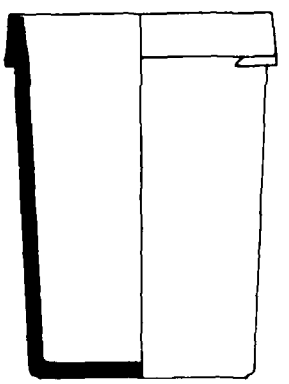


Fig. 86

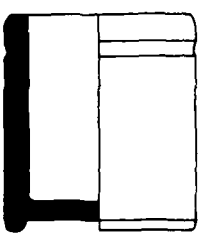


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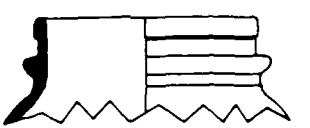


Fig. 88

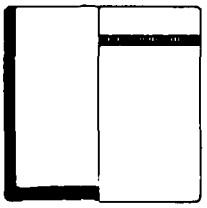


Fig. 70



Fig. 71



Fig. 72



Fig. 73

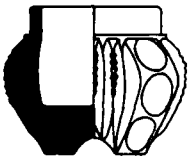


Fig. 74



Fig. 75

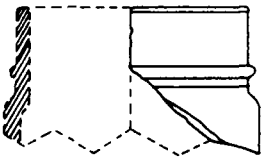


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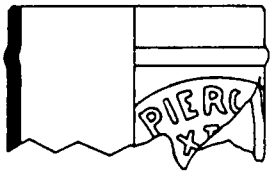


Fig. 77

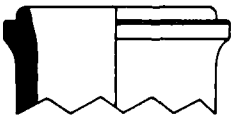


Fig. 78

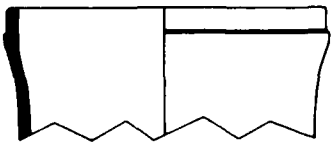


Fig. 79

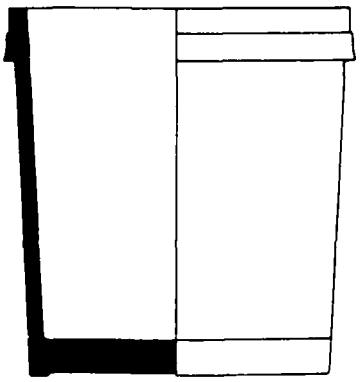


Fig. 80

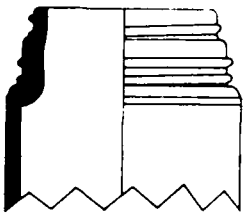


Fig. 61

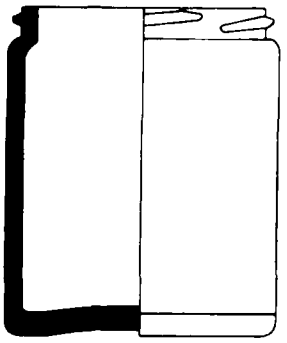


Fig. 62



Fig. 63

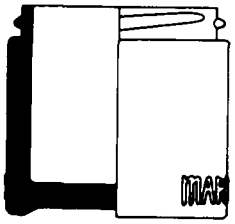


Fig. 64

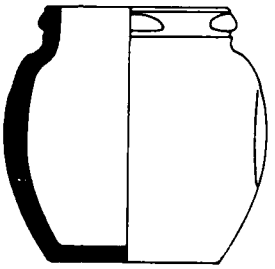


Fig. 65

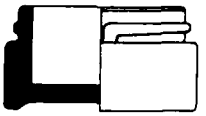


Fig. 66

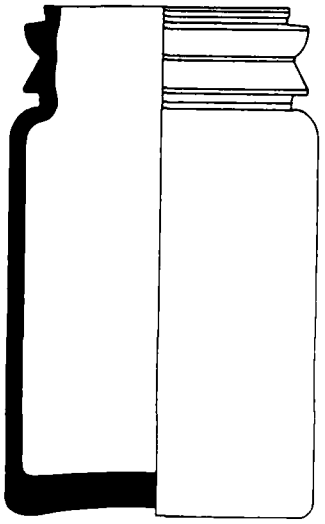


Fig. 67

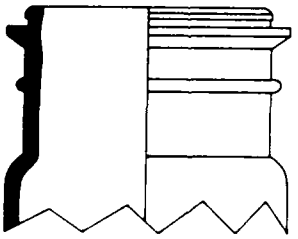


Fig. 68

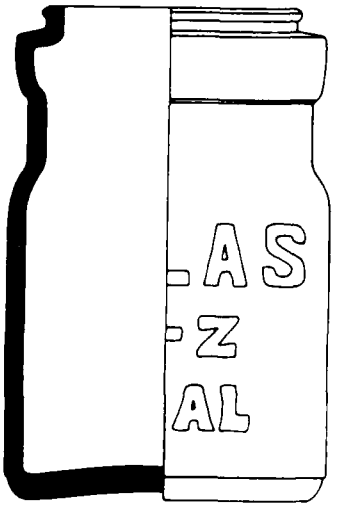


Fig. 69

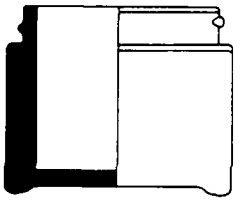


Fig. 52

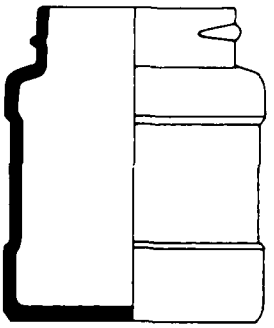


Fig. 53

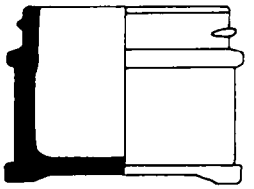


Fig. 54

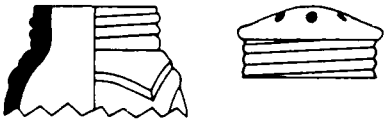


Fig. 55

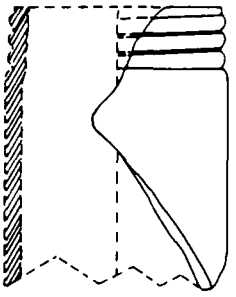


Fig.56

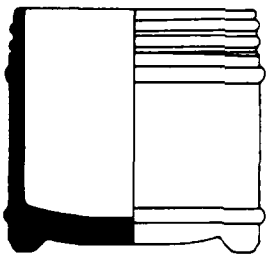


Fig.57

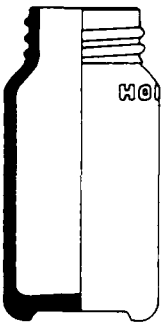


Fig.58

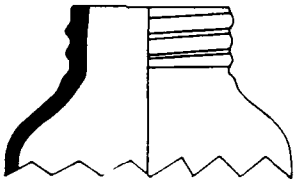


Fig. 59

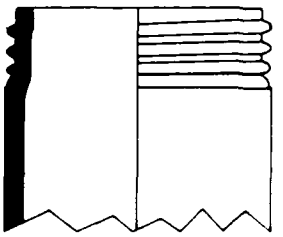


Fig. 60

Circa 1867, panel bottles with embossed lettering came into existence (Lorrain 1968:40). In 1906 the first attempt to establish federal labelling standards was instituted via the Pure Food and Drug Law. However, the law proved inadequate and was superceded by the Federal Food, Drug and Cosmetic Act of 1938. This act required that all labels exhibit the legal name of the product, the net contents, and the name and address of the product packer, manufacturer or distributor (Busch 1981:99).

The Neville House "Glass Maker's Marks", or "GMM" category was established to encompass all glass container fragments which exhibit historical information. This information could take the form of embossed, painted, etched, or paper product labels and the embossed trademark of the glass container's manufacturer. None of the artifacts in GMM are complete. The complete specimens were grouped in the categories of "Glass Bottles" or "Glass Jars". All of the artifacts in the GMM category are fragments of containers. There are no miscelleneous glass items which exhibit historical information included in the category.

The main emphasis in the analysis of the GMM assemblage was on the historical information exhibited by the specimens. Besides obvious dates, names, and locations supplied by the container labels and glass manufacturers' trademarks, information pertaining to the occupants of Neville House could also be obtained. Through the analysis of the GMM assemblage it was hoped information concerning the occupant's dietary, medical, and social behaviors could be ascertained. The historical information present on the artifacts could yield information pertaining to trading patterns among the occupants and the local business district as well as the relationships between local merchants and nationwide distributors. The Neville House was located in a rural area, among other small communities, outside of a large metropolitan area. The artifacts could possibly demonstrate the relationship between the occupants and the local business district as well as their relationship with the larger, more distant metropolitan district. The relationship between the manufacturers of the glass containers and the manufacturers of the containers' contents could also be studied. This is especially interseting because of Pittsburgh's role in nineteenth century glass making. At least eight Pittsburgh area glass manufactuerers are repersented among the specimens.

METHODOLOGY

The number of specimens assigned to the Glass Maker's Mark category and the limited availability of laboratory space made it necessary to analyze the specimens in each field catalogue group (F.C.), separately, rather than the Glass Maker's Mark artifact assemblage as a whole. As the specimens were removed from storage and examined, they were divided into analytical groupings on the basis of the historical information embossed, painted, or paper labeled on them. The historical information on which each group was based, could take the form of a container's product name or product manufacturer (e.g.

BROMO-SELTZER or The Joseph Horne Company). The information could also be in the form of the trademark of the container's manufacturer (e.g. The Laurens Glass Works). Those specimens which exhibited both product labels and glass manufacturer's trade marks, were listed in both of the appropiate groups, and were cross-referenced to each other. The specimens were listed under the appropriate groups, sketched, and described in detail. They were then repackaged and returned to storage. Those specimens which could not be identified at the time were labeled and left out for future examination.

ANALYSIS

Once the artifact groups were established, analysis began with research of the products, their manufactures, and the container manufacturers. The research incorporated historical documents, collector's guides and personal communications with various local bottle collectors. The information retrieved from these sources made it possible in most cases to complete fragmentary labels or marks. It also made it possible to determine the locations of various product and glass manufacturers, as well as dates. This information was then coded for the computer analysis. In the coding process, all of the groups were assigned sequential three-digit numbers beginning with 001. The groups were alphabetically ordered. As analysis proceeded a few groups were added or eliminated and it became necessary to disrupt the alphabetical ordering. This had no effect on the outcome of the computer anaylsis. In the same manner, the locations of the product manufacturers were coded. The state locations were designated by three-digit numbers beginning with 001, which corresponded to an initially alphabetically ordered list.

The dates calculated for each specimen were also coded for the computer. Every effort was made to assign dates to all of the groupsor distinguishable subgroups on the basis of the historical information revealed through the product and/or glass manufacturers' trademark. For example, BROMO-SELTZER has been manufactured since 1891, but a subgroup of BROMO-SELTZER bottle fragments embossed with the Maryland Glass Company's trademark of an "M" within a circle could only have been manufactured since 1916. Manufacturing dates, if not available via trademarks, were based on the method of manufacture exhibited by morphological attributes. If the specimens were too fragmentary to exhibit the necessary attributes, the attributes exhibited by complete examples, of the container being considered, were used. The complete examples were provided by containers within the Neville House assemblage, containers exhibited in references, or personal collections. The computer code for each specimen concluded with two digits which indicated the product's function (e.g. medicine, beverage, personal care, etc.). The assigned functions are defined as follows:

Beverage:

Wine, Whiskey, Gin, Vermouth, etc.
Beer
Soda, Soda extract
Mineral Water

Beverage Cont.:
- Bottled Water
- Milk
- Juice

Personal Care:
- Perfume
- Cosmetic Creams
- Deodorant
- Mouthwash
- Hair Dye
- Soap, Shampoo
- Petroleum Jelly
- Toothpaste/powder

Domestic Care:
- Disinfectant
- Household Cleaners
- Ammonia
- Bluing
- Shoe Polish
- Insecticides
- Veterinary Products
- Plant Food, Fertilizer
- Machine Oil
- Paints
- Non-medical Chemicals
- Ink
- Glue

Consumables (Food):
- Baby Food
- Nursing Bottles
- Condiments
- Food extracts, Flavoring
- Cooking Oil
- Jarred Meats and Cheeses
- Preserve Jars

Medicine:
- Patent and Proprietary Medicines
- Pharmaceuticals
- Over the Counter Medications
- Bitters

Other:
- Glass Contianer Manufacturers
- Unidentified Products
- Unidentified Specimens

A standard form for all of the GMM artifact groups was drafted, when the data was ready to be compiled. This form was divided into: the group name; the number of specimens in the group; the color of the individual specimens; the number of individual forms (the number of

containers which could be reconstructed from the specimens in the class); the shapes of the forms represented; the dimensions of the forms; the marks or labels found in association with the forms; the name of the container's contents (product name); the location of the product's manufacturer; the date during which the product was manufactured; the name of the container's manufacturer; the date during which the container could have been manufactured; a description of the group specimens; and historical comments.

The name of the artifact group was based on the product label information, or the glass manufacturer's name. The number of specimens in the artifact group was expressed as an artifact count. The fragmentary labels or marks associated with the specimens were described as they would appear on the reconstructed forms, if possible. The symbols used to describe the labels and trademarks are as follows: Quotation marks (" ") enclosed all historical information found on the container labels. Within the quotation marks are the words and punctuation as they appear on the containers. On the fragmentary labels, where not all of the information appears, brackets ([ ]) enclose letters, words, or phrases which are known to complete the labels. Ellipsis points (...) indicate portions of the fragmentary label which do not appear and are not known. Parentheses (( )) within the quotation marks enclose descriptions of figures or pictures which appear in the label or mark. The names, locations, and dates of the products and glass manufacturers were derived from the research materials.

The descriptions of the specimens in the groups were dealt with as if the specimens represented reconstructed forms. This method of description was deemed necessary because the fragmentary specimens, in most cases, did not evidence any useful morphological data. Information obtained from the actual reconstructed specimens was combined with published information in order to present a more complete description. All of the containers represented by the artifacts in the Glass Maker's Mark category were either pressed or blown in molds via the same manufacturing methods. Because of this, the reconstructed forms in the Neville House assemblage demonstrated uniformity with the complete examples represented in the research materials and the Neville House assemblage. The description also refers the reader to any identical whole specimens in the Neville House Assemblage.

Completing the artifact group data forms are historical comments pertaining to the products or to the glass manufactures. Modern information concerning those products which continue to be manufactured at the time of this writing was acquired in most cases from modern product labels.

Group Name: ABSORBINE JR.
Group Number: 001.
No. of Specimens: 14 fragments.
Color of Specimens: 14 colorless.
No. of Individual(s) Represented: 8 (minimum).
No. of Individual Shapes Represented: 8 round.
Base Diameter: (8) 4.8 cm.
Height: (8) 14.0 cm.
Associated Marks/Labels: Embossed around the upper bodies of the round bottles is "ABSORBINE JR. 4 FL...". Embossed across at least six of the bases is "W. F. YOUNG INC. (in downturned arc)/U.S.A./SPRINGFIELD MASS. (in upturned arc)". Two bases are embossed with "W.F.YOUNG P.D.F.S. (in downturned arc)/U.S.A./SPRINGFIELD, MASS. (in upturned arc)".
Product Name: 8 ABSORBINE JR.
Location of Product Manufacturer: 8 Springfield, Massachusetts.
Date of Product Manufacturer: 8, ?-present.
Container Manufacturer Name: 8 unknown.
Location of Container Manufacturer: 8 unknown.
Date of Container Manufacturer: 8, 1903-1920.
Description: The ABSORBINE JR. bottle fragments include base, body, and shoulder fragments of at least eight cylindrical bottles. The colorless bottles have a basal diameter of 4.8 cm and a reconstructed height of 14.0 cm. The bottles exhibit seam marks around the base, up the body, and over the lip. This, along with evidence of machine cut-off scars and valve marks, would suggest that the bottles were manufactured by an automatic bottle machine. These bottles had a square bead finish which accommodated a cork stopper which was topped off by tin. ABSORBINE JR. bottles are represented among the whole bottles by specimen 8848-8.
Comments: ABSORBINE JR. is a liniment for muscle aches, which is still manufactured by W. J. Young Incorporated of Springfield, Massachusetts. The liniment is known to have come in at least one early type of bottle -- an amber, union oval bottle which was blown in a mold. It exhibited a beaded lip which probably accommodated a cork stopper (Adams 1971:57).

Group Name: ACME SHOE DRESSING.
Group Number: 002.
No. of Specimens: 8 fragments.
Color of Specimens: 8 aqua.
No. of Individual(s) Represented: 3.
No. of Individual Shapes Represented: 3 square (fragmentary).
Base Diameter: (3) 4.0 cm x 4.0 cm.
Height: 3 unknown.
Associated Marks/Labels: Embossed down the front of the square bottles is "ACME SHOE DRESSING INC./WATER PROOFING/THE WOLFF CHEMICAL CO./PHILA.U.S.A.".
Product Name: 3 ACME SHOE DRESSING.
Location of Product Manufacturer: 3 Philadelphia, Pennsylvania.
Date of Product Manufacturer: 3 unknown.
Container Manufacturer Name: 3 unknown.
Location of Container Manufacturer: 3 unknown.
Date of Container Manufacturer: 3, 1870-1910.

Description: The ACME SHOE DRESSING bottle fragments include base and body fragments of at least three square bottles with beveled corners. These aqua bottles have reconstructed basal dimensions of 4.0 cm x 4.0 cm. They exhibit seam lines extending up opposite corners from the basal edge, and were probably finished by hand with a lip which accommodated a cork stopper closure (Personal Communication: Winters). ACME SHOE DRESSING bottles are represented among the whole examples by specimen 8850-10.
Comments: None.

Group Name: The American Bottle Company.
Group Number: 003.
No. of Specimens: 7 fragments.
Color of Specimens: 1 pale green; 2 emerald green; 3 cobalt blue; 1 amber.
No. of Individual(s) Represented: 7.
No. of Individual Shapes Represented: 7 round.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the bases of three of the round bottles is "A.B.Co.". Four bottles are embossed across the lower body with "A.B.Co.", and one of these is embossed across the base with a shield containing the monogrammed letters "IBC" (group 118).
Product Name: 1 The Independent Brewing Company; 6 unknown.
Location of Product Manufacturer: 1 Pittsburgh, Pennsylvania; 6 unknown.
Date of Product Manufacturer: 1, 1907-1933; 6 unknown.
Container Manufacturer Name: 7 The American Bottle Company.
Location of Container Manufacturer: 7 Chicago, Illinois.
Date of Container Manufacturer: 7, 1905-1916.
Description: The container fragments embossed with The American Bottle Company trademark include base/body fragments of seven cylindrical bottles. One of these bottles is pale green, three are cobalt blue, two are emerald green, and one bottle is amber. All of the bottles were machine manufactured. They exhibit seam lines originating from a basal edge line, up the body of the bottle. The amber specimen is also embossed with The Independent Brewing Company's trademark. For a description, refer to group 118.
Comments: The American Bottle Company was formed as the result of a merger between The Ohio Bottle Company, The Streator Bottle and Glass Company, and The Aldolphus Busch Manufacturing Company (which later operated independently). The company became part of The Owens Bottle Company from 1917 to 1929, when the merger of Owens Bottle and Illinois Glass caused The American Bottle Company to lose its identity. The mark embossed on the specimens in this group is the trademark which was used by American Bottle from 1905 to 1916 (Toulouse 1971:30-33).

Group Name: Unidentified Ammonia Bottles.
Group Number: 246.
No. of Specimens: 2 fragments.
Color of Specimens: 2 aqua.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 oval.
Base Diameter: N/A.

Height: N/A.
Associated Marks/Labels: Embossed across the upper front is "AMMONIA (in downturned arc)".
Product Name: 1 unknown.
Location of Product Manufacturer: 1 unknown.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1 unknown.
Description: The unidentified ammonia bottles include shoulder and neck/finish fragments of an oval bottle. The aqua bottle exhibits a tapered lip which was hand finished and accommodated a cork stopper closure.
Comments: None.

Group Name: The Anchor Hocking Glass Corporation.
Group Number: 005.
No. of Specimens: 6 fragments.
Color of Specimens: 4 colorless; 1 emerald green; 1 amber.
No. of Individual(s) Represented: 6.
No. of Individual Shapes Represented: 4 round; 1 rectangular; 1 oval.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the bases of at least five of the containers is the Anchor Hocking trademark of an "H" and a superimposed anchor. The sixth container is a fruit jar which has this trademark embossed across the body. One rectangular bottle is also embossed across the upper body with "SQUIBB" (group 215). One oval bottle is also embossed across the lower front with "...PEERS/...0 YEARS".
Product Name: 1 SQUIBB Cod Liver Oil; 5 unknown.
Location of Product Manufacturer: 1 Princeton, New Jersey; 5 unknown.
Date of Product Manufacturer: 1, 1858-present; 5 unknown.
Container Manufacturer Name: 6 The Anchor Hocking Glass Corporation.
Location of Container Manufacturer: 6 Lancaster, Ohio.
Date of Container Manufacturer: 6, 1938-present.
Description: The container fragments which are embossed with the Anchor Hocking trademark include base and body fragments of five bottles and one fruit jar. The bottles include three colorless cylindrical bottles; one emerald green rectangular bottle with beveled corners; and one amber oval bottle. All the bottles in this group were manufactured by machine. They exhibit seam lines and, in some instances, machine cut-off scars. The emerald green specimen is also embossed with marks associating it with SQUIBB Cod Liver Oil. For a description, see group 215. The amber bottle is embossed with an unidentified product label. The Anchor Hocking trademark is represented among the whole bottles by specimens 8696-2 and 8850-8.
Comments: Several corporate changes involving The Anchor Cap Corporation and The Hocking Glass Company led to the formation of The Anchor Hocking Glass Corporation. Anchor Hocking went on to acquire control of such companies as Carr-Lowery without changing names (Toulouse 1971:46-8).

Group Name: Armour and Company Packers.

Group Number: 006.
No. of Specimens: 9 fragments.
Color of Specimens: 4 white milk glass; 3 colorless.
No. of Individual(s) Represented: 7 (minimum).
No. of Individual Shapes Represented: 6 round; 1 square.
Base Diameter: (3) 6.2 cm; (3) 5.0 cm; (1) 4.4 cm x 4.4 cm.
Height: 7 unknown.
Associated Marks/Labels: Embossed across 3 cylindrical jars is a shield containing "ARMOUR & CO./PACKERS (diagonally) CHICAGO". One cylindrical jar is embossed across the base with "ARMOUR AND COMP[ANY]/855/PATT. FEB[.10.03]." The square jar is embossed across the base with "Armour & Company (in script)/CHICAGO/U.S.A.".
Product Name: 7 Armour & Company Processed Foods.
Location of Product Manufacturer: 7 Chicago, Illinois.
Date of Product Manufacturer: 7, 1885-present.
Container Manufacturer Name: 7 unknown.
Location of Container Manufacturer: 7 unknown.
Date of Container Manufacturer: 3, 1903-1915; 4, 1903-1930.
Description: The Armour and Company containers include base/body fragments of one square jar, three round jars which taper out from the base, and three cylindrical jars. The square jar is of white milk glass and has basal dimensions of 4.4 cm x 4.4 cm. The three cylindrical jars are of white milk glass with basal diameters of 5.0 cm. The three round jars are colorless with basal diameters of 6.2 cm. All of the containers were machine manufactured with the milk glass, cylindrical examples being blown, while the colorless examples were pressed. The milk glass, cylindrical jars exhibit a side seam from the base to the finish parting line and a lip which is smooth and round beaded. The colorless jars exhibit a finish parting line and an extended lip from a tapered collar. Armour and Company jars are represented among the whole jars by Subcategory 2, Group 2, Subgroup 17.
Comments: These jars probably contained preserved meat or cheese. Armour & Company first began packing meat extracts in 1885. The use of glass containers represented in this group was not initiated by the company until about 1900 (Haskell 1981:46-7).

Group Name: The Armstrong Cork Company, Glass Division.
Group Number: 007.
No. of Specimens: 4 fragments.
Color of Specimens: 3 colorless; 1 amber.
No. of Individual(s) Represented: 4.
No. of Individual Shapes Represented: 3 round; 1 rectangular.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed on the bases of these three round and one square bottles is the Armstrong trademark of an "A" within a circle. Two of the round examples are embossed across the base with an inverted triangle containing the letter "C". Along the left side of the triangle is "REGISTERED". Above the triangle is "13 (the Armstrong trademark) 45". Encircling all of these markings is "CANADA DRY GINGER ALE INC. NEW YORK/CONTENTS 12 FL OZ.". Embossed across the shoulder of this bottle is "CANADA DRY" (group 034).
Product Name: 2 CANADA DRY GINGER ALE; 2 unknown.

Location of Product Manufacturer: 2 New York; 2 unknown.
Date of Product Manufacturer: 2, ?-present; 2 unknown.
Container Manufacturer Name: 4 The Armstrong Cork Company, Glass Division.
Location of Container Manufacturer: 4 Lancaster, Pennsylvania.
Date of Container Manufacturer: 4, 1938-1969.
Description: The container fragments which are embossed with The Armstrong Cork Company trademark include base/body fragments of one rectangular and three cylindrical bottles. The rectangular bottle is amber in color, while the cylindrical bottles are colorless. One of these colorless cylindrical bottles is also embossed with marks associating it with CANADA DRY GINGER ALE. For a description, see group 034. All of the specimens in this group were manufactured by machine, as exhibited by characteristic side seams.
Comments: The Armstrong Cork Company was formed in 1860 by Thomas M. Armstrong and John D. Glass. The company manufactured corks and other types of closures until they entered the glass business in 1938. At this time, Armstrong bought The Whitall-Tatum Glass Company and The Hart Glass Manufacturing Company. A general line of containers, in addition to insulators, pressed ware, etc., were produced (Toulouse 1971:24-25).

Group Name: The Atlas Glass Company.
Group Number: 008.
No. of Specimens: 88 fragments.
Color of Specimens: 10 pale green; 5 colorless; 73 aqua.
No. of Individual(s) Represented: 10 (minimum).
No. of Individual Shapes Represented: 10 round.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: The specimens in this group are embossed in three ways. The first style of jars are embossed across the bodies with "ATLAS (in downturned arc)/E-Z/SEAL/TRADE MARK (in upturned arc)". Embossed across the base is "...E-[Z]/SEA[L]/...". The second style of jars are embossed across the bodies with "ATLAS/STRONG SHOULDER/MASON". The third style of jars are embossed across the body with "ATLAS/MASON'S/PATENT/NOV 30th/1858".
Product Name: 10 unknown.
Location of Product Manufacturer: 10 unknown.
Date of Product Manufacturer: 10 unknown.
Container Manufacturer Name: 10 The Atlas Glass Company.
Location of Container Manufacturer: 10 Washington, Pennsylvania.
Date of Container Manufacturer: 10, 1896-1964.
Description: These jar fragments, manufactured by and exhibit the trademark of The Atlas Glass Company, include base and body fragments of an undetermined number of cylindrical body fragments of an undetermined number of cylindrical jars. The colorless, pale green, and aqua jars were of an early machine-manufactured type, produced both in semi-automatic and fully-automated machines (Personal Communication: Winters). Atlas jars are represented among the whole exampls by Subcategory 1, Group 2, Subgroup 13, Variety 2 and 4, as well as Subcategory 4, Group 1, Subgroup 1, Variety 5.
Comments: The Atlas Glass Company was founded in 1896 by C. N. Brady, J. W. Paxton, R. J. Beatty, and George Beatty. The company

incorporated the blue glass-making machine in order to manufacture the "ATLAS E-Z SEAL". In 1898, The Atlas Glass Company merged with The Republic Glas Company, and later The Wheeling Metal Company, to become The Atlas Glass and Metal Company. In 1902, this firm merged with The Hazel Glass Company to become The Hazel Atlas Glass Company (Toulouse 1971:55-56).

Group Name: Ayer/Harriet Hubbard Ayer.
Group Number: 112.
No. of Specimens: 11 fragments.
Color of Specimens: 10 white milk glass; 1 aqua.
No. of Individual(s) Represented: 6.
No. of Individual Shapes Represented: 3 square; 2 round; 1 oval.
Base Diameter: (3) 4.6 cm x 4.6 cm; 3 unknown.
Height: (3) 6.2 cm; (1) 4.9 cm; 2 unknown.
Associated Marks/Labels: Embossed across the bodies of the square jars is "HARRIET HUBBARD (in downturned arc)/AYER/NEW YORK NY/USA". Embossed across one round base is "[HARRI]ET HUBBA[RD A]YER...". Painted across the other round body is "AYER DRY/DEODORANT/ANTIPERSPIRANT/DEODORANT...RSPIRANT/A superior produ... day-long pro-/tection Non-i...an be used after shaving or.../Non-sticky, fragrant./...ROLAN/Active in ... xi... minum phenol suifon ...hate/... sl.../...SA...RD AK...VER/Made...London...Toronto/Cont. 11/2 ozs. New York...". Opposite of this is "Aye[r] (in script)". The oval aqua bottle is embossed across the base with "AYER".
Product Name: 4 HARRIET HUBBARD AYER deodorant; 1 AYER DEODORANT, ANTIPERSPIRANT; 1 AYER ?.
Location of Product Manufacturer: 4 New York; 2 unknown.
Date of Product Manufacturer: 6 unknown.
Container Manufacturer Name: 6 unknown.
Location of Container Manufacturer: 6 unknown.
Date of Container Manufacturer: 6, 1903-present.
Description: The HARRIET HUBBARD AYER container fragments include base, body, and rim fragments of 3 square jars, 2 cylindrical jars, and 1 oval bottle. The square jars are of white milk glass and are 6.2 cm in height, with basal dimensions of 4.6 cm x 4.6 cm. They exhibit seam lines up from the basal edge line, and over the continuous thread finish and smooth lip. There are also machine valve marks on the bases, suggesting that the jars were manufactured by machine. This type of jar is represented among the whole jars by Subcategory 1, Group 2, Subgroup 10. One of the white milk glass cylindrical jars has a painted label. This jar was machine made, exhibiting seam lines extending from the basal edge line, up over the continuous thread finish. This type of jar is represented among the whole jars by Subcategory 1, Group 2, Subgroup 17. The second milk glass, cylindrical jar is 4.9 cm in height. It was also manufactured by machine, exhibiting seam lines up from the basal edge over the continuous thread finish. The aqua oval bottle has a seam line breaching a shallow depression on the base, possibly from being blown in a bottom hinge mold.
Comments: At least the oval bottle and possibly the deodorant jars can be linked to the history of Dr. J. C. Ayer of Lowell, Massachusetts. Dr. Ayer became a millionaire, owned paper and cotton mills, and was

the founder of Ayer, Massachusetts. Ayer initially achieved such prosperity through sale of Ayer's Hair Vigor, a concoction which promised to return grey hair to its natural state and vitality (Ketchum, 1975:162).

Group Name: The Ball Brothers Company/The Ball Corporation.
Group Number: 009.
No. of Specimens: 25 fragments.
Color of Specimens: 25 aqua.
No. of Individual(s) Represented: 7 (minimum).
No. of Individual Shapes Represented: 7 round.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the bodies of these round jars is the Ball Brothers trademark "Ball (in script)", written diagonally. Below this mark on at least two jars is "PERFECT MASON...". Below the mark on at least four jars is "MASON...".
Product Name: 7 unknown.
Location of Product Manufacturer: 7 unknown.
Date of Product Manufacturer: 7 unknown.
Container Manufacturer Name: 7 The Ball Brothers Company/The Ball Corporation.
Location of Container Manufacturer: 7 Muncie, Indiana.
Date of Container Manufacturer: 7, 1892-present.
Description: The jar fragments manufactured by and exhibiting the trademark of The Ball Brothers Company include body fragments of at least seven cylindrical jars. The aqua jars were probably manufactured by machine (Personal Communication: Winters). "Ball jars" are represented among the whole examples by Subcategory 1, Group 1, Subgroup 8, Variety 2.
Comments: In 1887, Frank Ball began construction on his Muncie, Indiana jar plant, which opened the following year. In 1898, Ball developed a machine for semi-automatic operations, which was improved in 1907 and gave the Ball brothers an edge in the manufacture of Mason-like jars. "Until 1892 the words 'The Ball' appeared in block or gothic letters on their jars. A short period followed in which italics were used. This was followed by script letters, but the style was continually changed over the years... Until about 1904 reference to the Mason patent date of November 30, 1858, was included" (Toulouse 1971:66-68).

Group Name: BARTON'S DYANSHINE.
Group Number: 010.
No. of Specimens: 3 fragments.
Color of Specimens: 3 colorless.
No. of Individual(s) Represented: 2.
No. of Individual Shapes Represented: 2 round.
Base Diameter: (2) 5.3 cm.
Height: (2) 9.6 cm.
Associated Marks/Labels: Embossed across the bases of the round bottles is "BARTON'S (in downturned arc)/4/DYANSHINE (in upturned arc)". Although there are no fragments other than basal fragments in this group, the necks of these bottles would be embossed with "3 1/2OZ".

Product Name: 2 BARTON'S DYANSHINE.
Location of Product Manufacturer: 2 unknown.
Date of Product Manufacturer: 2 unknown.
Container Manufacturer Name: 2 unknown.
Location of Container Manufacturer: 2 unknown.
Date of Container Manufacturer: 2, 1903-1920.
Description: The BARTON'S DYANSHINE bottle fragments include base/body fragments of two cylindrical bottles. The colorless bottles have basal diameters of 5.3 cm and reconstructed heights of 9.6 cm. The bottles were manufactured by machine, as exhibited by machine cut-off scars on the bases. BARTON'S DYANSHINE bottles are represented by a whole bottle specimen.
Comments: N/A.

Group Name: BAYER ASPIRIN.
Group Number: 011.
No. of Specimens: 5 fragments.
Color of Specimens: 5 colorless.
No. of Individual(s) Represented: 1 (minimum).
No. of Individual Shapes Represented: 1 oval.
Base Diameter: (1) 2 cm x 1.3 cm.
Height: (1) 6.6 cm.
Associated Marks/Labels: Embossed across the front of the oval bottle is a circle containing "B/A/BAYER/E/R". Embossed down the left or right side is "THE BAYER CO.".
Product Name: 1 BAYER ASPIRIN.
Location of Product Manufacturer: 1 Hudson, New York.
Date of Product Manufacturer: 1, 1915-present.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1880-present.
Description: The BAYER bottle fragments include base and body fragments of at least one oval bottle. This colorless bottle has reconstructed basal dimensions of 2 cm x 1.3 cm and a reconstructed height of 6.6 cm. This bottle exhibited a screw-top finish which was either machine made or hand finished with a ground lip. Both types of finishes are represented in whole BAYER bottles by specimens 8787-2 and 8738-11.
Comments: BAYER ASPIRIN continues to be manufactured at the time of this writing. The Bayer Company, Glenbrook Laboratories, is a division of Sterling Drugs in New York, New York. The Bayer Company was found in 1915 (Adams et al. 1975:141). Adams (1976) lists the location of The Bayer Company as Hudson, New York.

Group Name: J.W. Beardsley's Sons.
Group Number: 014.
No. of Specimens: 31 fragments.
Color of Specimens: 31 colorless.
No. of Individual(s) Represented: 5 (minimum).
No. of Individual Shapes Represented: 5 round.
Base Diameter: (5) 8.1 cm.
Height: 5 unknown.
Associated Marks/Labels: Embossed across the bases of at least four of these round jars is "J.W. BEARDSLEY'S SONS (in downturned

arc)/PAT.FEB.10.03/NEW YORK U.S.A. (in upturned arc)". The patent dates on these jars also include "PAT.JUN.23.03" and "PAT.JUL.11.03". One jar is embossed across the base with "J.W. BEARDSLEY'S SONS (in downturned arc)/PATENTED (in downturned arc)/178/JUN.9.03/JUNE 23.03 (in upturned arc)/NEW YORK U.S.A. (in upturned arc).
Product Name: 5 J.W. Beardsley's Sons processed foods.
Location of Product Manufacturer: 5 New York.
Date of Product Manufacturer: 5 unknown.
Container Manufacturer Name: 5 unknown.
Location of Container Manufacturer: 5 unknown.
Date of Container Manufacturer: 5, 1903-1915.
Description: The J.W. Beardsley's Sons jar fragments include base/body fragments of at least 5 round jars which flare out from the bases. The colorless jars have basal diameters of 8.1 cm. The jars were pressed by machine in manufacture and exhibit finishes of an extended lip from a tapered collar. This type of container is represented among the whole jars by Subcategory 2, Group 2, Subgroup 9.
Comments: N/A.

Group Name: The Beech Nut Packing Company.
Group Number: 015.
No. of Specimens: 14 fragments.
Color of Specimens: 14 colorless.
No. of Individual(s) Represented: 10 (minimum).
No. of Individual Shapes Represented: 10 round.
Base Diameter: (10) 7.7 cm.
Height: 10 unknown.
Associated Marks/Labels: Embossed across the bases of five of these round jars is "BNP CO (in downturned arc)/S". Embossed across the five other bases is "BNP CO (in downturned arc)/S".
Product Name: 10 BEECH NUT foods.
Location of Product Manufacturer: 10 Canajoharie, New York.
Date of Product Manufacturer: 10, 1891-present.
Container Manufacturer Name: 10 The Beech Nut Packing Company.
Location of Container Manufacturer: 10 Canajoharie, New York.
Date of Container Manufacturer: 10, 1920-1940.
Description: The BEECH NUT jar fragments include base/body fragments of at least ten cylindrical jars. These colorless jars have basal diameters of 7.7 cm. They were manufactured by machine with seam lines extending up the body from the ring seam around the basal edge. The base itself exhibits a circular bottom plate.
Comments: "BNP CO" was the Beech Nut trademark used from 1920 to 1940. The Beech Nut label was used on bottles and jars by The Beech Nut Packing Company on their own products which consisted of various food products. The company was started by Walter H. Lipe and associates in 1891 in order to sell Lipes smoked ham and bacon. The company was first known as The Imperial Packing Company until 1899 when Albert Spencer suggested the name Beech Nut. Not until 1931 was Beech Nut baby food packed (Toulouse 1971:89-91). Beech Nut continues to manufacture an extensive line of baby foods.

Group Name: BELL-ANS/PA-PAY-ANS.
Group Number: 016.
No. of Specimens: 47 fragments.

Color of Specimens: 47 amber.
No. of Individual(s) Represented: 19 (minimum).
No. of Individual Shapes Represented: 12 rectangular; 7 round.
Base Diameter: (12) 5.1 cm x 3.5 cm; (7) 2.4 cm.
Height: (12) 7.2 cm; (7) 6.5 cm.
Associated Marks/Labels: Embossed down the left sides of eleven of the rectangular bottles is "BELL-ANS/FOR INDIGESTION". Embossed down the right sides is "BELL & COL INC./ORANGEBURG/NEW YORK.U.S.A.". Three of the eleven bottles are embossed on the bases with The Owens Bottle Company trademark of an "O" in a square (group 172). One rectangular bottle is embossed down the left or right side with "PA PAY-[ANS]/BEL...". The seven round bottles are embossed down the body with "BELL-ANS/FOR INDIGESTION". Two of these bottles are embossed on the base with The Fairmont Glass Works trademark of an "F" within a hexagon (group 074). One of the seven bottles is embossed across the base with the Owens trademark described above.
Product Name: 18 BELL-ANS; 1 PA PAY-ANS.
Location of Product Manufacturer: 19 Orangeburg, New York.
Date of Product Manufacturer: 19 unknown.
Container Manufacturer Name: 4 The Owens Bottle Company; 2 The Fairmont Glass Works; 13 unknown.
Location of Container Manufacturer: 4 Toledo, Ohio, or Fairmont, West Virginia; 2 Indianapolis, Indiana, or Fairmount, Indiana; 13 unknown.
Date of Container Manufacturer: 4, 1911-1929; 2, 1945-1960; 13 unknown.
Description: The BELL-ANS and PA PAY-ANS bottle fragments include base, body, shoulder, and neck fragments of at least seven cylindrical and twelve rectangular bottles. The amber rectangular bottles have basal dimensions of 5.1 cm x 3.5 cm, and reconstructed heights of 7.2 cm. The amber cylindrical bottles have basal diameters of 2.4 cm and reconstructed heights of 6.5 cm. All of the bottles were machine manufactured as exhibited by machine cut-off scars on their bases and/or seam lines extending from the basal edges, up the bodies, and over a bead lip. The bead lip probably accommodated a cork stopper style of closure. BELL-ANS bottles of both the rectangular and cylindrical varieties are represented among the whole bottles by specimens 8651-5,11; 8652-1, 2; 8967-4; 8893-4; 8766-3; 8748-11; 8768-8,9; 8749-6; 8756-6; 8932-7; 8904-5,3; 8966-12; 8910-5; 8948-1; 8920-1; 8840-2; 8779-2; 8855-4; 8855-4; 8865-3; 8712-1; 8744-2; 8933-2,5; 8689-1; and 8961-2,3,4.
Comments: PA PAY-ANS was manufactured by Bell and Company Incorporated of Orangeburg, New York and was predecessor to BELL-ANS (Toulouse 1970:63). Both products were antacid in pill form.

Group Name: D.M. Bennett.
Group Number: 017.
No. of Specimens: 6 fragments.
Color of Specimens: 6 colorless.
No. of Individual(s) Represented: 2 (minimum).
No. of Individual Shapes Represented: 2 buffalo oval.
Base Diameter: (2) ? x 4.1 cm.
Height: 2 unknown.
Associated Marks/Labels: Embossed down the fronts of the oval bottles is "DRUGGIST/D.M. BENNETT (diagonally and in script)/BRIDGEVILLE, PA".

Date of Product Manufacturer: 13, 1858-present.
Container Manufacturer Name: 13 The Carter Ink Company.
Location of Container Manufacturer: 13 unknown.
Date of Container Manufacturer: 13, 1900-1930.
Description: The CARTER'S bottle fragments include base and body fragments of nine round and four square bottles. Five of the nine round bottles are of a conical shape while four are cylindrical. The pale green, amber, and colorless conical bottles have basal diameters of 6.8 cm. The colorless, cylindrical bottles have basal diameters of 4.9 cm. The colorless square bottles have basal dimensions of 6.5 x 6.5 cm and reconstructed heights of 5.9 cm. The conical and cylindrical bottles were machine blown in molds and exhibit valve marks on their bases, while the square bottles were pressed in manufacture. All of the containers accommodated cork stopper style closures (Personal Communication: Winters). CARTER'S ink bottles are represented among the whole bottles by specimens 8651-39 and 8749-23.
Comments: The Carter Ink Company was producing ink bottles as early as 1858. Carter's is known for specializing in the conical ink bottle which was not faceted (Munsey 1970:120). Carter's Ink bottles have been excavated from western gold mining towns (Toulouse 1970:65) as well as sites such as Fort Union, New Mexico, and Fort Laramie, Wyoming (Wilson 1981:96-107). In 1858, The Carter Ink Company was located in Massachusetts (Haskell 1981:48) and continues to operate out of Cambridge.

Group Name: CHAMBERLAIN'S COLIC, CHOLERA, AND DIARRHOEA REMEDY.
Group Number: 039.
No. of Specimens: 16 fragments.
Color of Specimens: 16 aqua.
No. of Individual(s) Represented: 2 (minimum).
No. of Individual Shapes Represented: 2 rectangular.
Base Diameter: (1) ? cm x 3.2 cm; (1) 5.3 cm x ? cm.
Height: 2 unknown.
Associated Marks/Labels: Embossed down the fronts of these rectangular bottles is "CHAMBERLAIN'S/COLIC (diagonally)/CHOLERA (diagonally)/AND (diagonally)/DIARRHOEA REMEDY". Embossed down the right side is "CHAMBERLAIN MED. CO.". Embossed down the left side is "DES MOINES, IA.U.S.A.".
Product Name: 2 CHAMBERLAIN'S COLIC, CHOLERA, AND DIARRHOEA REMEDY.
Location of Product Manufacturer: 2 Des Moines, Iowa.
Date of Product Manufacturer: 2, ca. 1895-1965.
Container Manufacturer Name: 2 unknown.
Location of Container Manufacturer: 2 unknown.
Date of Container Manufacturer: 2, 1880-1965.
Description: The CHAMBERLAIN COLIC, CHOLERA, AND DIARRHOEA REMEDY bottle fragments include base and body fragments of at least two rectangular bottles, paneled on four sides. These aqua bottles appear in two sizes with basal dimensions of ? cm x 3.2 cm and 5.3 cm x ? cm. Both sizes exhibit beveled corners.
Comments: CHAMBERLAIN'S COLIC, CHOLERA, AND DIARRHOEA REMEDY bottles were available in three sizes with oil and prescription style finishes. They have been excavated from western gold mining towns as well as sites such as Fort Laramie, Wyoming (Toulouse 1970:68; Wilson 1981:53,137). Advertisements for this product appear in periodicals

Container Manufacturer Name: 8 The Carr-Lowrey Glass Company.
Location of Container Manufacturer: 8 Baltimore, Maryland.
Date of Container Manufacturer: 1, 1920-1963; 7, 1889-1963.
Description: The bottle fragments which are embossed with the Carr-Lowrey trademark include base/body fragments of two cylindrical, two rectangular, one square, one oval, one prima oval (Putnam 1965:25), and one buffalo oval (Putnam 1965:24) bottles. All of the bottles are colorless. One cylindrical bottle is also embossed with the WHITTEMORE FRENCH GLOSS label and is described in group 239. One rectangular bottle with the McCulloch Drug Company label is described in group 148. Both the 1889-1963 and 1920-1963 Carr-Lowrey trademarks are represented among the whole bottles by specimens 8859-15 and 8779-1.
Comments: Embossed across the bases of seven of the specimens is "C.L.G.CO.", the Carr-Lowrey trademark used from 1889 to 1963. One specimen is embossed with a linked "CL", the trademark used from 1920-1963.

Samual J. Carr, who was a salesman for The Whitall-Tatum Glass Company, joined William J. Lowrey in 1889 to found The Carr-Lowrey Glass Company. The company produced glass exclusively for druggists and perfumers. In 1898, the Baltimore plant was destroyed by fire, but immediately rebuilt. In 1915, semi-automatic machines were added and, by 1938, most of the machinery was automatic. In 1944, The Anchor Hocking Glass Corporation acquired Carr-Lowrey but retained the company name. Carr-Lowrey has always specialized in perfumers, with attention paid to the looks of the container (Toulouse 1971:134-137). The Carr-Lowrey trademark (1920-1963) is represented among the whole bottles by specimen 8859-15, and the 1889-1963 trademark by specimen 8779-1.

Group Name: CARTER'S.
Group Number: 038.
No. of Specimens: 22 fragments.
Color of Specimens: 19 colorless; 1 pale green; 2 amber.
No. of Individual(s) Represented: 13 (minimum).
No. of Individual Shapes Represented: 9 round; 4 square.
Base Diameter: (4) 4.9 cm; (5) 6.8 cm; (4) 6.5 cm x 6.5 cm.
Height: (4) 5.9 cm; 4 unknown.
Associated Marks/Labels: Embossed across the base of the pale green, round container is "CARTER'S (in downturned arc)/1897". Embossed across the base of the amber, round container is "CARTER'S (in downturned arc)/No.5/8/MADE IN U.S.A. (in upturned arc)". The remaining round containers are colorless with two embossed across the base with "CARTER'S (in downturned arc)/6/NO.3 (in upturned arc)"; one with "CARTER'S (in downturned arc)/MADE IN/U.S.A. (in upturned arc)"; one with "CARTER'S (in downturned arc)/7 1/2/MADE IN/U.S.A. (in upturned arc)"; and three with "CARTER'S (in downturned arc)/(mold number)/MADE IN U.S.A. (in upturned arc)". The mold numbers include "6", "156", and "12". At least one of the round containers is embossed around the shoulder with "[CARTER]'S INKS". Embossed across one of the square bases is "CARTER'S (in downturned arc)/MADE IN/U.S.A. (in upturned arc)". Three are embossed with CARTER'S (in downturned arc)/8/MADE IN/U.S.A. (in upturned arc)".
Product Name: 13 CARTER'S ink.
Location of Product Manufacturer: 13 Cambridge, Massachusetts.

product's "meritorious" effects. "CARBOLINE will restore hair on bald heads. CARBOLINE will prevent the hair from falling out. CARBOLINE is an elegant hair dressing." The Langley & Michaels Company of San Francisco, California, were the wholesalers of CARBOLINE. However, the product was sold in Pittsburgh exclusively by Kennedy & Company of 114 Wood Street (Blumenstein 1966:136).

Group Name: CARBONA.
Group Number: 036.
No. of Specimens: 10 fragments.
Color of Specimens: 10 aqua.
No. of Individual(s) Represented: 5 (minimum).
No. of Individual Shapes Represented: 5 twelve-sided.
Base Diameter: (3) 5.5 cm; (2) 4.3 cm.
Height: (2) 15.1 cm; 3 unknown.
Associated Marks/Labels: Embossed across the bases of four of the five twelve-sided bottles is "CARBONA". Embossed down three adjacent sides of one bottle is "CARBONA/Carbona Products Co (in italics)/CARBONA".
Product Name: 5 CARBONA.
Location of Product Manufacturer: 5 unknown.
Date of Product Manufacturer: 5 unknown.
Container Manufacturer Name: 5 unknown.
Location of Container Manufacturer: 5 unknown.
Date of Container Manufacturer: 5, 1903-1920.
Description: The CARBONA bottle fragments include base and body fragments of at least five twelve-sided bottles. Four of the five bottles were embossed down the body and had a basal diameter of 4.3 cm and a reconstructed height of 15.1 cm. This style of bottle exhibited a packer style lip (Blumenstein 1966:82). The four basally embossed specimens were manufactured by machine exhibiting cut-off scars.
Comments: CARBONA was a hairdressing product (Blumenstein 1966:83).

Group Name: The Carr-Lowrey Glass Company.
Group Number: 037.
No. of Specimens: 8 fragments.
Color of Specimens: 8 colorless.
No. of Individual(s) Represented: 8.
No. of Individual Shapes Represented: 2 round; 2 rectangular; 1 square; 1 oval; 1 prima oval; 1 buffalo oval.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the base of one of the two round bottles is "WHITTEMORE (in downturned arc)/(an interlocked CL)(the figure of a boy)6/..." (group 239). Embossed across the other round base is "[C.L.]C.Co./308". Embossed across the rectangular bases is "C.L.G.CO./1". One of these is embossed across the front with "McCulloch Drug Co (diagonally)/PITTSBURGH" (group 148). Embossed across the square, oval, prima oval, and buffalo oval bottles is "C.L.G.CO.".
Product Name: 1 WHITTEMORE FRENCH GLOSS; 1 "McCulloch Drug Co." prescription medicine; 6 unknown.
Location of Product Manufacturer: 1 Boston, Massachusetts; 1 Pittsburgh, Pennsylvania; 6 unknown.
Date of Product Manufacturer: 1 unknown; 1, ca. 1880; 6 unknown.

Color of Specimens: 3 colorless.
No. of Individual(s) Represented: 2.
No. of Individual Shapes Represented: 2 round.
Base Diameter: (2) 8.2 cm.
Height: 2 unknown.
Associated Marks/Labels: Embossed across the bases of these round bottles is an inverted triangle containing the letter "C". Along the left side of the triangle is "REGISTERED". Above the triangle is "13 (The Armstrong Cork Company trademark) 45" (group 007). Encircling all of these marks is "CANADA DRY GINGER ALE INC. NEW YORK/CONTENTS 12 FL.OZ.". Embossed across the shoulders of these bottles is "CANADA DRY".
Product Name: 2 CANADA DRY GINGER ALE.
Location of Product Manufacturer: 2 New York.
Date of Product Manufacturer: 2, 1888-present.
Container Manufacturer Name: 2 The Armstrong Cork Company, Glass Subcategory.
Location of Container Manufacturer: 2 Lancaster, Pennsylvania.
Date of Container Manufacturer: 2, 1938-1969.
Description: The CANADA DRY GINGER ALE bottle fragments include base and shoulder fragments of two cylindrical bottles. The colorless bottles have basal diameters of 8.2 cm. They were machine manufactured, exhibiting cut-off scars and seam lines which extend up from the basal edge line.
Comments: CANADA DRY GINGER ALE continues to be manufactured at the time of this writing. It was first bottled in 1888 in Toronto, Canada (Paul and Parmalee 1973:119). A 1983 advertising campaign for CANADA DRY GINGER ALE states that the product has been caffeine-free since 1904.

Group Name: CARBOLINE FOR THE HAIR.
Group Number: 035.
No. of Specimens: 1 fragment.
Color of Specimens: 1 colorless.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 rectangular.
Base Diameter: 1 unknown.
Height: 1 unknown.
Associated Marks/Labels: Embossed down the front of this rectangular bottle is "CARBOLINE/FOR THE HAIR".
Product Name: 1 CARBOLINE FOR THE HAIR.
Location of Product Manufacturer: 1 San Francisco, California.
Date of Product Manufacturer: 1, ca. 1881.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1880-1910.
Description: The CARBOLINE bottle fragments include a body fragment of a rectangular bottle. The colorless specimen of this group is too fragmentary to determine bottle dimensions. The bottle was probably finished by hand with a lip which would accommodate a cork stopper closure.
Comments: Advertisements for CARBOLINE appeared in periodicals dating to 1881 (Wilson 1981:135). One such advertisement describes CARBOLINE as "The Great Petroleum Hair Restorer". It also goes on to mention the

Base Diameter: (17) 5.7 cm x 3.6 cm.
Height: (17) 17.0 cm.
Associated Marks/Labels: Embossed down the fronts of these rectangular bottles is "CALIFORNIA FIG SYRUP Co./SAN FRANCISCO CAL." Embossed down the left and right sides is "SYRUP OF FIGS".
Product Name: 17 CALIFORNIA FIG SYRUP.
Location of Product Manufacturer: 17 San Francisco, California.
Date of Product Manufacturer: 17, ca. 1875-?.
Container Manufacturer Name: 17 unknown.
Location of Container Manufacturer: 17 unknown.
Date of Container Manufacturer: 17, 1890-1915.
Description: The CALIFORNIA FIG SYRUP bottle fragments include base, body, and shoulder fragments of at least seventeen bottles, panelled on four sides. These colorless bottles have reconstructed basal dimensions of 5.7 cm x 3.6 cm and reconstructed heights of 17 cm. CALIFORNIA FIG SYRUP bottles are represented among the whole examples by specimen 8913-4. This complete example, like the fragmentary specimens, exhibits seam lines which extend up from the basal edge to the center of the neck where they were tooled off by the hand finishing process. The complete bottle also exhibits a square bead lip.
Comments: An advertisement for CALIFORNIA FIG SYRUP appears in an 1892 issue of the Owego Daily Record (New York)(Baldwin 1973: 97). Further advertisements occur in other newspapers dating from 1887-1893. CALIFORNIA FIG SYRUP bottles have been excavated from sites such as Fort Union, New Mexico, and date from 1875-1890 (Wilson 1981:43,136).

Group Name: The California Perfume Company.
Group Number: 033.
No. of Specimens: 1 fragment.
Color of Specimens: 1 colorless.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 rectangular.
Base Diameter: (1) 4.8 cm x ? cm.
Height: (1) 14.7 cm.
Associated Marks/Labels: Embossed down the front of this rectangular bottle is "FRUIT/California Perfume Co (in italics)/FLAVORS".
Product Name: 1 The California Perfume Company, Fruit Flavors.
Location of Product Manufacturer: 1 California.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1880-1910.
Description: The California Perfume Company Fruit Flavors bottle fragments include a body fragment of a rectangular bottle with at least three panelled sides. The colorless bottle has basal dimensions of 4.8 cm x ? cm, and a reconstructed height of 14.7 cm. It was hand finished (Personal Communication: Winters), and, if complete, would exhibit a collared neck with a square bead lip (Adams 1972:113).
Comments: The California Perfume Company was the predecessor to the modern-day Avon industries.

Group Name: CANADA DRY GINGER ALE.
Group Number: 034.
No. of Specimens: 3 fragments.

Height: 3 unknown.
Associated Marks/Labels: Embossed down the fronts of these rectangular bottles is "J. E. BURNS & CO/PHILADELPHIA, PA.".
Product Name: 3 unknown.
Location of Product Manufacturer: 3 Philadelphia, Pennsylvania.
Date of Product Manufacturer: 3 unknown.
Container Manufacturer Name: 3 unknown.
Location of Container Manufacturer: 3 unknown.
Date of Container Manufacturer: 3, 1880-1910.
Description: The J. E. Burns & Company bottle fragments include base and body fragments of at least three rectangular panel bottles. The colorless specimens of this group are too fragmentary to determine bottle dimensions. A complete bottle would have been finished by hand with lips which accommodated cork stopper closures (Personal Communication: Winters).
Comments: N/A.

Group Name: The Adolphus Busch Glass Manufacturers.
Group Number: 260.
No. of Specimens: 2 fragments.
Color of Specimens: 2 amber.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 round.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the base of this round bottle is "AB" with the two letters connected. This trademark was used by Busch from 1904 to 1907.
Product Name: 1 ? beer.
Location of Product Manufacturer: 1 unknown.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 The Adolphus Busch Glass Manufacturers.
Location of Container Manufacturer: 1 St. Louis, Missouri; or Belleville, Illinois.
Date of Container Manufacturer: 1, 1904-1907.
Description: The bottle fragments which are embossed with the Busch Glass trademark include base fragments of a cylindrical beer bottle. The amber bottle was manufactured by machine.
Comments: Adolphus Busch first became involved in glass making by giving financial aid to The Streator Bottle and Glass Company in 1882. In 1886, Busch bought The Belleville Glass Works in Illinois. Busch enlarged his Belleville plant, and by 1891 was producing his and others beers, as well as sodas, minerals, and bitters. In 1892, he began to manufacture fruit jars. In 1905, Belleville merged with Streator Bottle and Glass and The Ohio Bottle Company to form The American Bottle Company. Busch opened his St. Louis plant in 1900 and operated it until 1928 (Toulouse 1971:26-27).

Group Name: CALIFORNIA FIG SYRUP.
Group Number: 032.
No. of Specimens: 81 fragments.
Color of Specimens: 81 colorless.
No. of Individual(s) Represented: 17 (minimum).
No. of Individual Shapes Represented: 17 rectangular.

lettering of earlier stages and the body diameter is also smaller (1860-1870).

5) Amber, light green, or aqua, embossed with logo of scales, pint and quart sizes (1870-1895).

6) Light green and aqua, blob top with Hutchinson stopper, with or without logo (1880-1870).

7) Amber, blob top, Baltimore loop, with logo (1885-1890).

8) Amber, hand finished and machine made, crown top, with logo (1895-1910).

9) Clear glass, machine made, crown top, with logo (1905-1922).

Group Name: BURNETT'S STANDARD FLAVORING EXTRACTS.
Group Number: 030.
No. of Specimens: 23 fragments.
Color of Specimens: 23 colorless.
No. of Individual(s) Represented: 5 (minimum).
No. of Individual Shapes Represented: 5 rectangular.
Base Diameter: (2) 4.0 cm x 1.9 cm; (3) 4.7 cm x ?.
Height: 5 unknown.
Associated Marks/Labels: Embossed down the fronts of these rectangular bottles is "BURNETT'S/STANDARD FLAVORING/EXTRACTS".
Product Name: 5 BURNETT'S STANDARD FLAVORING EXTRACTS.
Location of Product Manufacturer: 5 Boston, Massachusetts.
Date of Product Manufacturer: 5 unknown.
Container Manufacturer Name: 5 unknown.
Location of Container Manufacturer: 5 unknown.
Date of Container Manufacturer: 5, 1880-1910.
Description: The BURNETT STANDARD FLAVORING EXTRACT bottle fragments include base and body fragments of at least five rectangular panel bottles. These colorless bottles are of two sizes. The smaller size bottles have reconstructed basal dimensions of 4.0 x 1.9 cm while the larger bottles have reconstructed basal dimensions of 4.7 cm x ? cm. All of the bottles exhibit three paneled sides. They were probably hand finished except for one specimen which exhibits a machine cut-off scar on the base.
Comments: Joseph Burnett and Company of Boston manufactured culinary products such as sauces and extracts. The bottles which once contained these products have been excavated from western sites such as Fort Union, New Mexico, and Fort Laramie, Wyoming. These bottles include a colorless, rectangular bottle with a thickened plain lip finish, dating from 1860-1890; a colorless, rectangular panel bottle with a thickened plain lip finish dating from 1865 to 1890; and a blue rectangular blake bottle also with a thickened lip finish which dates from 1875-1890 (Wilson 1981:84,86,87).

Group Name: J. E. Burns and Company.
Group Number: 029.
No. of Specimens: 4 fragments.
Color of Specimens: 4 colorless.
No. of Individual(s) Represented: 3 (minimum).
No. of Individual Shapes Represented: 3 rectangular.
Base Diameter: 3 unknown.

failed in 1904, was reestablished as The Buck Glass Company. By 1915, the company was producing various bottles in a wide range of colors. The Buck trademark is found most commonly on milk bottles. Buck, in 1940, originated the first square, short milk bottle. In 1961, The Buck Glass Company was sold to Knox Glass (Toulouse 1971:57-58).

Group Name: The J. C. Buffum Company.
Group Number: 028.
No. of Specimens: 45 fragments.
Color of Specimens: 45 aqua.
No. of Individual(s) Represented: 8 (minimum).
No. of Individual Shapes Represented: 7 round; 1 ten-sided.
Base Diameter: (5) 6.6 cm; (2) 7.65 cm; (1) 6.8 cm; 5 unknown.
Height: (2) 20.0 cm; 1 unknown.
Associated Marks/Labels: Embossed around the bodies of five of the seven round bottles is "J. C. BUFFUM & CO. (in double line lettering)/PITTSBURG PA.". Two of the seven round bottles were embossed across the body with "BUFFUM/PORTER". The ten-sided bottle is embossed down every other adjacent side with "BUFFUMS/SASPARILLA/... & LEMON".
Product Name: 8 Buffum beverages.
Location of Product Manufacturer: 8 Pittsburgh, Pennsylvania.
Date of Product Manufacturer: 8, 1845-1922.
Container Manufacturer Name: 8 unknown.
Location of Container Manufacturer: 8 unknown.
Date of Container Manufacturer: 6, 1845-1850; 1, 1850-1860; 1, ?-1870.
Description: The Buffum bottle fragments include base/body, body, shoulder, and neck fragments of at least seven cylindrical and one ten-sided bottle. Five of the seven cylindrical bottles are embossed with double-line lettering and have reconstructed basal diameters of 6.6 cm. They exhibit kickups with improved pontil residue and an applied, flared bead lip. Two of the seven cylindrical bottles are embossed as PORTER. These also exhibit kick ups with improved pontils and flared bead lips. This type of bottle is represented among the whole bottles by specimens 8850-14 and 8774-1, and has a basal diameter of 7.65 cm and a height of 20.0 cm. The ten-sided, aqua specimen was mold blown and embossed as a SASPARILLA. It exhibits an improved pontil and measures 6.8 cm in diameter.
Comments: Joseph and Haskell Buffum began their business under the name J. C. and H. W. Buffum in 1845. During his years in business (1845-1899), J. C. Buffum was the mayor of Lawrenceville, Pennsylvania, and a member of the Pittsburgh city council. In 1899, the company was incorporated under the name "J. C. Buffum Company". This name remained until the business dissolved in 1922 (Personal Communication: Murray). In 1886, the company is listed as being involved in The Star Beer Bottling Company, which imported and was a dealer in ales, stouts, sodas, mineral water, etc. (Pennsylvania Historical Review 1886).
Buffum bottles exhibit nine styles of manufacture:

1) Aqua, flaring medical type lip, iron pontiled (1845).
2) Aqua or cobalt blue, blob top, double line embossing, iron pontil (1845-1850).
3) Same as above, but no iron pontil (1850-1860).
4) Same as (3), but embossing returns to smaller

Description: The BRUCE'S container fragments include body/shoulder fragments of two round containers. The specimens in this group were too incomplete to determine container dimensions. The colorless containers were manufactured by machine (Personal Communication: Winters).
Comments: N/A.

Group Name: BUCINE.
Group Number: 026.
No. of Specimens: 17 fragments.
Color of Specimens: 17 colorless.
No. of Individual(s) Represented: 5 (minimum).
No. of Individual Shapes Represented: 5 rectangular.
Base Diameter: (5) 6.0 cm x 3.8 cm.
Height: 5 unknown.
Associated Marks/Labels: Embossed down the fronts of the rectangular bottles is "BUCINE".
Product Name: 5 BUCINE.
Location of Product Manufacturer: 5 unknown.
Date of Product Manufacturer: 5 unknown.
Container Manufacturer Name: 5 unknown.
Location of Container Manufacturer: 5 unknown.
Date of Container Manufacturer: 5, 1880-1910.
Description: The BUCINE bottle fragments include body fragments of at least five rectangular blake prescription bottles (Putnam 1965:31). They exhibit beveled corners, and at least the front sides are panelled. These colorless bottles have reconstructed basal dimensions of 6.0 x 3.8 cm. They were hand finished and probably accommodated a cork stopper style closure (Personal Communication: Winters).
Comments: N/A.

Group Name: THE BUCK GLASS COMPANY.
Group Number: 027.
No. of Specimens: 5 fragments.
Color of Specimens: 4 aqua; 1 colorless.
No. of Individual(s) Represented: 5.
No. of Individual Shapes Represented: 5 round.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed on the bases of these five round containers is The Buck Glass Company trademark of a "B".
Product Name: 5 unknown.
Location of Product Manufacturer: 5 unknown.
Date of Product Manufacturer: 5 unknown.
Container Manufacturer Name: 5 The Buck Glass Company.
Location of Container Manufacturer: 5 Baltimore, Maryland.
Date of Container Manufacturer: 5, 1909-1961.
Description: The container fragments which are embossed with the Buck trademark include base/body fragments of at least five cylindrical containers. Four of the containers are aqua in color while the fifth is colorless. All of the containers were machine manufactured. The Buck Glass trademark is represented among the whole bottles by specimen 8749-14.
Comments: In 1909, The Nivison Glass Company of Baltimore, which had

No. of Specimens: 803 fragments.
Color of Specimens: 803 cobalt blue.
No. of Individual(s) Represented: 35.
No. of Individual Shapes Represented: 35 round.
Base Diameter: (4), 6.8 cm; (22) 5.2 cm; (7) 4.2 cm; (2) 2.8 cm.
Height: (4), 16.5 cm; (22), 13 cm; (7) 10.2 cm; (2) 6.6 cm.
Associated Marks/Labels: Embossed across bodies of the cylindrical bottles is "BROMO-SELTZER/EMERSON/DRUG CO./BALTIMORE, MD.". Two of the specimens were also embossed across the base with an "M" within a circle, The Maryland Glass Company trademark (group 144).
Product Name: 35 BROMO-SELTZER.
Location of Product Manufacturer: 35 Baltimore, Maryland.
Date of Product Manufacturer: 35, 1891-present.
Container Manufacturer Name: 2 The Maryland Glass Company; 33 unknown.
Location of Container Manufacturer: 2 Baltimore, Maryland; 33 unknown.
Date of Container Manufacturer: 2, 1907-present; 33 unknown.
Description: The BROMO-SELTZER bottle fragments include base, body, shoulder and neck fragments of at least 35 cylindrical bottles. The cobalt blue bottles are represented by at least 4 sizes with basal diameters of 6.8 cm, 5.2 cm, 4.2 cm, 2.8 cm, and corresponding reconstructed heights of 16.5 cm, 13 cm, 10.2 cm, and 6.6 cm. The bottles were machine manufactured or hand finished exhibiting bead as well as lug top finishes. BROMO SELTZER bottles are represented among the whole examples by specimens 8652-12; 8653-4,3,7; 8749-1; 8859-4; 8932-5; 8938-10,11; 8810-1; 8775-2; 8956-1; 8796-1; 8798-1; 3; 8794-4; 8781-1; 8849-4,5,6,7; 8855-3; 8852-5; 8865-2; 8864-3; 8947-4,5,6,7; 8833-1,2; 8755-1; 8695-2,3; 8681-1; and 8704-3.
Comments: BROMO-SELTZER was first manufactured in 1891 by Captain Isaac Emerson who had formulated the product in 1888. The first blue BROMO-SELTZER bottles were purchased from Hazel-Atlas and were semi-automatic, and partially handblown. By 1907 The Maryland Glass Corporation was established to produce BROMO-SELTZER bottles. In 1920 cork closures on the bottles gave way to metal seals, and in 1954 screw on caps were initiated. BROMO-SELTZER is now produced by The Warner Lambert Company of New Jersey (Personal Communique: The Warner Lambert Company). An advertisement for BROMO-SELTZER appears in the January, 1891, issue of The Ladies' Home Journal (Baldwin, 1973:82).

Group Name: BRUCE'S.
Group Number: 025.
No. of Specimens: 4 fragments.
Color of Specimens: 4 colorless.
No. of Individual(s) Represented: 2.
No. of Individual Shapes Represented: 2 round.
Base Diameter: 2 unknown.
Height: 2 unknown.
Associated Marks/Labels: Embossed across the upper body of these round containers is "BRUCE'S (in downturned arc)".
Product Name: 2 BRUCE'S.
Location of Product Manufacturer: 2 unknown.
Date of Product Manufacturer: 2 unknown.
Container Manufacturer Name: 2 unknown.
Location of Container Manufacturer: 2 unknown.
Date of Container Manufacturer: 2, 1903-1940.

Product Name: 4 unknown.
Location of Product Manufacturer: 4 unknown.
Date of Product Manufacturer: 4 unknown.
Container Manufacturer Name: 4 The Brockway Glass Company.
Location of Container Manufacturer: 4 Brockway, Pennsylvania.
Date of Container Manufacturer: 4, 1933-present.
Description: The bottle fragments which are embossed with the Brockway Glass trademark, include base/body fragments of two cylindrical, one prima oval, and one monarch oval bottle. The cylindrical bottles are colorless or amber in color. The prima oval is colorless, while the monarch oval is amber in color. All of these bottles were machine manufactured. Bottles exhibiting the Brockway trademark are represented among the whole bottles by specimen 8963-1.
Comments: The Brockway Glass Company was started in 1907 by twelve glass blowers from The Hazel-Atlas Glass Co. Their company, The Brockway Machine Bottle Company was operated in a rehabilitated glass factory in Brockwayville (now Brockway), Pennsylvania. The first container produced was a vaseline jar. In 1933, The Brockway Machine Bottle Company merged with its subsidiary The Brockway Sales Company, and formed The Brockway Glass Company. In 1964, the company expanded greatly through transactions with Hazel-Atlas (Toulouse 1971:58, 59-62).

Group Name: BROMOLITHIA.
Group Number: 023.
No. of Specimens: 190 fragments.
Color of Specimens: 190 amber.
No. of Individual(s) Represented: 17 (minimum).
No. of Individual Shapes Represented: 17 round.
Base Diameter: (15), 5.9 cm; (2), 4.4 cm.
Height: (15), 15.0 cm; 2 unknown.
Associated Marks/Labels: Embossed across the bodies of these round bottles is "BROMOLITHIA (in downturned arc)/CHEMICAL CO./PHILADELPHIA".
Product Name: 17 BROMOLITHIA.
Location of Product Manufacturer: 17 Philadelphia, Pennsylvania.
Date of Product Manufacturer: 17, ca. 1890.
Container Manufacturer Name: 17 unknown.
Location of Container Manufacturer: 17 unknown.
Date of Container Manufacturer: 17, 1880-1913.
Description: The BROMOLITHIA bottle fragments include base, body, and shoulder fragments of at least seventeen cylindrical bottles. These amber bottles are represented in at least two sizes. The larger of the two sizes is 5.9 cm in diameter and has a height of 15.0 cm. The smaller bottles measure 4.4 cm in diameter with an unknown height. Seam lines on all of the bottles extend up the body within 1/4 inch of the square bead lip finish. This is charcteristic of bottles manufactured by a semi-automatic bottle machine. BROMOLITHIA bottles are represented among the whole bottles by specimen 8864-4.
Comments: BROMOLITHIA was manufactured around the turn of the century by Keasby and Mattison of Philadelphia, Pennsylvania (Personal Communication: Murray).

Group Name: BROMO-SELTZER.
Group Number: 024.

Location of Product Manufacturer: 2 unknown.
Date of Product Manufacturer: 2, ca. 1900 (Muncie 1970:73).
Container Manufacturer Name: 2 unknown.
Location of Container Manufacturer: 2 unknown.
Date of Container Manufacturer: 2, ca. 1900 (Muncie 1970:73).
Description: The B.P.CO. bottle fragments include body fragments of at least two baseless, oval pill bottles. These cobalt blue bottles have reconstructed body dimensions of 4.4 cm x 2.1 cm and heights of 7.4 cm. A whole bottle example, specimen 8749-2, exhibits a continuous seam line around the sides of the bottle. The line extends halfway up the neck, short of the bead lip finish which probably accommodated a cork stopper.
Comments: N/A.

Group Name: THE BRIDGEVILLE DAIRY.
Group Number: 022.
No. of Specimens: 21 fragments.
Color of Specimens: 21 colorless.
No. of Individual(s) Represented: 7 (minimum).
No. of Individual Shapes Represented: 7 round.
Base Diameter: (3) 6.3 cm; (2) 7.8 cm; (2) 9.7 cm.
Height: 7 unknown.
Associated Marks/Labels: Embossed across the bodies of three of the round bottles is a circle containing "BRIDGEVILLE (in downturned arc)/DAIRY/CO (in upturned arc)". Above the circle is the container volume (1, half-pint; 1, pint; 1, quart) and below the circle is "[REGIS]TERED". At least two bottles are embossed with an oval containing "BRIDGEVILLE (in downturned arc)/DAIRY/CO(in upturned arc)". At least two bottles are embossed around the body with "BRIDGEVILLE DAIRY/...REGISTERED".
Product Name: 7 BRIDGEVILLE DAIRY products.
Location of Product Manufacturer: 7 Bridgeville, Pennsylvania.
Date of Product Manufacturer: 7 unknown.
Container Manufacturer Name: 7 unknown.
Location of Container Manufacturer: 7 unknown.
Date of Container Manufacturer: 7, 1903-1920.
Description: The BRIDGEVILLE DAIRY bottle fragments include base and body fragments of at least seven cylindrical milk bottles. The colorless bottles are represented in three sizes with basal diameters of 6.3 cm, 7.8 cm, and 9.7 cm. All of the bottles were manufactured by machine (Personal Communication: Winters).
Comments: N/A.

Group Name: The Brockway Glass Company.
Group Number: 021.
No. of Specimens: 4 fragments.
Color of Specimens: 2 colorless; 2 amber.
No. of Individual(s) Represented: 4.
No. of Individual Shapes Represented: 2 round; 1 prima oval (Putnam 1965:25); 1 monarch oval (Putnam 1965:26).
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the bases of these round and oval bottles is the Brockway trademark of a "B" with extended serifs.

No. of Individual(s) Represented: 3 (minimum).
No. of Individual Shapes Represented: 3 rectangular.
Base Diameter: 3 unknown.
Height: 3 unknown.
Associated Marks/Labels: Embossed down the fronts of these rectangular bottles is "HENRY C. BLAIR/WALNUT & 8TH STS./PHILADELPHIA".
Product Name: 3 unknown.
Location of Product Manufacturer: 3 Philadelphia, Pennsylvania.
Date of Product Manufacturer: 3 unknown.
Container Manufacturer Name: 3 unknown.
Location of Container Manufacturer: 3 unknown.
Date of Container Manufacturer: 3, 1880-1910.
Description: The HENRY C. BLAIR bottle fragments include body fragments of at least three rectangular bottles. The colorless specimens of this group are too fragmentary to determine bottle dimensions. They were probably hand finished and accommodated a cork stopper style closure (Personal Communication: Winters).
Comments: N/A.

Group Name: BOURJOIS.
Group Number: 019.
No. of Specimens: 1 fragment.
Color of Specimens: 1 colorless.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 rectangular.
Base Diameter: (1) 5.2 cm x 2.8 cm.
Height: 1 unknown.
Associated Marks/Labels: Embossed across the base of this rectangular bottle is "BOURJOIS". Embossed across the lower front is "4OZ".
Product Name: 1 BOURJOIS perfume.
Location of Product Manufacturer: 1 unknown.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1903-1920.
Description: The BOURJOIS bottle fragment is a base fragment of a rectangular bottle. This colorless bottle has basal dimensions of 5.2 x 2.8 cm. It was machine manufactured exhibiting a machine cut-off scar.
Comments: BOURJOIS was probably a perfume.

Group Name: B.P.CO.
Group Number: 020.
No. of Specimens: 2 fragments.
Color of Specimens: 2 cobalt blue.
No. of Individual(s) Represented: 2.
No. of Individual Shapes Represented: 2 oval baseless.
Base Diameter: (2) 4.4 cm x 2.1 cm (because there is no base, these are body dimensions).
Height: (2) 7.4 cm.
Associated Marks/Labels: Embossed across the fronts of these baseless, oval bottles is a circle containing two back-to-back "P"s. Embossed above the circle is "B.P.Co. (in downturned arc)".
Product Name: 2 B.P.CO. pills.

Product Name: 2 unknown.
Location of Product Manufacturer: 2 Bridgeville, Pannsylvania.
Date of Product Manufacturer: 2, 1898-1940.
Container Manufacturer Name: 2 unknown.
Location of Container Manufacturer: 2 unknown.
Date of Container Manufacturer: 2 unknown.
Description: The fragments of bottles manufactured exclusively for D.M. Bennett include base and body fragments of at least two buffalo oval (Putnam 1965:24) bottles. These colorless bottles have basal dimensions of ? x 4.1 cm. They also exhibit a shallow, uniform indentation on the base which conforms to the shape of the bottle. These bottles probably exhibited a prescription or medical style lip which would accommodate a glass or cork stopper.
Comments: In 1898, Daniel Miller Bennett bought the first drugstore in Bridgeville, Pennsylvania, from a Mr. Hoey. Bennett operated the store until his death in 1940. Bennett's sons William and John operated the business until October, 1975, when it became known as The Blair Pharmacy (Bridgeville Diamond Jubilee 1901-1976 1976:19).

Group Name: BILLY BAXTER.
Group Number: 013.
No. of Specimens: 67 fragments.
Color of Specimens: 48 aqua; 19 pale green.
No. of Individual(s) Represented: 17 (minimum).
No. of Individual Shapes Represented: 17 round.
Base Diameter: (15), 5.8 cm; (2) 6.7 cm.
Height: (15), 21.5 cm; 2 unknown.
Associated Marks/Labels: Embossed around the lower bodies of the round bottles is "Billy Baxter Billy Baxter (in script)/10 FL. OZ.".
Product Name: 17 BILLY BAXTER soda.
Location of Product Manufacturer: 17 Pittsburgh, Pennsylvania.
Date of Product Manufacturer: 17 unknown.
Container Manufacturer Name: 17 unknown.
Location of Container Manufacturer: 17 unknown.
Date of Container Manufacturer: 17, 1915.
Description: The BILLY BAXTER bottle fragments include base, body, and shoulder fragments of at least seventeen round bottles. One of these bottles is aqua in color and cylindrical in shape. One is pale green and cylindrical. Eight are aqua and "bowling pin shaped" in profile. Seven are pale green and "bowling pin shaped" in profile. All of the bottles were machine manufactured, as demonstrated by the machine cut-off scars on their bases and/or the seam lines extending up their bodies. The two cylindrical specimens have basal diameters of 6.7 cm while the "bowling pin style" bottles have basal diameters of 5.8 cm and reconstructed heights of 21.5 cm. BILLY BAXTER bottles are represented among the whole bottles by specimen 8931-3. This whole example is "bowling pin shaped" in profile. Seam lines run up from the basal edge, up the body, and over a crown top lip.
Comments: N/A.

Group Name: HENRY C. BLAIR.
Group Number: 018.
No. of Specimens: 7 fragments.
Color of Specimens: 7 colorless.

dating to the 1890's, including the June 15, 1893, issue of the Homer Republican (N.Y.)(Baldwin 1973:106). The Chamberlain Medicine Company marketed its products internationally until 1965 (Marzio 1976:571).

Group Name: CHAMBERLAIN'S COUGH REMEDY.
Group Number: 040.
No. of Specimens: 2 fragments.
Color of Specimens: 2 aqua.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 rectangular.
Base Diameter: (1) 2.5 cm x 5.0 cm.
Height: (1) 14.6 cm.
Associated Marks/Labels: Embossed down the front of this rectangular bottle is "CHAMBERLAIN'S/COUGH REMEDY". Embossed down the right side is "CHAMBERLAIN MED.CO.". Embossed down the left side is "DES MOINES, IA. U.S.A.".
Product Name: 1 CHAMBERLAIN'S COUGH REMEDY.
Location of Product Manufacturer: 1 Des Moines, Iowa.
Date of Product Manufacturer: 1, ca. 1895-1965.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1880-1910.
Description: CHAMBERLAIN'S COUGH REMEDY bottle fragments include base and body fragments of a rectangular bottle, panelled on four sides. The aqua bottle has reconstructed basal dimensions of 5.0 cm x 2.5 cm and a reconstructed height of 14.6 cm. This specimen exhibits seam lines running up opposite beveled corners. It was probably finished with an oil type lip which would accommodate a cork stopper (Baldwin 1973:107).
Comments: Advertisements for CHAMBERLAIN'S COUGH REMEDY appeared in periodicals dating to the 1890's including the July 1, 1897, issue of the Daily Territorial Enterprise (Virginia, Nevada). CHAMBERLAIN'S COUGH REMEDY bottles were available in three sizes (Baldwin 1973:107).

Group Name: CHAMBERLAIN'S PAIN BALM.
Group Number: 041.
No. of Specimens: 2 fragments.
Color of Specimens: 2 aqua.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 rectangular.
Base Diameter: (1) 5.8 cm x ? cm.
Height: 1 unknown.
Associated Marks/Labels: Embossed across the front of this bottle is "CHAMBERLAIN'S/PAIN-BALM". Embossed down the right side is "CHAMBERLAIN MED.CO.". Embossed down the left side is "DES MOINES, IA. U.S.A.".
Product Name: 1 CHAMBERLAIN'S PAIN-BALM.
Location of Product Manufacturer: 1 Des Moines, Iowa.
Date of Product Manufacturer: 1, ca. 1895-1965.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1880-1910.
Description: CHAMBERLAIN'S PAIN-BALM bottle fragments include body fragments of a rectangular bottle, panelled on four sides. The aqua

bottle has basal dimensions of 5.8 cm x ? cm.
Comments: Advertisements for CHAMBERLAIN'S PAIN-BALM appeared in periodicals dating to the 1890's, including the April 6, 1897, issue of the Emporia Daily Gazette (Kansas). CHAMBERLAIN'S PAIN-BALM bottles were available in three sizes (Baldwin 1973:107).

Group Name: CHESEBROUGH VASELINE.
Group Number: 042.
No. of Specimens: 30 fragments.
Color of Specimens: 28 colorless; 2 amber.
No. of Individual(s) Represented: 8 (minimum).
No. of Individual Shapes Represented: 8 round.
Base Diameter: (8) 4.2 cm.
Height: 8 unknown.
Associated Marks/Labels: Embossed across the bodies of an amber and three colorless round jars is "TRADE (diagonally)MARK (diagonally)/VASELINE (in downturned arc)/CHESEBROUGH/NEW-YORK (in upturned arc)". Three jars are embossed with "VASELINE (in downturned arc)/CHESEBROUGH/NEW-YORK (in upturned arc)". One jar is embossed with "CHESEBROUGH (in downturned arc)/VASELINE/MANUFACT'G CO (in upturned arc)".
Product Name: 8 CHESEBROUGH VASELINE.
Location of Product Manufacturer: 8 Chesebrough, New York.
Date of Product Manufacturer: 8, ca. 1865-present.
Container Manufacturer Name: 8 unknown.
Location of Container Manufacturer: 8 unknown.
Date of Container Manufacturer: 8, 1903-1960.
Description: The CHESEBROUGH VASELINE jar fragments include base and body fragments of at least eight cylindrical jars. Seven of these jars are colorless while one is amber. These amber and colorless jars have basal diameters of 4.2 cm. They were manufactured by machine, exhibiting seam lines which extend up the continuous thread finishes. CHESEBROUGH VASELINE jars are represented among the whole examples by Subcategory 1, Group 1, Subgroup 2, Variety 1.
Comments: CHESEBROUGH VASELINE jars have been excavated from Fort Union, New Mexico, and date from 1865-1890 (Wilson 1981:50). An advertisement for VASELINE appears in the January, 1891, issue of the Ladies Home Journal (Baldwin 1973:499). VASELINE continues to be manufactured at the time of this writing. It is manufactured by Chesebrough-Ponds Incorporated of New York, New York.

Group Name: CITRATE OF MAGNESIA.
Group Number: 043.
No. of Specimens: 21 fragments.
Color of Specimens: 21 colorless.
No. of Individual(s) Represented: 8 (minimum).
No. of Individual Shapes Represented: 8 round.
Base Diameter: (7) 6.8 cm; (1) 7.4 cm.
Height: (7) 20.4 cm; 1 unknown.
Associated Marks/Labels: Embossed across the bodies of six of these round bottles is a circle. Within the circle is a folded ribbon containing the words "CITRATE MAGNESIA". At least two of these six bottles are embossed across the base with "WARNER (in downturned arc)/(a crescent)". One bottle is embossed across the body with a

double circle containing "CITRATE (in downturned arc)/OF/MAGNESIA (in upturned arc)". One bottle is embossed across the body with "CITRATE (in downturned arc)/MAGNESIA (in upturned arc)/...TS O...".
Product Name: 8 CITRATE OF MAGNESIA.
Location of Product Manufacturer: 8 unknown.
Date of Product Manufacturer: 8 unknown.
Container Manufacturer Name: 8 unknown.
Location of Container Manufacturer: 8 unknown.
Date of Container Manufacturer: 8, 1880-1910.
Description: The CITRATE OF MAGNESIA bottle fragments include base and body fragments of at least eight cylindrical bottles. Seven of the colorless bottles have basal diameters of 6.8 cm and reconstructed heights of 20.4 cm. One of the colorless bottles has a basal diameter of 7.4 cm. Six of the seven smaller bottles exhibit a blob top finish which accommodated lightning bottle stopper closures (Adams 1972:42). All of the specimens were finished by hand.
Comments: CITRATE OF MAGNESIA was probably a bicarbonate-type medicinal product. The lightning stopper closures allowed the empty bottles to be returned to the druggist for refills. CITRATE OF MAGNESIA is known to have been available in a granular form (Adams 1971:108). CITRATE OF MAGNESIA bottles are known to have been manufactured by the Tibby Brothers glass works of Pittsburgh circa 1896 (McKrearin & Wilson 1978:179).

Group Name: CLIQUOT CLUB.
Group Number: 044.
No. of Specimens: 4 fragments.
Color of Specimens: 4 pale green.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 round.
Base Diameter: (1) 6.6 cm.
Height: 1 unknown.
Associated Marks/Labels: Embossed across the shoulder of this round bottle is "TRADE/CLIQUOT CLUB/MARK".
Product Name: 1 CLIQUOT CLUB soda.
Location of Product Manufacturer: 1 unknown.
Date of Product Manufacturer: 1, 1881-unknown.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1913-unknown.
Description: The CLIQUOT CLUB bottle fragments include shoulder, neck, and lip fragments of a cylindrical bottle. This pale green bottle has a reconstructed basal diameter of 6.6 cm. The bottle was manufactured by an automatic bottle machine. It exhibits the characteristic seam lines up, around the neck, and over a crown top lip.
Comments: The Cliquot Club Company was founded in 1881. The company first used its trademark in 1913 (Adams et al. 1975:138).

Group Name: COCA MARIANI.
Group Number: 045.
No. of Specimens: 10 fragments.
Color of Specimens: 10 dark green.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 round.

Base Diameter: (1) 8.5 cm.
Height: (1) 24.7 cm.
Associated Marks/Labels: Embossed across the base of this cylindrical bottle is "COCA MARIANI (in downturned arc)/E/PARIS (in upturned arc)". Embossed around the upper body is "COCA MARIANA/[PARIS]".
Product Name: 1 COCA MARIANI.
Location of Product Manufacturer: 1 Paris, France.
Date of Product Manufacturer: 1, 1850-1890.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1 unknown.
Description: The COCA MARIANI bottle fragments include base, body, and shoulder fragments of a cylindrical bottle. This dark green bottle has a basal diameter of 8.5 cm and a reconstructed height of 24.7 cm. A reconstructed COCA MARIANI bottle would exhibit a short body, elongated neck, and be finished by a brandy style lip (Blumenstein 1966:26).
Comments: COCA MARIANI was a cognac or cordial. Bottles of the liquor have been excavated from western gold mining towns, dating from 1850-1890 (Toulouse 1970:61).

Group Name: COKE DANDRUFF CURE.
Group Number: 046.
No. of Specimens: 2 fragments.
Color of Specimens: 2 colorless.
No. of Individual(s) Represented: 2.
No. of Individual Shapes Represented: 2 rectangular.
Base Diameter: (2) 7.65 x 4.9 cm.
Height: 2 unknown.
Associated Marks/Labels: Embossed across the bases of these two rectangular bottles is "COKE/DANDRUFF/CURE".
Product Name: 2 COKE DANDRUFF CURE.
Location of Product Manufacturer: 2 unknown.
Date of Product Manufacturer: 2 unknown.
Container Manufacturer Name: 2 unknown.
Location of Container Manufacturer: 2 unknown.
Date of Container Manufacturer: 2, 1880-1910.
Description: The COKE DANDRUFF CURE bottle fragments include base fragments of two rectangular bottles. These colorless bottles have basal dimensions of 7.65 cm x 4.9 cm. The specimens exhibit seam lines extending from a basal edge line, up opposite corners of the bottles.
Comments: N/A.

Group Name: The Consolidated Fruit Jar Company.
Group Number: 048.
No. of Specimens: 9 fragments.
Color of Specimens: 9 aqua.
No. of Individual(s) Represented: 3 (minimum).
No. of Individual Shapes Represented: 3 round.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the bodies of the round jars is "MASON (in downturned arc)/(The Consolidated Fruit Jar Company trademark of a monogrammed CFJ Co)/PATENT/NOV 30th/1858".
Product Name: 3 unknown.

Location of Product Manufacturer: 3 unknown.
Date of Product Manufacturer: 3 unknown.
Container Manufacturer Name: 3 The Consolidated Fruit Jar Company.
Location of Container Manufacturer: 3 New Brunswick, New Jersey.
Date of Container Manufacturer: 3, 1871-1882.
Description: The jar fragments which were manufactured by and exhibit the trademark of The Consolidated Fruit Jar Company include body fragments of at least three cylindrical jars. The aqua jars were blown in molds and hand finished with ground lips. Consolidated fruit jars are represented among the whole specimens by Subcategory 1, Group 2, Subgroup 11.
Comments: The Consolidated trademark of a superimposed "CFJ Co" was used from 1871 to 1882. The Consolidated Fruit Jar Company manufactured either the jars or the zinc lids for Mason jars. The company was a consolidation of The Mason Manufacturing Company, The New York Metals Company, Payne and Company, The Jersey City Glass Works, and others. After 1882, The Hero Glass Works acquired The Consolidated Fruit Jar Company, but Consolidated still retained the right to make zinc caps. In 1876, Consolidated bought the jar patents from Mason, which had all expired by 1889. After selling out to Hero, Consolidated did make glass inserts for zinc lids, but in 1908 the company closed (Toulouse 1971:123-125).

Group Name: Colgate and Company Perfumers.
Group Number: 047.
No. of Specimens: 10 fragments.
Color of Specimens: 9 colorless; 1 emerald green.
No. of Individual(s) Represented: 5.
No. of Individual Shapes Represented: 2 round; 3 rectangular.
Base Diameter: (1) 3.5 cm; (1) 4.5 cm; (3) ? x 3.3 cm.
Height: 5 unknown.
Associated Marks/Labels: Embossed across the base of a round bottle is "COLGATE & CO. (in downturned arc)/W/PERFUMERS/4/NEW YORK (in upturned arc)". Embossed across the body of the other round bottle is "COLGATE & CO. (in downturned arc)/PERFUMERS/NEW YORK (in upturned arc)". The rectangular bottle is embossed across the body with "COLGATE & CO. (in downturned arc)/PERFUMERS/NEW YORK (in upturned arc)".
Product Name: 5 Colgate and Company perfumes.
Location of Product Manufacturer: 5 New York.
Date of Product Manufacturer: 5, ca. 1870-1890.
Container Manufacturer Name: 5 unknown.
Location of Container Manufacturer: 5 unknown.
Date of Container Manufacturer: 5, 1880-1910.
Description: The Colgate and Company Perfumers bottle fragments include base, body, shoulder, neck, and lip fragments of at least two cylindrical and three rectangular bottles. One colorless, cylindrical bottle has a basal diameter of 3.5 cm. The emerald green cylindrical bottle has a basal diameter of 4.5 cm. The colorless rectangular bottles have basal dimensions of ? cm x 3.3 cm. All of the bottles were finished by hand. They exhibit seam lines which extend up from the basal edge to the middle of the neck where they were erased by the hand-finishing process. The cylindrical bottles were finished with bead lips.
Comments: Colgate & Company Perfumers bottles have been excavated from

western sites including Fort Union, New Mexico, and date from 1870 to 1890 (Wilson 1981:71).

Group Name: COTY.
Group Number: 049.
No. of Specimens: 5 fragments.
Color of Specimens: 5 colorless.
No. of Individual(s) Represented: 2.
No. of Individual Shapes Represented: 1 oval; 1 rectangular.
Base Diameter: (1) 4.5 cm x 2 cm; (1) ? cm x 2.6 cm.
Height: (1) 7.5 cm; 1 unknown.
Associated Marks/Labels: Embossed across the base of the oval bottle is "COTY/FRANCE". Embossed across the front and back of the rectangular bottle is a star and bubble pattern. Embossed down the left or right side is "COTY".
Product Name: 2 COTY perfume.
Location of Product Manufacturer: 2 France.
Date of Product Manufacturer: 2, ?-present.
Container Manufacturer Name: 2 unknown.
Location of Container Manufacturer: 2 unknown.
Date of Container Manufacturer: 2, 1903-present.
Description: The COTY perfume bottle fragments include base, body, and shoulder fragments of an oval and a rectangular bottle. Both of the bottles are colorless. The oval bottle has basal dimensions of 4.5 cm x 2 cm and a reconstructed height of 7.5 cm. The rectangular based, round in frontal view, bottle has basal dimensions of ? cm x 2.6 cm. Both of the bottles were manufactured by machine (Personal Communication: Winters). COTY bottles are represented among the whole bottles by specimens 8767-1, 8778-1, and 8981-5.
Comments: COTY perfumes continue to be manufactured at the time of this writing. COTY is a division of Pfizer in New York, New York.

Group Name: CREOMULSION.
Group Number: 050.
No. of Specimens: 3 fragments.
Color of Specimens: 3 colorless.
No. of Individual(s) Represented: 2.
No. of Individual Shapes Represented: 2 rectangular.
Base Diameter: (2) 7.3 cm x 3.7 cm.
Height: (2) 21.5 cm.
Associated Marks/Labels: Embossed across the fronts of these rectangular bottles is "CREOMULSION (in downturned arc)/FOR/COUGHS/due to/COLDS".
Product Name: 2 CREOMULSION for coughs due to colds.
Location of Product Manufacturer: 2 unknown.
Date of Product Manufacturer: 2, ?-present.
Container Manufacturer Name: 2 unknown.
Location of Container Manufacturer: 2 unknown.
Date of Container Manufacturer: 2, 1903-1920.
Description: The CREOMULSION bottle fragments include body fragments of at least two rectangular bottles. These colorless bottles have reconstructed basal dimensions of 7.3 cm x 3.7 cm and a reconstructed height of 21.5 cm. CREOMULSION bottles are represented among the whole bottles by specimen 8842-16. This complete example exhibits a paneled

back and seam lines extending up opposite corners from the basal edge line, around the neck, and over a square bead lip. On the base is evidence of a machine cut-off scar.
Comments: CREOMULSION for coughs due to colds is still manufactured at the time of this writing as a children's cough remedy. It is produced by The Creomulsion Company of Atlanta, Georgia. It is not known whether this was the location of manufacture for the containers represented by the artifacts in this group.

Group Name: The Crescent Bottle Works.
Group Number: 051.
No. of Specimens: 3 fragments.
Color of Specimens: 3 colorless.
No. of Individual(s) Represented: 2.
No. of Individual Shapes Represented: 1 round; 1 buffalo oval.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the bases of the round and buffalo oval bottles is The Crescent Bottle Works trademark of a crescent. Embossed across the body of the round bottle is an oval containing ".../...[LIBERT]Y AVE".
Product Name: 2 unknown.
Location of Product Manufacturer: 1 Pittsburgh, Pennsylvania; 1 unknown.
Date of Product Manufacturer: 2 unknown.
Container Manufacturer Name: 2 The Crescent Bottle Works.
Location of Container Manufacturer: 2 McDonald, Pennsylvania.
Date of Container Manufacturer: 2, ?-1930.
Description: The container fragments embossed with The Crescent Bottle Works trademark include base/body fragments of a cylindrical and a buffalo oval (Putnam 1965:24) bottle. All of these specimens are colorless. The cylindrical bottle also exhibits a partial embossed label, identifying the bottle as that of a Pittsburgh business, probably a druggist.
Comments: The Crescent Bottle Works were located directly west of McDonald, near The Pennsylvania Railroad. The company closed permanently sometime in the late 1920's (Personal Communication: Murray). The works were one of several in the Pittsburgh area which demonstrated the transition in the glass industry from small single oven operations to larger works operated by unskilled as well as skilled labor.

Group Name: CRISWELL'S BROMOPEPSIN.
Group Number: 052.
No. of Specimens: 3 fragments.
Color of Specimens: 3 amber.
No. of Individual(s) Represented: 3.
No. of Individual Shapes Represented: 3 round.
Base Diameter: 3 unknown.
Height: 3 unknown.
Associated Marks/Labels: Embossed down the bodies of these round bottles was "CRISWELL'S BROMOPEPSIN/CURES HEADACHE/AND INDIGESTION".
Product Name: 3 CRISWELL'S BROMOPEPSIN.
Location of Product Manufacturer: 3 unknown.

Date of Product Manufacturer: 3 unknown.
Container Manufacturer Name: 3 unknown.
Location of Container Manufacturer: 3 unknown.
Date of Container Manufacturer: 3, 1870-1910.
Description: The CRISWELL'S BROMOPEPSIN bottle fragments include body fragments of at least three cylindrical bottles. The amber specimens were too fragmentary to determine bottle dimensions. The specimens do, however, exhibit seam lines extending over the shoulders and were probably finished by hand with a lip which accommodated a cork stopper (Personal Communication: Winters).
Comments: N/A.

Group Name: CROFT'S MILK COCOA.
Group Number: 053.
No. of Specimens: 3 fragments.
Color of Specimens: 3 colorless.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 oval.
Base Diameter: (1) 8.5 cm x 5.9 cm.
Height: 1 unknown.
Associated Marks/Labels: Embossed across the base of this oval bottle is "CROFT & ALLEN CO. (in downturned arc)/PHILA PA. (in upturned arc)". Embossed across the front is "CROFT'S (in downturned arc)/MILK COCOA/CROFT & ALLEN/PHILA...".
Product Name: 1 CROFT'S MILK COCOA.
Location of Product Manufacturer: 1 Philadelphia, Pennsylvania.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1903-1930.
Description: The CROFT'S MILK COCOA bottle fragments include base and body fragments of an oval bottle. This colorless bottle has basal dimensions of 8.5 cm x 5.9 cm. It also exhibits a valve mark on the base, which suggests that it was manufactured by an automatic bottle machine.
Comments: N/A.

Group Name: The Crown Perfumery.
Group Number: 055.
No. of Specimens: 4 fragments.
Color of Specimens: 4 emerald green.
No. of Individual(s) Represented: 2.
No. of Individual Shapes Represented: 2 round.
Base Diameter: (2) 4.1 cm.
Height: (2) 6.1 cm.
Associated Marks/Labels: Embossed across the bases of these round bottles is "(a diamond figure containing C.P.Co.)/No. 160745 (in upturned arc).". Embossed across the bodies is "THE CROWN (in downturned arc)/PERFUMERY/COMPANY/LONDON (in upturned arc)".
Product Name: 2 "The Crown Perfumery" perfumes.
Location of Product Manufacturer: 2 London.
Date of Product Manufacturer: 2, ca. 1873.
Container Manufacturer Name: 2 unknown.
Location of Container Manufacturer: 2 unknown.

Date of Container Manufacturer: 2, 1870-1910.
Description: The Crown Perfumery Company bottle fragments include base, body, and finish fragments of two cylindrical bottles. These emerald green bottles have basal dimensions of 4.1 cm and reconstructed heights of 6.3 cm. The specimens exhibit seam lines up the body to a square bead lip which accommodated a cork stopper.
Comments: Crown Perfumery perfumes were advertised in periodicals dating from 1872-1874 (Wilson 1981:133).

Group Name: Cunninghams and Company.
Group Number: 056.
No. of Specimens: 1 fragment.
Color of Specimens: 1 aqua.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 round.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the base of this round bottle is "C&Co".
Product Name: 1 unknown.
Location of Product Manufacturer: 1 unknown.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 Cunninghams and Company.
Location of Container Manufacturer: 1 Pittsburgh, Pennsylvania.
Date of Container Manufacturer: 1, 1879-1907.
Description: The bottle fragments embossed with The Cunninghams and Company trademark include a base fragment of a cylindrical bottle. The specimen is aqua in color.
Comments: The beginnings of Cunninghams & Company can be traced back to the window and bottle glass operated by Wilson Cunningham and George Whitten Jackson in 1845 (McKrearin & Wilson 1978:156). Cunninghams and Company's early history involved a number of partner and name changes, including: Cunningham and Duncan; Cunninghams and Ihmsen; and finally Cunninghams and Company in 1879 after Dominick Ihmsen retired. In 1882, Dominec Cunningham separated from the company to form The D. O. Cunningham Glass Company. Cunninghams and Company produced a number of items including beverage bottles, window glass, and historical flasks (Toulouse 1971:119-121).

Group Name: The D. O. Cunningham Glass Company.
Group Number: 065.
No. of Specimens: 4 fragments.
Color of Specimens: 2 aqua; 2 pale green.
No. of Individual(s) Represented: 4.
No. of Individual Shapes Represented: 1 square or rectangular; 3 round.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the bases of the square or rectangular bottles is "DOC". The round bottles are embossed across the lower bodies with "DOC". Embossed across the bases of the two pale green round bottles is "H.F.". Across their bodies is an oval containing "H.FRUECHT (in downturned arc)/CARNEGIE,PA. (in upturned arc)" (group 077).

Product Name: 2 H. FRUECHT beverage; 2 unknown.
Location of Product Manufacturer: 2 Carnegie, Pennsylvania; 2 unknown.
Date of Product Manufacturer: 2 unknown.
Container Manufacturer Name: 4 The D. O. Cunningham Glass Company.
Location of Container Manufacturer: 4 Pittsburgh, Pennsylvania.
Date of Container Manufacturer: 4, 1882-1937.
Description: The bottle fragments which are embossed with The D. O. Cunningham Glass Company trademark include one square or rectangular bottle and three cylindrical bottles. The square or rectangular bottle is aqua in color as well as one of the three cylindrical bottles. The remaining cylindrical specimens are pale green in color. The pale green bottles are also embossed with information associating them with H. FRUECHT bottles. This type of bottle is described in group 077.
Comments: The D. O. Cunningham Glass Company began in 1882 with the separation of Dominec O'Conor Cunningham from Cunningham and Company (group 056). Cunningham was able to do this because of a large inheritance. The company advertised mineral, ginger ale, and beer bottles in 1885. In 1886 furnaces for green and amber glass were running. D. O. Cunningham died in 1911 and, in 1937, the company converted to a bottle jobbing business (Toulouse 1971:163-164).

Group Name: The Cupples Company (Presto Jar).
Group Number: 254.
No. of Specimens: 2 fragments.
Color of Specimens: 2 colorless.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 round.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the body of the round jar is "Presto (diagonally)/S...ME".
Product Name: 1 unknown.
Location of Product Manufacturer: 1 unknown.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 The Illinois Glass Company or The Owens-Illinois Glass Company.
Location of Container Manufacturer: 1 (see groups 116 and 173).
Date of Container Manufacturer: 1, 1925-1946.
Description: The container fragments which were manufactured by The Illinois or Owens-Illinois Glass company, and exhibit the trademark of The Cupples Company, include those of a cylindrical bottle. The colorless bottle was manufactured by machine.
Comments: The label "Presto" refers to the rubber rings used as seals on Mason-type jars, and manufactured by The Cupples Company of St. Louis, Missouri. The jars were also referred to by this name, but were first produced by The Illinois Glass Company, Alton, Illinois, and The Illinois Pacific Glass Company. Later, they continued to be made by The Owens-Illinois Glass Company until 1946 when the metal disc sealer became more popular. Presto jars took the form of wide-mouth bead-seal Masons; improved Masons, standard and wide-mouth "Lightning" seal; and "Glass Top" Masons (Toulouse 1971:425-426).

Group Name: THE CUTICURA SYSTEM OF CURING CONSTITUTIONAL HUMORS.
Group Number: 057.

No. of Specimens: 6 fragments.
Color of Specimens: 6 aqua.
No. of Individual(s) Represented: 2 (minimum).
No. of Individual Shapes Represented: 2 square.ase Diameter: (2) 6.3 cm x 6.3 cm.
Height: (2) 23.4 cm.
Associated Marks/Labels: Embossed down the front of the rectangular bottles is "THE CUTICURA SYSTEM/OF CURING/CONSTITUTIONAL HUMORS". Although there are no specimens of the backs of these bottles, they were embossed with "POTTER DRUG & CHEMICAL CORPORATION BOSTON MASS. U.S.A." (Baldwin 1973:140).
Product Name: 2 THE CUTICURA SYSTEM OF CURING CONSTITUTIONAL HUMORS.
Location of Product Manufacturer: 2 Boston, Massachusetts.
Date of Product Manufacturer: 2, ca. 1879.
Container Manufacturer Name: 2 unknown.
Location of Container Manufacturer: 2 unknown.
Date of Container Manufacturer: 2, 1870-1910.
Description: THE CUTICURA SYSTEM bottle fragments include body fragments of at least two square bottles. The aqua bottles had reconstructed basal dimensions of 6.3 cm x 6.3 cm, and reconstructed heights of 23.4 cm. The reconstructed specimens probably exhibited an oil style lip and were hand finished (Baldwin 1973:140).
Comments: "Constitutional humors" are defined as secretions which pertain to an individual's constitution (affecting the entire body) (Baldwin 1973:22,24). An advertisement for this product appears in the May 24, 1879, issue of Harper's Weekly. Cuticura products were produced by Weeks and Potter, Chemists and Druggists of Boston. The company is known for manufacturing a number of products under the "Cuticura" name (Baldwin 1975:139,140).

Group Name: CU-VEL.
Group Number: 058.
No. of Specimens: 1 fragment.
Color of Specimens: 1 amber.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 rectangular.
Base Diameter: (1) 5.1 cm x 3.8 cm.
Height: 1 unknown.
Associated Marks/Labels: Embossed across the base of this rectangular bottle is "Cu-Vel (in script)".
Product Name: 1 CU-VEL.
Location of Product Manufacturer: 1 unknown.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1903-1920.
Description: The CU-VEL bottle fragments include a base fragment of a rectangular bottle. The amber bottle has basal dimensions of 5.1 cm x 3.8 cm. The specimen exhibits a bottom plate, mold lines extending up opposite corners from the basal edge line, and a suction cut-off scar. These characteristics would suggest that the bottle was manufactured by an automatic machine.
Comments: N/A.

Group Name: DAGGETT AND RAMSDELLS COLD CREAM.
Group Number: 059.
No. of Specimens: 39 fragments.
Color of Specimens: 39 colorless.
No. of Individual(s) Represented: 15 (minimum).
No. of Individual Shapes Represented: 15 round.
Base Diameter: (6) 9.5 cm; (6) 6.7 cm; (3) 5.2 cm.
Height: 6 unknown; (6) 6.5 cm; (3) 5.8 cm.
Associated Marks/Labels: Embossed across the bases of these round jars is "DAGGETT & RAMSDELLS (in downward arc)/PERFECT (in downturned arc)/(a seal containing the words COLD CREAM)/TRADE MARK/CHEMISTS (in upturned arc)".
Product Name: 15 DAGGETT AND RAMSDELLS COLD CREAM.
Location of Product Manufacturer: 15 unknown.
Date of Product Manufacturer: 15 unknown.
Container Manufacturer Name: 15 unknown.
Location of Container Manufacturer: 15 unknown.
Date of Container Manufacturer: 15, 1903-1930.
Description: The DAGGETT AND RAMSDELLS jar fragments include base/body fragments of at least 15 cylindrical jars. These colorless jars came in three sizes with basal diameters of 9.5 cm, 6.7 cm, and 5 cm, and heights of ? cm, 6.5 cm, and 5.8 cm, respectively. All of the jars were manufactured by machine, exhibiting threaded finish and smooth lip. DAGGETT AND RAMSDELLS jars are represented among the whole jars by Subcategory 1, Group 2, Subgroup 22. Although I have listed all of the specimens as being colorless, Mr. Winters has noted tint difference because of the different reagents used.
Comments: N/A.

Group Name: "DEAD STUCK" FOR BUGS.
Group Number: 060.
No. of Specimens: 2 fragments.
Color of Specimens: 2 aqua.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 oval.
Base Diameter: 1 unknown.
Height: 1 unknown.
Associated Marks/Labels: Embossed across the front of the oval bottles is "...[POI]SONOUS WON'T [S]TAIN/"[DEAD STU]CK" FOR BUG[S]/[TRADE] (a bug) MAR[K]/...CHEMICA[L]...".
Product Name: 1 "DEAD STUCK" FOR BUGS insecticide.
Location of Product Manufacturer: 1 Philadelphia, Pennsylvania.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1890-1910.
Description: The "DEAD STUCK" FOR BUGS bottle fragments include body fragments of an oval bottle. The fragments of this aqua bottle are too small to give an indication of the bottle dimensions.
Comments: "DEAD STUCK" was an insecticide manufactured by The William Gottlieb Company of Philadelphia, Pennsylvania.

Group Name: G. M. HAYS DEEME.
Group Number: 096.

No. of Specimens: 5 fragments.
Color of Specimens: 5 colorless.
No. of Individual(s) Represented: 3 (minimum).
No. of Individual Shapes Represented: 3 oval.
Base Diameter: 3 unknown.
Height: 3 unknown.
Associated Marks/Labels: Embossed across the fronts of the oval bottles is "G. M. HAYS DEEME (in downturned arc)/ATLANTIC CITY (in upturned arc)".
Product Name: 3 G. M. HAYS DEEME.
Location of Product Manufacturer: 3 Atlantic City, New Jersey.
Date of Product Manufacturer: 3 unknown.
Container Manufacturer Name: 3 unknown.
Location of Container Manufacturer: 3 unknown.
Date of Container Manufacturer: 3, 1880-1910.
Description: The G. M. Hays Deeme bottle fragments include body fragments of at least 3 oval bottles. The colorless specimens in this group are too fragmentary to determine bottle dimensions. However, the bottles were probably hand finished with a lip which accommodated a cork stopper (Personal Communication: Winters).
Comments: N/A.

Group Name: DENNISONS ADHESIVES.
Group Number: 061.
No. of Specimens: 1 fragment.
Color of Specimens: 1 colorless.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 round.
Base Diameter: (1) 5.1 cm.
Height: 1 unknown.
Associated Marks/Labels: Embossed across the base of the round bottle is "Dennisons (in downturned arc)/Adhesives (in upturned arc)" in script.
Product Name: 1 DENNISONS ADHESIVES.
Location of Product Manufacturer: 1 unknown.
Date of Product Manufacturer: 1, ?-present.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1880-1910.
Description: The DENNISONS ADHESIVES bottle fragments include a base fragment of a cylindrical bottle. The colorless bottle has a basal diameter of 5.1 cm. The bottle was probably finished by hand with a lip which accommodated a cork stopper closure.
Comments: DENNISON ADHESIVES continue to be manufactured at the present time. The products are manufactured by The Dennison Manufacturing Company of Framingham, Massachusetts. Whether this was the location of manufacture when the specimen in this group was used, is not known.

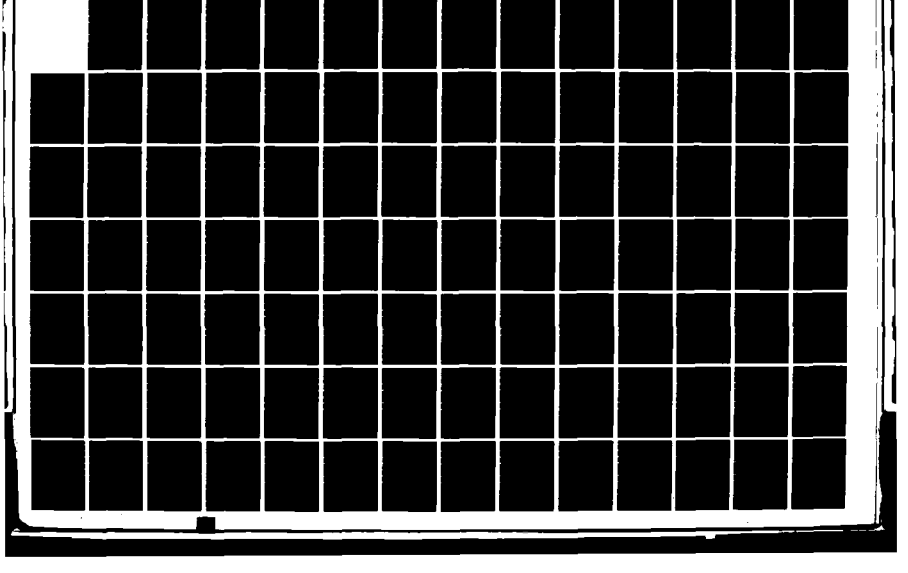
Group Name: THE DIAMOND GLASS COMPANY.
Group Number: 062.
No. of Specimens: 12 fragments.
Color of Specimens: 12 colorless.
No. of Individual(s) Represented: 11 (minimum).

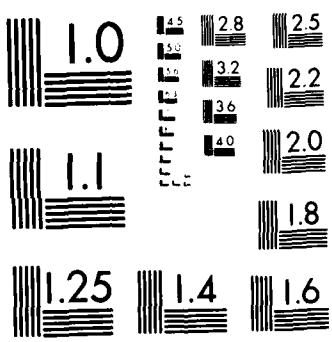
No. of Individual Shapes Represented: 10 rectangular; 1 round.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the base of the round bottle is The Diamond Glass Company's trademark of a diamond. Embossed across the bases of the rectangular bottles is a diamond containing various three-digit numbers including "A81, 181, 336, 353, and 918". One of the specimens is also embossed across the body with "[LISTERINE/LAMBERT/PHARMACAL COMPANY" (group 135).
Product Name: 1 LISTERINE; 10 unknown.
Location of Product Manufacturer: 11 unknown.
Date of Product Manufacture: 1, ?-present; 10 unknown.
Container Manufacturer Name: 11 The Diamond Glass Company.
Location of Container Manufacturer: 11 Royersford, Pennsylvania.
Date of Container Manufacturer: 11, 1924-present.
Description: The container fragments which are embossed with The Diamond Glass Company trademark include base/body fragments of ten rectangular and one cylindrical container. All of the containers are colorless. The cylindrical bottle is also embossed with a label, associating it with LISTERINE. This type of bottle is described in group 135. All of the specimens were machine manufactured. The Diamond Glass Trademark is represented among the whole bottles by specimens 8651-15; 8749-18; 8838-1; 8853-5; and 8981-7.
Comments: The Diamond Glass Company in 1888 acquired land and operated next to The Royersford Stock Glass Company. Royersford Stock merged with Diamond in 1894. In 1924, this company incorporated the use of its diamond trademark. Specimens assigned to this group are questionable because of several other companies which also used the diamond trademark. These companies include The Diamond Glass Company of Montreal; The Diamond Flint Glass Company of Hartford City, Indiana; The Diamond Vial Company of Toledo, Ohio; The Diamond Glass Company of Ravenna, Ohio; The Diamond Glass Company of West Virginia; and The Diamond Glass Company of Indiana, Pennsylvania (Toulouse 1971:550-552).

Group Name: DIAMOND MONOGRAM PURE RYE WHISKEY.
Group Number: 063.
No. of Specimens: 1 fragment.
Color of Specimens: 1 clear.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 rectangular or square.
Base Diameter: 1 unknown.
Height: 1 unknown.
Associated Marks/Labels: Embossed across the front of the rectangular or square bottle is a segmented, double-line circle containing "SCHUELTZ RENZIEHAUSEN & CO (in downturned arc)/(a diamond with DIAMOND/MONOGRAM/PURE RYE/WHISKEY along each side and a monogrammed SSR Co in the center)/COP[PER DIST]ILLED".
Product Name: 1 DIAMOND MONOGRAM PURE RYE WHISKEY.
Location of Product Manufacturer: 1 Maryland.
Date of Product Manufacturer: 1, ca. 1850-1890.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1 unknown.
Description: The DIAMOND MONOGRAM bottle fragment includes a body

AD-A153 688 ANALYSIS OF ARCHAEOLOGICAL GEOLOGICAL AND HISTORICAL ARTIFACTS AND DOCUME.. (U) CARNEGIE MUSEUM OF NATURAL HISTORY PITTSBURGH PA J B RICHARDSON MAR 85 8/10

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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS 1963 A

fragment of a square or rectangular bottle. The colorless specimen is too fragmentary to determine bottle dimensions or morphological attributes.
Comments: DIAMOND MONOGRAM whiskey bottles have been excavated from western gold mining towns dating from 1850 to 1890. The whiskey was manufactured in Maryland (Toulouse 1970:60).

Group Name: DILLS FAMILY EXTRACTS.
Group Number: 257.
No. of Specimens: 12 fragments.
Color of Specimens: 12 colorless.
No. of Individual(s) Represented: 3 (minimum).
No. of Individual Shapes Represented: 3 rectangular.
Base Diameter: (3) 4.2 cm x 2.0 cm.
Height: (3) 13.2 cm.
Associated Marks/Labels: Embossed down the fronts of the rectangular bottles is "USE DILL'S/FAMILY EXTRACTS". Embossed down the right sides is "DILLS FAMILY EXTRACTS". Embossed down the left side is "...DILL MEDICINE...".
Product Name: 3 DILLS FAMILY EXTRACTS.
Location of Product Manufacturer: 3 Norristown, Pennsylvania.
Date of Product Manufacturer: 3 unknown.
Container Manufacturer Name: 3 unknown.
Location of Container Manufacturer: 3 unknown.
Date of Container Manufacturer: 3, 1880-1910.
Description: The DILLS FAMILY EXTRACTS bottles include base and body fragments of at least three rectangular bottles. The colorless bottles have reconstructed basal dimensions of 4.2 cm x 2.0 cm and reconstructed heights of 13.2 cm. DILLS FAMILY EXTRACTS bottles are represented among the whole bottles by specimen 8864-1. This complete example is panelled on four sides with beveled corners. It exhibits a double bead lip and seam lines running up opposite corners from the basal edge line, three-quarters of the way up the collared neck. This would suggest the bottle might have been manufactured by a semi-automatic bottle machine and then hand finished.
Comments: N/A.

Group Name: DIOXOGEN.
Group Number: 064.
No. of Specimens: 10 fragments.
Color of Specimens: 10 amber.
No. of Individual(s) Represented: 4.
No. of Individual Shapes Represented: 4 round.
Base Diameter: (2) 5.2 cm; (1) 7.8 cm; 1 unknown.
Height: 4 unknown.
Associated Marks/Labels: Embossed around the lower bodies of three of these round bottles is "Dioxogen/THE OAKLAND/CHEMICAL COMPANY". One of the bottles is embossed with "Dioxogen/THE OAKLAND/CHEMICAL COMP'Y".
Product Name: 4 DIOXOGEN.
Location of Product Manufacturer: 4 unknown.
Date of Product Manufacturer: 4 unknown.
Container Manufacturer Name: 4 unknown.
Location of Container Manufacturer: 4 unknown.
Date of Container Manufacturer: 4, 1903-1920.

Description: The DIOXOGEN bottle fragments include base and body fragments of at least four cylindrical bottles. The amber bottles are represented in at least three sizes with basal diameters of 5.2 cm, ? cm, and 7.8 cm. All of the bottles were manufactured by machine (Personal Communication: Winters).
Comments: N/A.

Group Name: THE DOMINION GLASS COMPANY.
Group Number: 066.
No. of Specimens: 1 fragment.
Color of Specimens: 1 dark green.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 round.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the base of this round bottle is the Dominion trademark of a diamond containing a "D".
Product Name: 1 unknown.
Location of Product Manufacturer: 1 unknown.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 The Dominion Glass Company.
Location of Container Manufacturer: 1 Montreal, Canada.
Date of Container Manufacturer: 1, 1913-present.
Description: The bottle fragments which are embossed with The Dominion Glass Company trademark include a base fragment of a cylindrical bottle. The bottle is dark green in color and was machine manufactured.
Comments: The Dominion Glass Company was formed as a result of the merger of The Diamond Flint Glass Company of Montreal and The Sudenham Glass Company of Wallaceburg, Ontario. This new company manufactured a general line of containers in all colors. Plants were located in Montreal, Toronto, Wallaceburg, and Hamilton, Ontario, and also one in Redcliff, Alberta. In 1963, one of the two Montreal plants was closed, but a new plant was opened in Winnipeg, Manitoba. In 1964 and 1965, plants were opened in Burnaby, British Columbia; Quebec City, Quebec; and Halifax, Nova Scotia (Toulouse 1971:154-157).

Group Name: DRAKE'S PLANTATION BITTERS.
Group Number: 261.
No. of Specimens: 13 fragments.
Color of Specimens: 13 amber.
No. of Individual(s) Represented: 1 (minimum).
No. of Individual Shapes Represented: 1 square.
Base Diameter: (1) 7.0 cm x 7.0 cm.
Height: (1) 25.0 cm.
Associated Marks/Labels: This square bottle was manufactured in the shape of a log cabin. Embossed across the "roof" (shoulder) was "S. T./DRAKE/1860/PLANTATION/X/BITTERS". Embossed across the back is "PATENTED/1862".
Product Name: 1 DRAKE'S PLANTATION BITTERS.
Location of Product Manufacturer: 1 unknown.
Date of Product Manufacturer: 1, 1862-unknown.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.

Date of Container Manufacturer: 1, 1865-1875 (Munsey 1970:114).
Description: The DRAKE'S PLANTATION BITTERS bottle fragments include base, body, and shoulder fragments of a figural, square bottle. The amber bottle has reconstructed basal dimensions of 7.0 cm x 7.0 cm and a reconstructed height of 25.0 cm. The bottle was fashioned in the form of a log cabin with a tiered roof as the bottle shoulder and log walls as the bottle body. The bottle was probably finished by a slanting collar (oil) type lip which accommodated a cork stopper (Switzer 1974:36-37).
Comments: 1860 PLANTATION BITTERS was developed just before the Civil War by Colonel P. H. Drake. Drake enacted extensive advertisement for his product, using the phrase "S. T. 1860X". Drake's bitters contained enough alcohol to make it 79 proof. This alcoholic content was shared by the other bitters of the time and, therefore, became the target of prohibition groups. The Pure Food and Drug Act required that the alcoholic content be printed on the label. This, along with the establishment of national prohibition in 1920, caused the subsequent demise of the bitters business (Ketchum 1975:99-100). DRAKE'S 1860 PLANTATION BITTERS bottles have been excavated from western sites including Fort Laramie, Wyoming, and Fort Union, New Mexico (Wilson 1981:24). Remarkably well-preserved examples of DRAKE'S BITTERS bottles, and the case in which they were shipped, were excavated from the hold of the Bertrand steam boat. The Bertrand sank in April, 1865, on the Missouri River on its way to Fort Benton, Montana Territory (Petsche 1974:5; Switzer 1974:36-37). Advertisements for DRAKE'S BITTERS appear in periodicals dating from 1868-1876 (Wilson 1981:133).

Group Name: DRAM BOTTLES.
Group Number: 067.
No. of Specimens: 15 fragments.
Color of Specimens: 14 colorless; 1 amethyst.
No. of Individual(s) Represented: 13 (minimum).
No. of Individual Shapes Represented: 1 round; 12 unknown.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the shoulders of these round and beveled corner bottles is a dram mark followed by Roman numerals. These numerals include "XV" on the round bottles, "iv" on three rectangular bottles, and "i, vi, viii, xi, xv, xvi" on four of the rectangular bottles. At least seven of the rectangular specimens show gradations down the left and right corners of the bottles.
Product Name: 13 unknown.
Location of Product Manufacturer: 13 unknown.
Date of Product Manufacturer: 13 unknown.
Container Manufacturer Name: 13 unknown.
Location of Container Manufacturer: 13 unknown.
Date of Container Manufacturer: 13, 1880-present.
Description: The DRAM bottle fragments include body and shoulder fragments of at least thirteen bottles. Only one specimen can be positively identified as a cylindrical bottle. It is colorless, as are twelve of the thirteen bottles. One bottle is amethyst in color. DRAM bottles were available in various shapes including practical ovals, royal oblongs, buffalo ovals, and prima ovals (Putnam 1965:22-27). These bottles exhibited a prescription-style lip and were either hand

finished or machine made. DRAM bottles are represented among the whole bottles by specimens 8738-6, 8821-1, 8848-6, 8850-7, 8853-4, 8873-1, 8907-4, 8966-19, and 8969-1.
Comments: N/A.

Group Name: EAGLEBRAND NOVA.
Group Number: 164.
No. of Specimens: 6 fragments.
Color of Specimens: 6 white milk glass.
No. of Individual(s) Represented: 1 (minimum).
No. of Individual Shapes Represented: 1 round.
Base Diameter: (1) 8.0 cm.
Height: (1) 4.05 cm.
Associated Marks/Labels: Embossed around the body of the round jar is "EAGLEBRAND NOVA".
Product Name: 1 EAGLEBRAND NOVA cold cream.
Location of Product Manufacturer: 1 unknown.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1903-present.
Description: The EAGLEBRAND NOVA jar fragments include base, body, and rim fragments of at least 1 cylindrical jar. This white milk glass jar has a basal diameter of 8.0 cm and a height of 4.05 cm. The jar was machine manufactured and exhibits seam lines up from the basal edge line, over the continuous thread finish, up to the smooth lip. EAGLEBRAND NOVA jars are represented among the whole jars by Subcategory 1, Group 2, Subgroup 6.
Comments: N/A.

Group Name: EASTMAN CHEMICALS.
Group Number: 068.
No. of Specimens: 5 fragments.
Color of Specimens: 5 colorless.
No. of Individual(s) Represented: 3 (minimum).
No. of Individual Shapes Represented: 3 rectangular.
Base Diameter: (3) ? cm x 3.4 cm.
Height: 3 unknown.
Associated Marks/Labels: Embossed down the fronts of these rectangular bottles was "ROCHESTER, N.Y./(gradations in ounces)/EASTMAN".
Product Name: 3 EASTMAN CHEMICALS.
Location of Product Manufacturer: 3 Rochester, New York.
Date of Product Manufacturer: 3, ca. 1889.
Container Manufacturer Name: 3 unknown.
Location of Container Manufacturer: 3 unknown.
Date of Container Manufacturer: 3, 1880-1910.
Description: The EASTMAN bottle fragments include body fragments of at least 3 rectangular bottles. The colorless bottles have basal dimensions of ? cm x 3.4 cm. They exhibit seam lines which extend up opposite corners of the bottles. The bottles were probably hand finished with lips which accommodated cork stopper closures. EASTMAN bottles are represented among the whole examples by specimen 8654-2.
Comments: Bottles such as these contained photographic chemicals, necessary for cameras sold by Eastman Kodak during the turn of the

century. An advertisement for this type of Kodak camera appears in photographic periodicals of this period (Photographic Journal 1889:v).

Group Name: ECLIPSE FRENCH SATIN GLOSS.
Group Number: 069.
No. of Specimens: 1 fragment.
Color of Specimens: 1 dark green.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 square.
Base Diameter: (1) 4.2 cm x 4.2 cm.
Height: 1 unknown.
Associated Marks/Labels: Embossed across the base of this square bottle was "773/5A". Embossed down the front was "ECLIPSE/FRENCH SATIN/GLOSS".
Product Name: 1 ECLIPSE FRENCH SATIN GLOSS paint.
Location of Product Manufacturer: 1 unknown.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1880-1910.
Description: The ECLIPSE FRENCH SATIN GLOSS bottle fragments include a base/body fragment of a square bottle with rounded corners. The dark green bottle has basal dimensions of 4.2 cm x 4.2 cm. The specimen exhibits seam lines extending up opposite corners from the basal edge line. The blowing of this specimen into an improperly warmed mold has also produced "whittle marks" on the body.
Comments: N/A.

Group Name: EDLIS.
Group Number: 070.
No. of Specimens: 1 fragment.
Color of Specimens: 1 colorless.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 square or rectangular.
Base Diameter: (1) ? cm x 4.4 cm.
Height: 1 unknown.
Associated Marks/Labels: Embossed across the upper front of this square or rectangular bottle is a double circle containing "EDLIS (diagonally)".
Product Name: 1 EDLIS.
Location of Product Manufacturer: 1 unknown.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1903-1920.
Description: The EDLIS bottle fragments include a body fragment of a square or rectangular bottle with fluted sides and beveled corners. The colorless specimen has basal dimensions of ? cm x 4.4 cm. The specimen was manufactured by machine.
Comments: N/A.

Group Name: EL CAYA.
Group Number: 071.
No. of Specimens: 46 fragments.

Color of Specimens: 46 white milk glass.
No. of Individual(s) Represented: 11 (minimum).
No. of Individual Shapes Represented: 11 square.
Base Diameter: (11) 5.3 cm x 5.3 cm.
Height: (11) 6.7 cm.
Associated Marks/Labels: Embossed across the bases of at least 7 of these square jars is "THE EL CAYA CO. (in downturned arc)/NEW YORK (in upturned arc)". Embossed down the left and right sides is "EL CAYA". Four of the 11 jars are embossed across the bases with "JAMES C. CRANE (in downturned arc)/NEW YORK (in upturned arc). These were also embossed down the left and right sides with "EL CAYA".
Product Name: 11 EL CAYA cold cream.
Location of Product Manufacturer: 11 New York.
Date of Product Manufacturer: 11 unknown.
Container Manufacturer Name: 11 unknown.
Location of Container Manufacturer: 11 unknown.
Date of Container Manufacturer: 11, 1903-1930.
Description: The EL CAYA jar fragments include base, body, and rim fragments of at least eleven square jars with rounded corners. These white milk glass jars have basal dimensions of 5.3 cm x 5.3 cm, and heights of 6.7 cm. The jars were machine manufactured with a raised double-square, flange-like shoulder. The bottles also exhibit a smooth lip and a finish of one continuous thread. EL CAYA jars are represented among the jars by Subcategory 1, Group 2, Subgroup 5.
Comments: N/A.

Group Name: ELY'S CREAM BALM.
Group Number: 072.
No. of Specimens: 1 fragment.
Color of Specimens: 1 amber.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 rectangular.
Base Diameter: (1) 3.35 cm x 2.4 cm.
Height: (1) 6.7 cm.
Associated Marks/Labels: Embossed across the front of this rectangular bottle is "ELY'S (in downturned arc)/CREAM/BALM".
Product Name: 1 ELY'S CREAM BALM.
Location of Product Manufacturer: 1 Owego, New York, or New York, New York.
Date of Product Manufacturer: 1, 1865-1890.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1880-1910.
Description: The ELY'S CREAM BALM bottle fragments include a base/body fragment of a rectangular bottle with beveled corners. The amber specimen has basal dimensions of 3.35 cm x 2.4 cm, and a reconstructed height of 6.7 cm. It was manufactured by machine, exhibiting a bottom plate and seam lines extending up from a basal edge line. A complete bottle of this type would exhibit a sheared-style finish (Adams 1972:121).
Comments: This specimen is a base/body fragment of an amber, rectangular bottle. ELY'S CREAM BALM was manufactured by The Ely's Brothers of Owego, New York, and later New York City. An advertisement for their product appears in the January 3, 1880, edition

of the Ithaca Daily Journal. It reads, "Gives relief at once for cold in the head..." (Baldwin 1973:166-167). Ely's bottles have been excavated from western sites such as Fort Union, New Mexico, and date from 1865 to 1890 (Wilson 1981:44).

Group Name: EVERETT & BARRON SHOE POLISHES.
Group Number: 073.
No. of Specimens: 10 fragments.
Color of Specimens: 4 colorless; 6 aqua.
No. of Individual(s) Represented: 4 (minimum).
No. of Individual Shapes Represented: 2 rectangular; 2 buffalo oval.
Base Diameter: (1) 5.6 cm x 3.5 cm; 3 unknown.
Height: (1) 13.3 cm; 3 unknown.
Associated Marks/Labels: One of two colorless, rectangular bottles is embossed across the base with the Hazel Atlas trademark (group 098). Embossed down the front is "Guarantee[d]/Everett & Barron Co. (diagonally and in script)/Product/[PROVIDE]NCE, [R.I.] U.S.A.". The other colorless bottle is embossed down the front with "3 1/2 FLUID O...(horizontally, in downturned arc)/EVERETT & BARRON CO./SHOE POLISHES/PROVIDENCE, R.I.". The remaining two aqua bottles are embossed down the front with "EVERETT & BARRONS/SHOE DRESSINGS/ PROVIDENCE, R.I.".
Product Name: 4 EVERETT & BARRON SHOE POLISHES.
Location of Product Manufacturer: 4 Providence, Rhode Island.
Date of Product Manufacturer: 4 unknown.
Container Manufacturer Name: 1 The Hazel-Atlas Glass Company; 3 unknown.
Location of Container Manufacturer: 1 Wheeling, West Virginia; 3 unknown.
Date of Container Manufacturer: 1, 1920-1964; 3, 1903-1940.
Description: The EVERETT & BARRON bottle fragments include base and body fragments of two rectangular and two buffalo oval (Putnam 1965:24) bottles. One of the colorless rectangular bottles has basal dimensions of 5.6 cm x 3.5 cm and a reconstructed height of 13.3 cm. The remaining colorless rectangular bottle and aqua buffalo oval bottle fragments are too small to determine bottle dimensions. The colorless rectangular bottle, for which there are dimensions, is represented among the whole bottles by specimen 8966-9. Like the fragmentary specimen, this bottle exhibits a machine cut-off scar, a bottom plate, and seam lines extending up opposite corners from the basal edge line. The complete bottle exhibits a thread finish which would accommodate a metal screw-on cap.
Comments: N/A.

Group Name: The Fairmont Glass Works.
Group Number: 074.
No. of Specimens: 13 fragments.
Color of Specimens: 7 amber; 5 colorless; 1 pale green.
No. of Individual(s) Represented: 13.
No. of Individual Shapes Represented: 7 round; 2 rectangular; 3 square; 1 buffalo oval.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: The bases of 4 amber round bottles are

embossed respectively with "F", "F/4", and "F/7". The last 2 bottles are also embossed down the bodies with "BELL-ANS" (Group 016). The amber rectangular bottles were embossed across the bases with "37/F" and "F/3". One amber square base is embossed with "F". The bases of 3 colorless round bottles are embossed respectively with "87/F/2", "F", and "557/FGW/1". The 2 colorless square bases are embossed with "FGC/252/4" and "F/345/2". The pale green buffalo oval bottle is embossed across the base with "F/814". One amber round bottle is embossed across the base with a hexagon containing an "F". Embossed down the bottle was "BELL-ANS".
Product Name: 2 BELL-ANS; 11 unknown.
Location of Product Manufacturer: 2 Orangeburg, New York; 11 unknown.
Date of Product Manufacturer: 13 unknown.
Container Manufacturer Name: 13 The Fairmont Glass Works.
Location of Container Manufacturer: 13 Indianapolis or Fairmont, Indiana.
Date of Container Manufacturer: 1, 1898-1930; 10, 1930-1945; 1, 1945-1960; 1, 1960-1968.
Description: The container fragments which were manufactured by and exhibit the trademark of The Fairmont Glass Works, include those of a pale green cylindrical bottle, an amber square bottle, 5 amber cylindrical bottles; 2 amber rectangular bottles; 3 colorless cylindrical bottles; and 1 pale green buffalo oval (Putnam, 1965:24) bottle. At least 2 of the amber cylindrical bottles were manufactured for BELL-ANS (group 016). All of the specimens were manufactured by machine, exhibiting the characteristic full seam-lines and/or valve marks and/or cut-off seams. Bottles embossed with The Fairmont Glass Works trademarks are represented among the whole examples by specimens 8749-30, 8768-9, and 8961-2.
Comments: Nine of these bottles are embossed across the base with an "F", the trademark used by Fairmont from 1930 to 1945. One of the specimens is embossed in the same manner with "FGW", the trademark used from 1898 to 1930. One of the specimens is embossed in the same manner with a hexagon containing an "F", the trademark used from 1945 to 1960. One of the specimens is embossed in the same manner with "FGC", the trademark used from 1960 to 1968. In 1889, a Fairmont, Indiana, banker founded The Fairmont Glass Company. The banker's son, Palmer Winslow, acquired the company at the age of 18 and successfully ran it until his death in 1927. Winslow built factories in Matthews, Indiana (which moved to Columbus, Ohio), and Indianapolis (which became the main plant after the Fairmont factory was closed in 1908)(Toulouse 1971:200-202).

Group Name: FELLOW'S COMPOUND SYRUP OF HYPOPHOSPHITES.
Group Number: 075.
No. of Specimens: 14 fragments.
Color of Specimens: 14 aqua.
No. of Individual(s) Represented: 4 (minimum).
No. of Individual Shapes Represented: 4 oval.
Base Diameter: (4) 9.3 cm x 3.9 cm.
Height: 4 unknown.
Associated Marks/Labels: Embossed down the fronts of these oval bottles is "FELLOWS/SYRUP OF/HYPOPHOSPHITES".
Product Name: 4 FELLOWS SYRUP OF HYPOPHOSPHITES.
Location of Product Manufacturer: 4 St. John, New Brunswick.

Date of Product Manufacturer: 4, ca. 1880.
Container Manufacturer Name: 4 unknown.
Location of Container Manufacturer: 4 unknown.
Date of Container Manufacturer: 4, 1880-1910.
Description: The FELLOWS SYRUP OF HYPOPHOSPHITES bottle fragments include body fragments of at least fourteen oval bottles. The aqua bottles have reconstructed basal dimensions of 9.3 cm x 3.9 cm. They exhibit seam lines extending up the sides from the basal edge lines. The bottles were probably finished by hand with a lip which accommodated a cork stopper closure.
Comments: FELLOW'S COMPOUND was manufactured by Fellows and Company of St. John. An advertisement for the product appears in such papers as the April 12, 1879, issue of the Detroit Free Press, and reads "For consumption, dyspepsia, etc..." (Baldwin 1973:175).

Group Name: FLEISCHMANN'S DRY GIN.
Group Number: 076.
No. of Specimens: 10 fragments.
Color of Specimens: 10 colorless.
No. of Individual(s) Represented: 3 (minimum).
No. of Individual Shapes Represented: 3 rectangular.
Base Diameter: (3) 9.0 cm x 6.8 cm.
Height: 3 unknown.
Associated Marks/Labels: Embossed down the front of these rectangular bottles is "FLEISCHMANN'S". Embossed down the backs is "DRY GIN". Embossed across the base of one bottle is The Owens-Illinois Glass Company trademark (group 173).
Product Name: 4 FLEISCHMANN'S DRY GIN.
Location of Product Manufacturer: 4 unknown.
Date of Product Manufacturer: 4 unknown.
Container Manufacturer Name: 1 The Owens-Illinois Glass Company; 3 unknown.
Location of Container Manufacturer: 1 (see group 173); 3 unknown.
Date of Container Manufacturer: 4, 1929-present.
Description: The FLEISCHMANN'S DRY GIN bottle fragments include base and body fragments of at least three rectangular bottles with beveled corners. The colorless bottles have reconstructed basal dimensions of 9.0 cm x 6.8 cm. FLEISCHMANN'S GIN bottles are represented among the whole examples by specimen 8785-1. This complete example was manufactured, like the fragmentary specimens, by machine. It exhibits a cut-off scar.
Comments: N/A.

Group Name: Joseph Fleming & Sons.
Group Number: 054.
No. of Specimens: 34 fragments.
Color of Specimens: 34 colorless.
No. of Individual(s) Represented: 8.
No. of Individual Shapes Represented: 8 square.
Base Diameter: (8) 7.8 cm x 7.8 cm.
Height: 8 unknown.
Associated Marks/Labels: Embossed across the upper bodies of the square bottles is a shield with crown containing a monogrammed "JFS". Below this, embossed vertically, is "JOSEPH FLEMING & SONS/412 MARKET

ST./PITTSBURGH PA".
Product Name: 8 unknown.
Location of Product Manufacturer: 8 Pittsburgh, Pennsylvania.
Date of Product Manufacturer: 8, 1890-1932.
Container Manufacturer Name: 8 unknown.
Location of Container Manufacturer: 8 unknown.
Date of Container Manufacturer: 8 unknown.
Description: The Joseph Fleming & Sons bottle fragments include base and body fragments of at least 7 square bottles with beveled corners and 1 square bottle with rounded corners. The colorless bottles have basal dimensions of 7.8 cm x 7.8 cm. They exhibit seam lines which extend up opposite corners from the basal edge.
Comments: Joseph Fleming & Sons, druggists, are first listed in the Pittsburgh City Directories in 1890 (Pittsburgh and Allegheny City Directory Vol. 1890-92:295). Prior to 1890, Joseph Fleming operated alone from his Market Street business. Fleming and his sons operated their business until 1932 (Polk's Pittsburgh Directory Vol. 1932:640).

Group Name: The Fort Pitt Brewing Company.
Group Number: 266.
No. of Specimens: 2 fragments.
Color of Specimens: 2 amber.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 round.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the base of the round bottle was "PFB Co.", monogram style.
Product Name: 1 Fort Pitt Beer.
Location of Product Manufacturer: 1 Sharpsburg, Pennsylvania.
Date of Product Manufacturer: 1, 1934-ca. 1960.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1 unknown.
Description: The Fort Pitt Brewing bottle fragments include base fragments of a cylindrical bottle. The amber bottle was manufactured by machine, exhibiting the characteristic machine cut-off scar.
Comments: The Fort Pitt Brewing Company is first listed in the 1934 Pittsburgh City Directories and advertised as "Brewers and bottlers of Pilsners, Fort Pitt, Ale and Stout,...". The company continues to be listed into the 1960's (Polk's Pittsburgh Directory 1934:695).

Group Name: Henry Fruecht.
Group Number: 077.
No. of Specimens: 14 fragments.
Color of Specimens: 14 pale green.
No. of Individual(s) Represented: 4 (minimum).
No. of Individual Shapes Represented: 4 round.
Base Diameter: (4) 6.3 cm.
Height: (4) 17.0 cm.
Associated Marks/Labels: Embossed across the bases of the round bottles was "H.F.". Embossed across the bodies is an oval containing "H. FRUECHT (in downturned arc)/CARNEGIE, PA. (in upturned arc)". At least 2 of the 4 bottles were embossed across the lower body with

"D.O.C." (group 065).
Product Name: 4 H. Fruecht beverages.
Location of Product Manufacturer: 4 Carnegie, Pennsylvania.
Date of Product Manufacturer: 4, ca. 1912-1924.
Container Manufacturer Name: 2 The D. O. Cunningham Glass Company; 2 unknown.
Location of Container Manufacturer: 2 Pittsburgh, Pennsylvania; 2 unknown.
Date of Container Manufacturer: 2, 1887-1937; 2 unknown.
Description: The H. Fruecht bottle fragments include base and body fragments of at least 4 cylindrical bottles. The pale green bottles have reconstructed basal diameters of 6.3 cm and reconstructed heights of 17.0 cm. They exhibit a slug plate label and seam lines which extend up to the neck, where they were tooled off. H. Fruecht bottles are represented among the whole examples by specimen 8843-1. The complete example was hand finished with a blob top lip which accommodated a Hutchinson stopper closure.
Comments: Henry Fruecht is listed as a bottler in the 1912-13 Carnegie City Directory, but does not appear in the 1924 directory (Polk's Carnegie Directory 1912-13:61).

Group Name: W. J. Gilmore and Company.
Group Number: 078.
No. of Specimens: 1 fragment.
Color of Specimens: 1 colorless.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 monarch oval.
Base Diameter: (1) 5.5 cm x 3.1 cm.
Height: 1 unknown.
Associated Marks/Labels: Embossed across the base of the monarch oval is "GILMORE".
Product Name: 1 Gilmore & Company drug or paint.
Location of Product Manufacturer: 1 Pittsburgh, Pennsylvania.
Date of Product Manufacturer: 1, ca. 1886-1904.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1 unknown.
Description: The Gilmore bottle fragments include a base/body fragment of a monarch oval (Putnam 1965:25) bottle. The colorless bottle has basal dimensions of 5.5 cm x 3.1 cm. The specimen exhibits a bottom plate and seam lines which extend up from the basal edge.
Comments: The Gilmore embossed on the specimen in this group is probably associated with W. J. Gilmore and Company, Druggists, of Pittsburgh. This company was the successor to W. MacKeown, Thompson, and Co., a wholesale druggist. MacKeown, Thompson, and Company was founded in 1825 by W. MacKeown and his brother. It later became known as MacKeown, Owens and Company, then MacKeown, Thompson, and Company, and finally in 1886, W. J. Gilmore took over. The Gilmore Company made "...a specialty of heavier drugs and paints and oils" (The Pennsylvania Historical Review 1886:132). Gilmore is last listed in the Pittsburgh Directories in 1904 (Pittsburgh and Allegheny City Directory 1904:652).

Group Name: The Glenshaw Glass Company.
Group Number: 080.

No. of Specimens: 1 fragment.
Color of Specimens: 1 amber.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 round.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the base of the round bottle is The Glenshaw Glass trademark of a "G" within a square.
Product Name: 1 unknown.
Location of Product Manufacturer: 1 unknown.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 The Glenshaw Glass Company.
Location of Container Manufacturer: 1 Glenshaw, Pennsylvania; Swedesboro, Maryland; or Orangeburg, New York.
Date of Container Manufacturer: 1, 1932-present.
Description: The container fragments which were manufactured by and exhibit the trademark of The Glenshaw Glass Company include a base fragment of an amber cylindrical bottle. The bottle was manufactured by machine.
Comments: The Glenshaw trademark of a "G" within a square, was adopted in 1932. The Glenshaw Glass Company was formed in 1894 by two Pittsburgh glass blowers, a merchant, and a hotel keeper. In 1904, the company is listed as manufacturing flint, green, and amber glass, in beverage bottles, proprietary medicines, and packers. In 1914, a plant in Swedesboro, Maryland, was acquired. By 1952, The Glenshaw Company operated 16 machines and in 1961 established a plant in Orangeburg, New York (Toulouse 1971:211-213).

Group Name: GLOVER'S IMPERIAL MANGE MEDICINE.
Group Number: 081.
No. of Specimens: 20 fragments.
Color of Specimens: 20 amber.
No. of Individual(s) Represented: 3 (minimum).
No. of Individual Shapes Represented: 3 rectangular.
Base Diameter: (3) 5.9 cm x 4.3 cm.
Height: 3 unknown.
Associated Marks/Labels: Embossed down the fronts of the rectangular bottles is "...FL OZ. (horizontally)/GLOVERS IMPERIAL/MANGE MEDICINE". Embossed down the left sides is "H. CLAY GLOVER CO.". Embossed down the right sides is "NEW YORK". Embossed across at least one base is The Owens Bottle Company trademark (group 172). Embossed across at least one base is the Whitall-Tatum trademark of "W.T.Co." (group 236).
Product Name: 3 GLOVERS IMPERIAL MANGE MEDICINE.
Location of Product Manufacturer: 3 New York.
Date of Product Manufacturer: 3, ca. 1860-?.
Container Manufacturer Name: 1 The Owens Bottle Company; 1 The Whitall-Tatum Glass Company; 1 unknown.
Location of Container Manufacturer: 1 Toledo, Ohio, or Fairmont, West Virginia; 1 Millville, New Jersey; 1 unknown.
Date of Container Manufacturer: 1, 1911-1929; 1, 1857-1938; 1 unknown.
Description: The GLOVERS IMPERIAL MANGE MEDICINE bottle fragments include base and body fragments of at least three rectangular bottles with beveled corners. The amber bottles have basal dimensions of 5.9 cm x 4.3 cm. They were manufactured by machine, exhibiting cut-off

Description: The HERBO-PHOSATE bottle fragments include body and shoulder fragments of a cylindrical bottle. The pale blue specimens are too fragmentary to determine bottle dimensions. However, the bottle was manufactured by a machine and probably exhibited a finish which accommodated a cork stopper style closure.
Comments: HERBO-PHOSATE was possibly an organic fertilizer.

Group Name: HIND'S HONEY AND ALMOND CREAM.
Group Number: 106.
No. of Specimens: 8 fragments.
Color of Specimens: 8 colorless.
No. of Individual(s) Represented: 4 (minimum).
No. of Individual Shapes Represented: 4 rectangular.
Base Diameter: (4) 6 cm x 3.5 cm.
Height: 4 unknown.
Associated Marks/Labels: Embossed across the fronts of 2 of the 4 rectangular bottles is "HINDS (in downturned arc)/HONEY/AND/ALMOND CREAM (in upturned arc)/A.S.HINDS CO/BLOOMFIELD/N.J. U.S.A.". Embossed across the bases is "A S HINDS CO./(The Whitall-Tatum trademark used from 1935-1938)10". Two of the 4 bottles are embossed across the fronts with "A.S.Hinds (in downturned arc)/(a monogrammed ASH)/Portland Me (in upturned arc)/U.S.A.". At least one of these bottles is embossed across the base with "AY/111".
Product Name: 4 HIND'S HONEY AND ALMOND CREAM.
Location of Product Manufacturer: 2 Bloomfield, New Jersey; 2 Portland, Maine.
Date of Product Manufacturer: 4, 1880-?.
Container Manufacturer Name: 2 The Whitall-Tatum Glass Company; 2 unknown.
Location of Container Manufacturer: 2 Millville, New Jersey; 2 unknown.
Date of Container Manufacturer: 2, 1935-1938; 1, 1880-1910; 1, 1890-1930.
Description: The HIND'S HONEY AND ALMOND CREAM bottle fragments include base and body fragments of at least four rectangular bottles. The colorless bottles have basal dimensions of 6 cm x 3.5 cm. All of the specimens exhibit machine-made characteristics such as bottom plates, seam lines extending up from the basal edge line, and machine cut-off scars. HIND'S HONEY AND ALMOND CREAM bottles are represented among the whole examples by specimen 8748-7. This complete specimen, like the fragmentary specimens, was machine made and exhibits a continuous thread finish.
Comments: Aurelius S. Hinds began his business by selling his cream over the counter at his drugstore, and to other druggists. Hinds, from Livermore, Maine, was employed by the H. H. Hay drugstore of Portland, Maine. He eventually purchased and operated his own drugstore until his retirement. His store was bought in 1925 by Lehn and Fink. The Hinds trademark of the intertwined "ASH" was used from 1890-1930. The "AY/111" mark was used from 1880-1910 (Toulouse 1971:54-55). Hind's bottles have been excavated from western gold mining towns dating from 1850 to 1890 (Historical Archeology 1970:66).

Group Name: HIRES ROOT BEER/EXTRACT.
Group Number: 107.

right to continue manufacturing the tableware (Toulouse 1971:233-235).

Group Name: HELLMANN'S.
Group Number: 102.
No. of Specimens: 10 fragments.
Color of Specimens: 10 colorless.
No. of Individual(s) Represented: 6 (minimum).
No. of Individual Shapes Represented: 6 round.
Base Diameter: (4) 8.0 cm; (2) 6.6 cm.
Height: 6 unknown.
Associated Marks/Labels: Embossed across the bases of the round jars is "HELLMANN'S/BLUE RIBBON/REGISTERED". Three of the jars are also embossed across the bases with the Owens-Illinois trademark (group 173). Two of the six jars are also embossed with The Owens Bottle Company trademark (group 172).
Product Name: 6 HELLMANN'S mayonnaise.
Location of Product Manufacturer: 6 unknown.
Date of Product Manufacturer: 6, ?-present.
Container Manufacturer Name: 3 The Owens-Illinois Glass Company; 2 The Owens Bottle Company; 1 unknown.
Location of Container Manufacturer: 3 (see group 173); 2 (see group 172); 1 unknown.
Date of Container Manufacturer: 3, 1911-1929; 2, 1929-present; 1 unknown.
Description: The HELLMANN'S jar fragments include base fragments of at least six cylindrical jars. The colorless jars are represented by two sizes with basal diameters of 8.0 cm and 6.6 cm. They were manufactured by machine, exhibiting cut-off scars as well as valve marks. HELLMANN'S jars are represented among the whole jars by Subcategory 1, Group 1, Subgroup 15, Variety 1. These jars were also machine made and exhibit lug finishes.
Comments: HELLMANN'S mayonnaise continues to be manufactured at the time of this writing. It is manufactured by Best Foods, CPC International Incorporated of Englewood Cliffs, New Jersey. Whether this was the location of manufacture when the specimens in this group were used is not known.

Group Name: HERBO-PHOSATE.
Group Number: 103.
No. of Specimens: 3 fragments.
Color of Specimens: 3 pale.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 round.
Base Diameter: 1 unknown.
Height: 1 unknown.
Associated Marks/Labels: Embossed around the shoulder of the round bottle is "[HER]B-O HERB-O". Embossed across the body is "...E RET.../[HE]RB-O PHOSA[TE]/[P]ROVIDENCE, R[I]".
Product Name: 1 HERBO-PHOSATE.
Location of Product Manufacturer: 1 Providence, Rhode Island.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1903-1920.

Lehew). H. J. Heinz bottles are represented among the whole examples by specimens 8842-7, 8852-2, 8981-1, and 8922-7.
Comments: Henry J. Heinz began his packing and glassmaking industry as a produce peddler at the age of 16. The Pittsburgh native's first packed product was horseradish. It was packed in clear glass bottles so that people could see they were not being cheated. In 1869, Heinz went into business with L. C. Noble and formed Heinz and Noble. In 1872, the company added another partner and became Heinz, Noble, and Company. The firm went bankrupt as a result of the panic of 1875. Heinz reformed his company, and by 1879 was producing horseradish, celery sauce, and pickles. By 1890, over 57 varieties were being produced which prompted their famous slogan.

Heinz entered the glass business in 1893. A plant was constructed in his home town of Sharpsburg. It was a hand-operated plant until 1910, when 4 Owens machines were acquired. In April, 1946, The Allegheny Glass Company purchased the plant which, in turn, was acquired by Brockway Glass. Brockway closed the plant in 1947.

Henry J. Heinz died in 1919 but the company to this day remains a family enterprise (Toulouse 1971:236-237).

Group Name: The A. H. Heisey Glass Company.
Group Number: 104.
No. of Specimens: 3 fragments.
Color of Specimens: 3 colorless.
No. of Individual(s) Represented: 3.
No. of Individual Shapes Represented: 3 round.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed in the center of the bases of the round containers is a diamond containing an "H", the Heisey trademark used from 1900-1958 (Toulouse 1971:233).
Product Name: N/A.
Location of Product Manufacturer: N/A.
Date of Product Manufacturer: N/A.
Container Manufacturer Name: The A. H. Heisey Glass Company.
Location of Container Manufacturer: Newark, Ohio.
Date of Container Manufacturer: Ca. 1900-1958.
Description: The container fragments which were manufactured by and exhibit the trademark of The A.H. Heisey Glass Company include those of at least three round bases or tableware with 12 sides. The colorless containers were pressed during manufacture by machine. The Heisey trademark is represented among the whole bottles by specimens 8938-6 and 8938-9.
Comments: The A.H. Heisey Glass Company was begun by Augustus H. Heisey and the relationship with his father-in-law, George Duncan of Pittsburgh. Duncan & Heisey formed a company which would later become part of The United States Glass Company. Heisey left the company, and in 1893 established a glass factory in Newark, Ohio. The factory included one furnace and 16 pots and manufactured flint tableware. The company continued to expand under the leadership of Heisey and his sons. Augustus Heisey would remain the president of the company off and on until his death in 1922. The presidency was passed between Heisey's sons until 1958 when the company closed. The Imperial Glass Company of Bellaire, Ohio, bought the molds, certain names, and the

Height: 2 unknown.
Associated Marks/Labels: Embossed down the fronts of the rectangular bottles is "HEIDENREICH/DRUGS".
Product Name: 2 unknown.
Location of Product Manufacturer: 2 Pittsburgh, Pennsylvania.
Date of Product Manufacturer: 2, 1922-1947.
Container Manufacturer Name: 2 unknown.
Location of Container Manufacturer: 2 unknown.
Date of Container Manufacturer: 2 unknown.
Description: The Heidenreich Drugs bottle fragments include body fragments of a rectangular bottle with beveled corners. The colorless specimens are too fragmentary to determine bottle dimensions. The bottle was, however, probably finished by hand with a lip which accommodated a cork stopper closure.
Comments: According to the Pittsburgh city directories, Heidenreich Drugs first operated in 1922 under William F. Heidenreich of Crafton, Pennsylvania (Pittsburgh City Directories 1922:1019). The pharmacy advertised as selling cut-rate drugs, tobacco, and sundries. The company is last listed in 1947 and was operated by William F. Heidenreich, Jr. at 115 Smithfield Street (Pittsburgh City Directories 1934:882, 1947:974).

Group Name: The H. J. Heinz Company.
Group Number: 101.
No. of Specimens: 93 fragments.
Color of Specimens: 93 colorless.
No. of Individual(s) Represented: 65 (minimum).
No. of Individual Shapes Represented: 65 round.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the bases of the round bottles is "H.J. HEINZ CO. (in downturned arc)/(plant number)(bottle mold number)(date)/(mold number)/PAT^{D}". Ten of the bottles are also embossed across the base with The Owens Bottle Company trademark (group 172). One bottle base is embossed with the Owens-Illinois trademark (group 173).
Product Name: 65 Heinz condiments and preserves.
Location of Product Manufacturer: 65 Pittsburgh, Pennsylvania.
Date of Product Manufacturer: 65, 1888-present.
Container Manufacturer Name: 10 The Owens Bottle Company; 1 The Owens-Illinois Glass Company; 54 unknown.
Location of Container Manufacturer: 10 (see group 172); 1 (see group 173); 54 Sharpsburg, Pennsylvania, or unknown.
Date of Container Manufacturer: 10, 1911-1929; 1, 1929-present; 54, 1893-present.
Description: The H. J. Heinz bottle fragments include base and body fragments of at least 65 round containers which exhibit 6 to 12 sides. All of the colorless containers were manufactured by machine. Among these containers there are at least 21 ketchup bottles, 5 chili sauce jars, 13 olive oil bottles, 18 pickle jars, 1 India relish/pickle jar, 3 vinegar bottles, 1 olive jar, 1 Trieste mustard/India relish jar, and 1 mincemeat/stuffed mangoes jars. Embossed across the bases of these containers is "H.J. HEINZ CO. (in downturned arc)/(plant number)(bottle mold number)(year made)/(mold number)/PAT^{D}" (Personal Communication:

Description: The container fragments which were manufactured by and exhibit the trademark of The Hazel-Atlas Glass Company include those of at least one colorless round, three colorless rectangular, three white milk glass cylindrical, and thirty-seven colorless cylindrical containers. All of the containers were manufactured by machine. At least one of the cylindrical containers was manufactured for WRIGHT'S SILVER CREAM (group 241). One of the three rectangular bottles was manufactured for EVERETT & BARRON'S SHOE POLISH (group 073). The Hazel-Atlas trademark is represented among the whole bottles by specimens 8651-31,20,27; 8816-1; 8983-1; 8749-11; 8739-3,4; 8850-5; 8848-7; 8966-3,9; 8913-2; and 8933-1.
Comments: N/A.

Group Name: Heck's Pharmacy.
Group Number: 099.
No. of Specimens: 11 fragments.
Color of Specimens: 11 colorless.
No. of Individual(s) Represented: 4 (minimum).
No. of Individual Shapes Represented: 4 prima oval.
Base Diameter: (2) 4.9 cm x 3.1 cm; 2 unknown.
Height: 4 unknown.
Associated Marks/Labels: Embossed down the fronts of one of the 4 prima oval bottles is "[HE]CK['S PHARM]ACY/SMITHFIELD & LIBERTY STS./PITTSBURG, PA.". Two of the bottles are embossed with "HECK'S PHARMACY/SIXTH ST. & LIBERTY AVE./PITTSBURG, PA.". The fourth bottle is embossed with "HECK'S/[PHA]RMACY/...[LIBERTY AVE./[PITTSBURG,] PA.".
Product Name: 4 unknown.
Location of Product Manufacturer: 4 Pittsburgh, Pennsylvania.
Date of Product Manufacturer: 4, 1888-1914.
Container Manufacturer Name: 4 unknown.
Location of Container Manufacturer: 4 unknown.
Date of Container Manufacturer: 4, 1880-1910.
Description: The Heck's Pharmacy bottle fragments include base and body fragments of at least 4 prima oval bottles (Putnam 1965:25). The colorless bottles are represented by two sizes. The larger of the two sizes have basal dimensions of 4.9 cm x 3.1 cm. All of the specimens exhibit bottom plates and seam lines extending up the basal edge line. The bottles were probably hand finished with a lip which accommodated a cork stopper style closure.
Comments: E. E. Heck is listed as a druggist in the Pittsburgh city directories first in 1888, and is last mentioned in 1914 when the location of his pharmacy is given as 6th and Liberty Avenue (Pittsburgh City Directories 1888-89:452; 1913-14:701). Heck was born in Kentucky and started his own business after being employed by John Colgeu and then the Ramsey and Company drug house, both of Pittsburgh (Allegheny County, Pa. Illustrated: 158).

Group Name: Heidenreich Drugs.
Group Number: 100.
No. of Specimens: 2 fragments.
Color of Specimens: 2 colorless.
No. of Individual(s) Represented: 2.
No. of Individual Shapes Represented: 2 rectangular.
Base Diameter: 2 unknown.

which came from Saratoga Springs, New York. Saratoga Springs became nationally and internationally known for the spring water which was first bottled in 1820 by Dr. Clark. Bottling of the water increased throughout the Civil War period and, by 1878, two of the bottling companies were selling approximately 100,000 dozen bottles a year (Schmeiser 1968:159).

Group Name: Hazard, Hazard & Co.
Group Number: 097.
No. of Specimens: 2 fragments.
Color of Specimens: 2 colorless.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 round.
Base Diameter: (1) 5.6 cm.
Height: 1 unknown.
Associated Marks/Labels: Embossed across the body of the round bottle is "HAZARD, HAZARD & CO. (in downturned arc)/(a seal containing a sea serpent? and a fleur de lis divided by a diagonal band)/NEW YORK".
Product Name: 1 HAZARD, HAZARD & CO.
Location of Product Manufacturer: 1 New York.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1880-1910.
Description: The Hazard, Hazard & Company bottle fragments include body fragments of a cylindrical bottle. The colorless bottle has a reconstructed basal diameter of 5.6 cm and exhibits seam lines up from a basal edge line. The bottle was probably finished with a lip which accommodated a cork stopper style closure.
Comments: N/A.

Group Name: The Hazel-Atlas Glass Company.
Group Number: 098.
No. of Specimens: 50 fragments.
Color of Specimens: 46 colorless; 4 white milk glass.
No. of Individual(s) Represented: 44 (minimum).
No. of Individual Shapes Represented: 40 round; 3 rectangular; 1 oval.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the bases of all of the containers is the Hazel-Atlas trademark of a superimposed "HA". One of the round containers is also embossed across the base with "SILVER (in downturned arc)/WRIGHT'S/CREAM (in upturned arc)" (group 241). One rectangular bottle was also embossed down the front with "Guarantee[d]/Everett & Barron Co. (diagonally and in script)/Product/[PROVID]ENCE, [R.I.] U.S.A." (group 073).
Product Name: 1 WRIGHT'S SILVER CREAM; 1 EVERETT & BARRON'S SHOE POLISH; 42 unknown.
Location of Product Manufacturer: 1 Keene, New Hampshire; 1 Providence, Rhode Island; 42 unknown.
Date of Product Manufacturer: 1, ?-present; 1 unknown; 42 unknown.
Container Manufacturer Name: 44 The Hazel-Atlas Glass Company.
Location of Container Manufacturer: 44 Wheeling, West Virginia.
Date of Container Manufacturer: 44, 1920-1964.

fragments do, however, exhibit seam lines extending up the neck. The bottles were probably hand finished with lips which accommodated cork stoppers.
Comments: N/A.

Group Name: HARRIS PURE FLAVORS.
Group Number: 094.
No. of Specimens: 31 fragments.
Color of Specimens: 31 colorless.
No. of Individual(s) Represented: 10 (minimum).
No. of Individual Shapes Represented: 10 rectangular.
Base Diameter: (7) 5.1 cm x 2.1 cm; 3 unknown.
Height: 10 unknown.
Associated Marks/Labels: Embossed across the fronts of 9 of the rectangular bottles is "HARRIS/PURE/FLAVORS/2 FL. OZ./BINGHAMPTON (in downturned arc)/N.Y.". At least 4 of the bases are embossed with the Illinois Glass trademark of an "I" within a diamond.
Product Name: 10 HARRIS PURE FLAVORS.
Location of Product Manufacturer: 10 Binghampton, New York.
Date of Product Manufacturer: 10 unknown.
Container Manufacturer Name: 10 unknown.
Location of Container Manufacturer: 10 unknown.
Date of Container Manufacturer: 10, 1880-1920.
Description: The HARRIS PURE FLAVORS bottle fragments include base, body, shoulder, neck, and rim fragments of at least 10 rectangular bottles. The colorless bottles are represented by 1-1/2 and 2-ounce bottles, with the 2-ounce bottles exhibiting basal dimensions of 5.1 cm x 2.1 cm. At least 3 of the bottles were manufactured by machine, evidenced by cut-off scars and seam lines extending up opposite beveled corners.
Comments: N/A.

Group Name: HATHORN SPRINGS.
Group Number: 095.
No. of Specimens: 4 fragments.
Color of Specimens: 4 opaque dark green.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 round.
Base Diameter: (1) 7.9 cm.
Height: (1) 19 cm.
Associated Marks/Labels: Embossed across the body of the round bottle is "HATHORN SPRINGS (in downturned arc)/SARATOGA N Y". Embossed on the base is "...L...".
Product Name: 1 HATHORN SPRINGS mineral water.
Location of Product Manufacturer: 1 Saratoga, New York.
Date of Product Manufacturer: 1, ca. 1878.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1 unknown.
Description: The HATHORN SPRINGS bottle fragments include base and body fragments of a cylindrical bottle. The dark green bottle has a reconstructed basal diameter of 7.9 cm and a reconstructed height of 19 cm. The fragments exhibit seam lines extending up the body.
Comments: HATHORN SPRINGS mineral water was one of many bottled waters

Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1870-1890.
Description: The Henry Hamma beer bottle fragments include body fragments of a cylindrical bottle. The aqua specimen is too fragmentary to determine bottle dimensions. However, the fragments do show that this bottle was blown in a mold which employed a slug plate. This bottle would also have been finished with a blob-top style lip.
Comments: N/A.

Group Name: Hardy Prescription Druggist.
Group Number: 092.
No. of Specimens: 4 fragments.
Color of Specimens: 4 colorless.
No. of Individual(s) Represented: 2.
No. of Individual Shapes Represented: 2 rectangular.
Base Diameter: (1) 5.6 cm x ? cm; 1 unknown.
Height: 2 unknown.
Associated Marks/Labels: Embossed down the front of one of the two rectangular bottles is "HARDY". Embossed down the front of the other bottle is "HARDY/PRESCRIPTIO[N DRU]GGIST (in upturned arc)/CAR[NEGIE, PE]NN.".
Product Name: 2 unknown.
Location of Product Manufacturer: 2 Carnegie, Pennsylvania.
Date of Product Manufacturer: 2 unknown.
Container Manufacturer Name: 2 unknown.
Location of Container Manufacturer: 2 unknown.
Date of Container Manufacturer: 2, 1880-1910.
Description: The Hardy Drug bottle fragments include body fragments of two rectangular bottles. One of the colorless bottles has basal dimensions of 5.6 cm x ? cm, while the other bottle is too fragmentary to determine its bottle dimensions. Both of the bottles were finished by hand with a lip which accommodated a cork stopper closure.
Comments: N/A.

Group Name: HARRIS BLUING.
Group Number: 093.
No. of Specimens: 6 fragments.
Color of Specimens: 6 aqua.
No. of Individual(s) Represented: 2.
No. of Individual Shapes Represented: 2 round.
Base Diameter: 2 unknown.
Height: 2 unknown.
Associated Marks/Labels: Embossed across the shoulders of the round bottles is "HARRIS BLUING".
Product Name: 2 HARRIS BLUING.
Location of Product Manufacturer: 2 unknown.
Date of Product Manufacturer: 2 unknown.
Container Manufacturer Name: 2 unknown.
Location of Container Manufacturer: 2 unknown.
Date of Container Manufacturer: 2, 1870-1910.
Description: The HARRIS BLUING bottle fragments include body, shoulder, and neck fragments of 2 cylindrical bottles. The aqua specimens were too fragmentary to determine bottle dimensions. The

"...506 MARKET ST./PITTSBURG, PA." (group 184). Embossed across the Philadelphia oval bases is a triangle containing "H". One of these bottles is embossed across the upper bodies with "(dram)ii". Embossed on the bases of 3 of the 8 round bottles is a triangle containing "H". One of these bottles is embossed across the base with "X42", and across the body with "[REICK'S DA]IRY/ONE PINT LIQUID" (group 198). Five of the 8 bottles are embossed across the lower body with "J.T.&A.H.". Three of these 5 bottles are also embossed across the base with "R" and across the body with ".../REGISTER...".
Product Name: 7 THE MAY DRUG CO. drugs; 2 ...506 MARKET ST. drugs; 2 REICK'S dairy products; 1 ...CLEANER; 26 unknown.
Location of Product Manufacturer: 11 Pittsburgh, Pennsylvania; 27 unknown.
Date of Product Manufacturer: 7, 1900-1939; 2, unknown; 2, 1890-1958; 27 unknown.
Container Manufacturer Name: 38 The J. T. and A. Hamilton Company.
Location of Container Manufacturer: 38 Pittsburgh, Pennsylvania.
Date of Container Manufacturer: 38, 1884-1943.
Description: The container fragments which were manufactured by and exhibit the trademark of The J. T. and A. Hamilton Glass Company include those of 24 rectangular, 8 cylindrical, 3 prima oval (Putnam 1965:25), 3 monarch oval (Putnam 1965:25), and 2 Philadelphia oval (Putnam 1965:25) bottles. The colorless were either manufactured by machine or finished by hand. At least 7 of the rectangular specimens were manufactured for The May Drug Company (group 146) while one bottle was manufactured for a cleaning product. At least 2 of the 8 cylindrical bottles were manufactured for Reick's Dairy. Two of the prima oval bottles were manufactured for a druggist or grocer located at 506 Market Street, Pittsburg (group 184).
Comments: Four of the specimens are embossed with "JT & AH", the Hamilton trademark used from 1884 to 1920. The remainder of the specimens are embossed with a triangle containing the letter "H". This mark was in use from 1900 to 1943. The Hamilton family owned glass plants in Pittsburgh and Charleroi, Pennsylvania. In 1884, a separation took place in which James T. and Alexander Hamilton took over the Pittsburgh plant while W. H. Hamilton operated the Charleroi plant. From this time on the company maintained a status quo. The company was last listed in 1943, when The Knox Glass Company acquired it (Toulouse 1971:290-291).

Group Name: Henry Hamma.
Group Number: 091.
No. of Specimens: 3 fragments.
Color of Specimens: 3 aqua.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 round.
Base Diameter: 1 unknown.
Height: 1 unknown.
Associated Marks/Labels: Embossed across the body of the round bottle is an oval containing "HENRY HAMMA (in downturned arc)/CARNEGIE (in upturned arc)".
Product Name: 1 Henry Hamma beer.
Location of Product Manufacturer: 1 Carnegie, Pennsylvania.
Date of Product Manufacturer: 1 unknown.

of 7.85 cm x 4.95 cm. They were manufactured by machine, exhibiting a bottom plate and seam lines extending up from the basal edge line to a lip which was probably hand finished.
Comments: N/A.

Group Name: HALES HONEY OF HOREHOUND AND TAR.
Group Number: 089.
No. of Specimens: 2 fragments.
Color of Specimens: 2 aqua.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 rectangular.
Base Diameter: 1 unknown.
Height: 1 unknown.
Associated Marks/Labels: Embossed down the front of the rectangular bottle is "H[ALES]/H[ONEY OF]/HORE[HOUND A]ND TAR". Although it does not appear on specimens in this group, embossed down the left side would be "NEW YORK". Embossed down the right side would be "C. N. CRITTENTON" (Baldwin 1973:218).
Product Name: 1 HALES HONEY AND HOREHOUND AND TAR.
Location of Product Manufacturer: 1 New York.
Date of Product Manufacturer: 1, ca. 1880.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1880-1910.
Description: The HALES HONEY OF HOREHOUND AND TAR bottle fragments include body fragments of a rectangular bottle. The aqua specimens are too fragmentary to determine bottle dimensions. However, the bottle did exhibit a panelled front.
Comments: Advertisements for HALES HONEY OF HOREHOUND AND TAR appear in various periodicals which date from 1876-1886 (Wilson 1981:138), including the December 11, 1880, issue of Harper's Weekly. This advertisement names C. N. Crittenton as proprietor (Baldwin 1973:218). Another advertisement describes HALES HONEY...as "The Great Cough Remedy For Children as well as Adults. Cures all Coughs, Colds, Difficult Breathing & Affections of the Throat, Bronchial Tubes, and Lungs..." (Bartholomew 1970:36).

Group Name: The J. T. and A. Hamilton Company.
Group Number: 090.
No. of Specimens: 38 fragments.
Color of Specimens: 38 colorless.
No. of Individual(s) Represented: 38.
No. of Individual Shapes Represented: 24 rectangular; 8 round; 3 prima oval; 2 monarch oval; 2 Phildelphia oval.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the rectangular bases is a triangle containing an "H". At least 7 of these bottles are embossed across the fronts with "THE/MAY DRUG/CO./PITTSBURG" (group 146). Embossed down the front of at least one bottle is "...CLEANER/...RIGINAL". Embossed across the monarch oval bases is a triangle containing "H". Embossed across the prima oval bases is a triangle containing "H". One of these bottles is embossed down the front with ".../...SBURG". Another is embossed down the front with

Group Name: Gregg and Company.
Group Number: 256.
No. of Specimens: 3 fragments.
Color of Specimens: 1 colorless; 1 aqua.
No. of Individual(s) Represented: 3.
No. of Individual Shapes Represented: 2 round; 1 oval.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the bases of the round and oval bottles is a "G".
Product Name: 3 unknown.
Location of Product Manufacturer: 3 unknown.
Date of Product Manufacturer: 3 unknown.
Container Manufacturer Name: 3 Gregg and Company.
Location of Container Manufacturer: 3 Knottingley, England, or Yorks, England.
Date of Container Manufacturer: 3, 1927-present.
Description: The container fragments which were manufactured by and exhibit the trademark of Gregg and Company include those of 1 oval and 2 cylindrical bottles. The cylindrical bottles of aqua and colorless, along with the aqua, oval bottle were manufactured by machine, exhibiting cut-off scars and seam lines. The Gregg and Company trademark is represented among the whole bottles by specimen 8859-1.
Comments: "G" is the trademark used by Gregg and Company since 1927. Gregg and Company was started in 1874 by three glass blowers of Knottingley, England. From 1874 to 1903 the company had several owners and at one point was even wagered on a horse race. In 1919, the works were expanded and, in 1921, hand-made bottles in flint and green were produced for doctors and druggists. In 1926, Gregg and Company was reformed as a private limited company and further expansion followed (Toulouse 1971:207-210).

Group Name: HAGEE'S CORDIAL OF THE EXTRACT OF COD-LIVER OIL COMPOUND.
Group Number: 088.
No. of Specimens: 2 fragments.
Color of Specimens: 2 colorless.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 rectangular.
Base Diameter: (1) 7.85 cm x 4.95 cm.
Height: 1 unknown.
Associated Marks/Labels: Embossed down the left side of the rectangular bottle is "[HAGEE]'S CORDIAL OF THE/EXTRACT OF/COD-LIVER OIL COMPOUND". Embossed down the right side is "KATHARMON CHEMICAL CO./ST. LOUIS, MO.".
Product Name: 1 HAGEE'S CORDIAL OF THE EXTRACT OF COD-LIVER OIL COMPOUND.
Location of Product Manufacturer: 1 St. Louis, Missouri.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1880-1910.
Description: THE HAGEE'S CORDIAL OF THE EXTRACT OF COD-LIVER OIL COMPOUND bottle fragments include body fragments of a rectangular bottle with strapped sides. The colorless bottle has basal dimensions

exhibiting basal dimensions of 7.3 cm x 7.3 cm. The oval bottles were manufactured by machine, exhibiting cut-off scars.
Comments: GORDON'S GIN is manufactured by Tanquerey Gordon and Company of London. The company has operated since 1769 and adopted the boar's head as a trademark in the late 19th century (Toulouse 1971:559).

Group Name: GRANER'S.
Group Number: 086.
No. of Specimens: 1 fragment.
Color of Specimens: 1 aqua.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 round.
Base Diameter: 1 unknown.
Height: 1 unknown.
Associated Marks/Labels: Embossed across the body of the round container is "GRANER'S (in downturned arc)".
Product Name: 1 GRANER'S.
Location of Product Manufacturer: 1 unknown.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1870-1910.
Description: The GRANER'S bottle fragments consist of a body fragment of a round bottle. This aqua specimen is too fragmentary to determine bottle dimensions. It was probably hand finished and accommodated a cork stopper (Personal Communication: Winters).
Comments: N/A.

Group Name: The Great A & P Tea Company.
Group Number: 087.
No. of Specimens: 11 fragments.
Color of Specimens: 11 colorless.
No. of Individual(s) Represented: 4 (minimum).
No. of Individual Shapes Represented: 4 rectangular.
Base Diameter: (4) 4.7 cm x ? cm.
Height: 4 unknown.
Associated Marks/Labels: Embossed down the fronts of 3 rectangular bottles is "THE GREAT/ATLANTIC & PACIFIC/TEA COMPANY/JERSEY CITY, N.J.". Embossed down one of the four bottles is "THE GREAT/ATLANTIC & PACIFIC/TEA COMPANY/NEW YORK, N.Y.".
Product Name: 4 THE GREAT ATLANTIC & PACIFIC TEA COMPANY extract.
Location of Product Manufacturer: 3 Jersey City, New Jersey; 1 New York, New York.
Date of Product Manufacturer: 4 unknown.
Container Manufacturer Name: 4 unknown.
Location of Container Manufacturer: 4 unknown.
Date of Container Manufacturer: 4, 1880-1910.
Description: The A & P extract bottle fragments include body fragments of at least 4 rectangular bottles with beveled corners and 4 panelled sides. The colorless bottles have basal dimensions of 4.7 cm x ? cm. The bottles were probably hand finished with lips which accommodated cork stopper closures (Personal Communication: Winters).
Comments: N/A.

hand-finished examples, exhibiting flared, medical-style lips. The square bottles were hand finished with bead lips.
Comments: N/A.

Group Name: GOLDEN WEDDING WHISKEY.
Group Number: 084.
No. of Specimens: 27 fragments.
Color of Specimens: 27 gold carnival glass.
No. of Individual(s) Represented: 1 (minimum).
No. of Individual Shapes Represented: 1 rectangular.
Base Diameter: 1 unknown.
Height: 1 unknown.
Associated Marks/Labels: Embossed across the front of the oval bottle is "Golden Wedding (in script)/FULL PINT". Embossed across the back is a bell containing "SINCE (in downturned arc)/1856".
Product Name: 1 GOLDEN WEDDING whiskey.
Location of Product Manufacturer: 1 Schenley, Pennsylvania.
Date of Product Manufacturer: 1, 1856-?.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, ca. 1930.
Description: The GOLDEN WEDDING whiskey bottle fragments include base, body, and shoulder fragments of at least one oval bottle. This gold "carnival glass" bottle was manufactured by machine. It exhibits a machine cut-off scar.
Comments: GOLDEN WEDDING whiskey was manufactured by Joseph S. Finch & Co., Inc., of Schenley. Because it was produced during prohibition, the paper label which would have been found on this bottle would read, "For Medicinal Purposes Only - Sale or Use for Other Purposes Will Cause Heavy Penalties To Be Inflicted" (Muncey 1970:133).

Group Name: GORDON'S DRY GIN.
Group Number: 085.
No. of Specimens: 35 fragments.
Color of Specimens: 35 aqua.
No. of Individual(s) Represented: 3.
No. of Individual Shapes Represented: 1 square; 2 oval.
Base Diameter: (1) 7.3 cm x 7.3 cm.
Height: 1 unknown.
Associated Marks/Labels: Embossed down the front of the square bottle is "LONDON (horizontally)/GORDON'S/DRY GIN/ENGLAND (horizontally)". Embossed across the base is a boar's head. Embossed across the fronts of the oval bottles is "GORDON'S/DRY GIN". Embossed down the left sides is "LONDON". Embossed down the right sides is "ENGLAND". Embossed across the bases are griffins' heads.
Product Name: 3 GORDON'S DRY GIN.
Location of Product Manufacturer: 3 London, England.
Date of Product Manufacturer: 3, 1769-present.
Container Manufacturer Name: 3 Tanquerey Gordon and Company.
Location of Container Manufacturer: 3 London, England.
Date of Container Manufacturer: 3, ca. 1870-present.
Description: The GORDON'S GIN bottle fragments include base and body fragments of at least 1 square bottle with beveled corners, and 2 oval bottles. All of the bottles are aqua in color with the square specimen

scars and seam lines which extend up from the basal edge. All four sides of the bottles were panelled.
Comments: GLOVERS MANGE MEDICINE was a veterinary medicine manufactured by H. Clay Glover. GLOVERS MANGE MEDICINE bottles have been excavated from western gold mining towns dating from 1860 to 1890 (Toulouse 1970:65).

Group Name: GLYCEROLE.
Group Number: 082.
No. of Specimens: 2 fragments.
Color of Specimens: 2 aqua.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 rectangular.
Base Diameter: (1) 4.7 cm x ? cm.
Height: 1 unknown.
Associated Marks/Labels: Embossed across the base of the rectangular bottle is "GLYCEROLE".
Product Name: 1 GYCEROLE.
Location of Product Manufacturer: 1 unknown.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1870-1910.
Description: The GLYCEROLE bottle fragments include a body fragment of a rectangular bottle with beveled corners and a panelled front. The aqua bottle has basal dimensions of 4.7 cm x ? cm. It was probably finished by hand with a lip which accommodated a cork stopper closure.
Comments: None.

Group Name: GLYCO-THYMOLINE.
Group Number: 083.
No. of Specimens: 44 fragments.
Color of Specimens: 44 colorless.
No. of Individual(s) Represented: At least 16.
No. of Individual Shapes Represented: 10 oval; 6 square.
Base Diameter: (10) 8.3 cm x 5.2 cm; (6) 5.8 cm x 5.8 cm.
Height: (6) 10.8 cm; 10 unknown.
Associated Marks/Labels: Embossed across the fronts of nine of the ten oval bottles is "GLYCO-THYMOLINE/(KRESS)". One oval bottle is embossed with "FLUID/GLYCO-/THYMOLINE" (embossed across the bases is "K&O CO./NEW YORK".) Embossed diagonally across the square bottles is "GLYCO-THYMOLINE".
Product Name: 16 GLYCO-THYMOLINE.
Location of Product Manufacturer: 16 unknown.
Date of Product Manufacturer: 16 unknown.
Container Manufacturer Name: 16 unknown.
Location of Container Manufacturer: 16 unknown.
Date of Container Manufacturer: 16, 1880-1920.
Description: The GLYCO-THYMOLINE bottle fragments include base, body, and finish fragments of at least 10 oval and 6 square bottles. Both types of bottles are colorless with the oval bottles having basal dimensions of 8.3 cm x 5.2 cm and the square bottles having basal dimensions of 5.8 cm x 5.8 cm with corresponding heights of 10.8 cm. The oval bottles are represented by machine-manufactured as well as

No. of Specimens: 57 fragments.
Color of Specimens: 57 pale blue.
No. of Individual(s) Represented: 8.
No. of Individual Shapes Represented: 7 square; 1 round.
Base Diameter: (7) 4.0 cm x 4.0 cm; 1 unknown.
Height: N/A.
Associated Marks/Labels: Embossed down adjacent sides of 2 square bottles with HIRES.../ROO.../MAKES FIVE/GALLONS OF A/DELICIOUS DRINK/MANUFACTURED BY/THE CHARLES E. HIRES COMPANY/PHILADELPHIA, PA". Five square bottles are embossed in the same manner with "HIRES/HOUSEHOLD EXTRACT/FOR HOME USE/MANUFACTURED BY/THE CHARLES E. HIRES CO./PHILADELPHIA, PA./U.S.A.". Embossed around the shoulder of the round bottle is "HIRES/TRADE MARK REGISTERED".
Product Name: 7 HIRES ROOT BEER EXTRACT; 1 HIRES ROOT BEER.
Location of Product Manufacturer: 8 Philadelphia, Pennsylvania.
Date of Product Manufacturer: 8, ca. 1870's-present.
Container Manufacturer Name: 8 unknown.
Location of Container Manufacturer: 8 unknown.
Date of Container Manufacturer: 8, 1903-1930.
Description: The HIRES bottle fragments include base, body, and finish fragments of 7 square bottles and 1 cylindrical bottle. Both types of bottles are colorless with the square specimens having basal dimensions of 4 cm x 4 cm. The cylindrical bottle specimens are too fragmentary to determine bottle dimensions. The cylindrical bottle was manufactured by machine, as well as some of the square bottles which exhibit seam lines extending up and over square bead lips. Some of the square bottles were hand finished with square bead lips.
Comments: The Charles E. Hires Company first manufactured root beer in the early 1870's. Hires continues to manufacture root beer and root beer extract at the time of this writing. A 19th century advertisement for HIRES IMPROVED ROOT BEER reads:

> This preparation has steadily grown in public favor during the past ten years until to-day it is used in every part of the United States & Canada, and a portion of the Old World. (Blumenstein 1966:139).

Group Name: JOHANN HOFF'S MALT EXTRACT.
Group Number: 108.
No. of Specimens: 3 fragments.
Color of Specimens: 3 olive green.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 round.
Base Diameter: 1 unknown.
Height: 1 unknown.
Associated Marks/Labels: Embossed around the shoulder of the round bottle is "JOHANN HOFF [JOHANN] HOFF".
Product Name: 1 JOHANN HOFF'S MALT EXTRACT.
Location of Product Manufacturer: 1 Berlin, Germany.
Date of Product Manufacturer: 1, 1866-?.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1870-1900.
Description: The JOHANN HOFF'S MALT EXTRACT bottle fragments include shoulder fragments of a cylindrical bottle. The dark green specimens

are too fragmentary to determine bottle dimensions. However, a complete bottle would exhibit a brandy style closure and would have been blown in a mold (Adams, 1971:49,50).
Comments: JOHANN HOFF'S MALT EXTRACT was advertised in an 1888 periodical as "The Standard Nutritive Tonic for Nursing Women Convalescents, the Aged, Nervous or Dyspeptic." The extract was brought to the United States from Germany by Leopold Hoff in 1866. In 1868, Hoff's agency was sold to Joseph S. Pedersen and to Tarant and Company the following year. Those bottles sold by Pedersen are embossed with a monogrammed "JSP". Around the time of this periodical, the Hoff's Extract was being counterfeited by a Philadelphia firm which advertised its counterfeit extract as "Genuine Imported Johann Hoff's Malt Extract". Advertisements for the real product cautioned against this counterfeit (Blumenstein 1966:140). Advertisements for JOHANN HOFF'S MALT EXTRACT also appeared in periodicals dating to 1894 (Wilson 1981:138) along with trade cards of the late 19th century (Munsey 1970:282).

Group Name: HOOD'S SASPARILLA.
Group Number: 109.
No. of Specimens: 2 fragments.
Color of Specimens: 2 aqua.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 rectangular.
Base Diameter: 1 unknown.
Height: 1 unknown.
Associated Marks/Labels: Embossed down the left or right side of the rectangular bottle is "[BINGHAM]TON N.Y.".
Product Name: 1 HOOD'S SASPARILLA.
Location of Product Manufacturer: 1 Binghamton, New York.
Date of Product Manufacturer: 1, 1880-?.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1880-1910.
Description: The HOOD'S SASPARILLA bottle fragments include body fragments of a rectangular bottle with beveled corners and at least 2 beveled sides. The aqua specimens are too fragmentary to determine bottle dimensions. The bottle was probably finished by hand with a lip which accommodated a cork stopper closure.
Comments: Binghamton, New York, is listed as the location of the product manufacturer for this bottle because it is embossed on the bottle. The C. I. Hood & Co., however, was listed in the Lowell, Massachusetts, city directories from 1880 to 1922 (Adams et al. 1975:128). It is unknown whether Binghamton served as a distribution center for HOOD'S SASPARILLA or whether the company itself relocated in Binghamton. Advertisements for HOOD'S SASPARILLA appeared in periodicals dating from 1883 to 1896 (Wilson 1981:138). One such advertisement tells of how HOOD'S SASPARILLA "Purifies the blood, creates an appetite, makes the weak strong, and builds up the system" (Adams 1971:137).

Group Name: HORLICK'S MALTED MILK.
Group Number: 110.
No. of Specimens: 30 fragments.

Color of Specimens: 30 pale blue.
No. of Individual(s) Represented: 8 (minimum).
No. of Individual Shapes Represented: 8 round.
Base Diameter: (6) 8.5 cm; (2) 6.8 cm.
Height: 8 unknown.
Associated Marks/Labels: Embossed across the bodies of the round containers is "HORLICKS (in downturned arc)/MALTED MILK/RACINE, WIS (in upturned arc)/U.S.A.".
Product Name: 8 HORLICK'S MALTED MILK.
Location of Product Manufacturer: 8 Racine, Wisconsin, or Slough, Bucks, England.
Date of Product Manufacturer: 8, ca. 1882.
Container Manufacturer Name: 8 unknown.
Location of Container Manufacturer: 8 unknown.
Date of Container Manufacturer: 8, 1870-1930.
Description: The HORLICK'S jar fragments include body fragments of at least 8 cylindrical jars. These pale blue jars come in 2 sizes with basal diameters of 8.5 cm and 6.8 cm. They exhibit seam lines extending up from the basal edge line. Whole jar examples in Subcategory 1, Group 2, Subgroup 23, Varieties 1 and 2 show these seam lines to extend up over the continuous thread finish. They also show smooth lips and ground lips.
Comments: It is not known whether HORLICKS MALTED MILK Company began in England or in Wisconsin. Both locations are mentioned on some of the hand and machine jars, while others have only the Racine location. The true trademark for the company is a pair of "M"s embossed in script (Toulouse 1971:252-253). A late nineteenth century advertisement for HORLICK'S MALTED MILK describes it as being a milk preparation very close to Mother's Milk. "Not Farinaceous. Entirely Soluble. The Best & Cheapest Food for Infants & Children. No Other Food Gives Such Universal Satisfaction At the Meeting of the Paedological Society held in Indianapolis, in June, 1882, This Food was unanimously pronounced better than all others..." (Blumenstein 1966:138).

Group Name: The Joseph Horne Company.
Group Number: 111.
No. of Specimens: 2 fragments.
Color of Specimens: 2 colorless.
No. of Individual(s) Represented: 2.
No. of Individual Shapes Represented: 2 rectangular.
Base Diameter: 2 unknown.
Height: 2 unknown.
Associated Marks/Labels: Embossed down one of the 2 rectangular bottles is "JOS. HOR.../...TTSBUR.../...RIES...". Embossed down the front of the second bottle is "...ORNE (vertically)/COMPANY (in upturned arc)/PITTSBURGH".
Product Name: 2 unknown.
Location of Product Manufacturer: 2 Pittsburgh, Pennsylvania.
Date of Product Manufacturer: 2 unknown.
Container Manufacturer Name: 2 unknown.
Location of Container Manufacturer: 2 unknown.
Date of Container Manufacturer: 2, 1880-1910.
Description: The Joseph Horne Company bottle fragments include body fragments of 2 rectangular bottles. The colorless specimens in this

group are too fragmentary to determine bottle dimensions. However, the bottles were probably hand finished with a lip which accommodated a cork stopper closure.
Comments: Although the contents of the bottles represented in this group are not known, the company for which the bottles were manufactured is in existence at the time of this writing.

Group Name: Richard Hudnut.
Group Number: 113.
No. of Specimens: 17 fragments.
Color of Specimens: 16 colorless; 1 white milk glass.
No. of Individual(s) Represented: 9 (minimum).
No. of Individual Shapes Represented: 4 round; 5 square or rectangular.
Base Diameter: 9 unknown.
Height: 9 unknown.
Associated Marks/Labels: Embossed across the body of one round bottle is "RICHARD/HUDNUT/NEW YORK". The same words are embossed across the body of a square or rectangular container. Embossed across the body of 2 other round bottles is "R. HUDNUT (in downturned arc)/CH...". Embossed across the base of a round cylindrical bottle is "RICHARD HUDN[UT] (in downturned arc)/PERFUMER/NEW Y[ORK] (in upturned arc). Embossed across the body of one square or rectangular bottle or jar is a double-lined square containing ".../MARVELOU[S]/COLD CREAM/RICHARD HUDNUT/NEW YORK". Embossed across the body of 2 other square or rectangular bottles is a double-lined circle containing "HR (in monogram)". Embossed down the body of another square or rectangular bottle is "[RICH]ARD HU[DNUT]". Embossed across the base of the milk glass rouge jar is "RICHAR[D HU]DNUT/ HR (monogrammed)/[NEW] YORK".
Product Name: 9 RICHARD HUDNUT cosmetics.
Location of Product Manufacturer: 9 New York.
Date of Product Manufacturer: 9 unknown.
Container Manufacturer Name: 9 unknown.
Location of Container Manufacturer: 9 unknown.
Date of Container Manufacturer: 9, 1903-1920.
Description: The RICHARD HUDNUT container fragments include base and body fragments of at least 4 cylindrical and 5 square or rectangular containers. One cylindrical specimen is white milk glass in color while the remaining fragments are colorless. All of the specimens are too fragmentary to determine bottle dimensions. However, at least one of the cylindrical containers was pressed in manufacture while the remaining containers were probably blown in a mold by a machine.
Comments: N/A.

Group Name: HUMPHREYS.
Group Number: 114.
No. of Specimens: 3 fragments.
Color of Specimens: 3 colorless.
No. of Individual(s) Represented: 3.
No. of Individual Shapes Represented: 3 round.
Base Diameter: (3) 4.8 cm.
Height: 3 unknown.
Associated Marks/Labels: Embossed across the bases of the round containers is "HUMPHREYS (in downturned arc)/(a winged circle)/NEW YORK

(in upturned arc)".
Product Name: 3 unknown.
Location of Product Manufacturer: 3 New York.
Date of Product Manufacturer: 3 unknown.
Container Manufacturer Name: 3 unknown.
Location of Container Manufacturer: 3 unknown.
Date of Container Manufacturer: 3, 1903-1920.
Description: The HUMPHREY'S bottle fragments include base/body fragments of at least 3 cylindrical bottles. These colorless bottles have basal diameters of 4.8 cm. They exhibit seam lines extending up from the basal edge line, and valve marks on the base, suggesting they were manufactured by machine.
Comments: N/A.

Group Name: C. Ihmsen and Sons.
Group Number: 115.
No. of Specimens: 3 fragments.
Color of Specimens: 3 amber.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 round.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the base of the round bottle is "C. IHMSEN & SONS PITTSBURGH (in circular pattern).".
Product Name: 1 unknown.
Location of Product Manufacturer: 1 unknown.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 C. Ihmsen and Sons Glass Company.
Location of Container Manufacturer: 1 Pittsburgh, Pennsylvania.
Date of Container Manufacturer: 1, 1850-1895.
Description: The container fragments which were manufactured by and exhibit the trademark of The C. Ihmsen and Sons Glass Company include base fragments of 1 cylindrical bottle. The amber bottle exhibits seam lines up from the basal edge and was probably hand finished.
Comments: The C. Ihmsen and Sons Glass Company stems from, as did a number of other Ihmsen companies, Charles Ihmsen of Philadelphia, who came to Pittsburgh and established a glass company by managing and later leasing The Pittsburgh Glass Works in 1797. Christian Ihmsen and Sons began in 1850 and was operated by Christian Ihmsen, son of Charles, and his sons Charles T. and William. In 1862 Christian died and the operations were taken over by his sons. The company closed about 1895 (Toulouse 1971:261-264).

Group Name: The Illinois Glass Company.
Group Number: 116.
No. of Specimens: 50 fragments.
Color of Specimens: 44 colorless; 4 amber; 1 aqua; 1 pale blue.
No. of Individual(s) Represented: 50.
No. of Individual Shapes Represented: 29 rectangular; 9 round; 6 oval; 5 prima oval; 1 square.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the bases of all of the containers is The Illinois Glass Company trademark of an "I" within a

diamond. Four colorless rectangular bottles are also embossed across the front with "HARRIS/PURE/FLAVORS/2 FL. OZ./BINGHAMTON (in downturned arc)/N.Y." (group 094). One colorless, rectangular bottle is also embossed across the front with "Mistol" (group 155). Embossed across the base of the amber, rectangular bottle is "A.M.S. Co." (group 252). One colorless oval bottle is embossed across the base with "A.C. BARNES CO. (in downturned arc)/OVOFERRIN (in upturned arc)" (group 012). Embossed across the body of one colorless round bottle is "LISTERINE/LAMBERT/PHARMACAL COMPANY" (group 135). One prima oval is embossed across the shoulder with the dram mark (group 067).
Product Name: 4 HARRIS PURE FLAVORS extracts; 1 MISTOL; 1 OVOFERRIN; 1 LISTERINE; 1 A.M.S. COMPANY; 42 unknown.
Location of Product Manufacturer: 4 Binghamton, New York; 1 unknown; 1 unknown; 42 unknown.
Date of Product Manufacturer: 4 unknown; 1 unknown; 1 unknown; 1, ?-present; 1 unknown; 42 unknown.
Container Manufacturer Name: 50 The Illinois Glass Company.
Location of Container Manufacturer: 50 Alton, Illinois; Gas City, Indiana; Chicago Heights, Illinois, or Bridgeton, New Jersey.
Date of Container Manufacturer: 50, 1873-1929.
Description: The container fragments which were manufactured by and exhibit the trademark of The Illinois Glass Company include base/body fragments of at least one colorless nine-sided, one colorless eight-sided, one amber cylindrical, one aqua oval, one colorless square, one amber rectangular, three colorless oval, five colorless prima oval, one pale blue cylindrical, twenty-eight colorless rectangular, five colorless cylindrical, and two amber oval bottles. All of the bottles were manufactured by machine, exhibiting the characteristic seam lines and/or cut-off scars and/or valve marks. At least four of the colorless rectangular bottles were manufactured for "Mistol" (group 155). At least one of the amber rectangular bottles was manufactured for The A.M.S. Co. (group 252). At least one of the colorless oval bottles was manufactured for A.C. BARNES, OVOFERRIN (group 012). At least one of the colorless cylindrical bottles was manufactured for LISTERINE antiseptic mouthwash (group 135). The Illinois Glass Company trademark is represented among the whole bottles by specimens 8651-31; 8652-6; 8748-10; 8749-25; 8768-3; 8842-10,1; 8850-6,9; 8859-8; 8966-11; 8922-5; 8950-3; 8769-1; and 8865-3.
Comments: The Illinois Glass Company was started in 1873 by William Elliot Smith and Edward Levis. Four years after constructing their furnace factory in Alton, Smith and Levis began to expand their business with the purchase of sixty-seven acres of land and the addition of another furnace. In 1879, a third furnace was added, and by 1909 there were eleven. After 1900 the company began to expand away from Alton to such cities as Gas City, Indiana, Chicago Heights, Illinois, Bridgeton, New Jersey, and later to the Pacific Coast (Illinois Pacific Glass Company). Illinois merged with Owens Bottle in 1929.

Illinois set many glass-making firsts during its history including in 1905 it reached the million gross per year mark -- by hand. In 1908 it integrated its corrugated paper plant into its glass business. In 1915 it had the first company physician, along with the first company food establishment. A horse-drawn railway station was used for transport within the plant. And, with such an expansive

business, Illinois was the first company to have coast-to-coast coverage (Toulouse 1971:264-268).

Group Name: IMPERIAL AMMONIA.
Group Number: 117.
No. of Specimens: 9 fragments.
Color of Specimens: 9 aqua.
No. of Individual(s) Represented: 2 (minimum).
No. of Individual Shapes Represented: 2 oval.
Base Diameter: 2 unknown.
Height: 2 unknown.
Associated Marks/Labels: Embossed across the fronts of the oval bottles is "IMPERIAL (in downturned arc)". Embossed across the backs is "AMMONIA (in downturned arc)".
Product Name: 2 IMPERIAL AMMONIA.
Location of Product Manufacturer: 2 unknown.
Date of Product Manufacturer: 2 unknown.
Container Manufacturer Name: 2 unknown.
Location of Container Manufacturer: 2 unknown.
Date of Container Manufacturer: 2, 1860-1880.
Description: The IMPERIAL AMMONIA bottle fragments include shoulder fragments of at least two oval bottles. The aqua specimens are too fragmentary to determine bottle dimensions. The bottles were probably finished by hand with a lip which accommodated a cork stopper.
Comments: N/A.

Group Name: The Independent Brewing Company.
Group Number: 118.
No. of Specimens: 3 fragments.
Color of Specimens: 1 amber; 2 aqua.
No. of Individual(s) Represented: 2 (minimum).
No. of Individual Shapes Represented: 2 round.
Base Diameter: (1) 6.8 cm.
Height: 1 unknown.
Associated Marks/Labels: Embossed across the shoulder of the aqua round bottle is "INDEPENDENT (in downturned arc)/BREWING CO (in downturned arc)/OF/PI[TTSB]URG (in upturned arc)". Embossed across the base is "BICo". The amber round bottle is embossed across the base with a shield containing a monogrammed "IBC". Embossed across the lower body is "A.B.Co." (group 003).
Product Name: 2 INDEPENDENT BREWING COMPANY.
Location of Product Manufacturer: 2 Pittsburgh, Pennsylvania.
Date of Product Manufacturer: 2, 1907-1933.
Container Manufacturer Name: 1 The American Bottle Company; 1 unknown.
Location of Container Manufacturer: 1 Chicago, Illinois; 1 unknown.
Date of Container Manufacturer: 1, 1905-1916; 1 unknown.
Description: The Independent Brewing bottles include base and body fragments of 2 cylindrical bottles. One of the bottles is aqua in color while one is amber. The amber bottle has a basal diameter of 6.8 cm. Both of the bottles exhibit seam lines extending up from the basal edge line. The amber specimen also exhibits a machine cut-off scar.
Comments: The Independent Brewing Company is first listed in the Pittsburgh City Directories in 1907 (Pittsburgh and Allegheny City Directory 1907:909). In 1932 the company was absorbed by The Duquesne

Brewery (Polk's Pittsburgh Directory 1932:754).

Group Name: The Iron City Chemical Company.
Group Number: 119.
No. of Specimens: 18 fragments.
Color of Specimens: 18 colorless.
No. of Individual(s) Represented: 7 (minimum).
No. of Individual Shapes Represented: 7 rectangular.
Base Diameter: (7) 6.2 cm x 3.7 cm.
Height: 7 unknown.
Associated Marks/Labels: Embossed down the left sides of the rectangular bottles is "IRON CITY CHEMICAL CO.". Embossed down the right sides is "PITTSBURGH".
Product Name: 7 The Iron City Chemical Company chemicals.
Location of Product Manufacturer: 7 Pittsburgh, Pennsylvania.
Date of Product Manufacturer: 7, 1891-1909.
Container Manufacturer Name: 7 unknown.
Location of Container Manufacturer: 7 unknown.
Date of Container Manufacturer: 7, 1880-1910.
Description: The Iron City Chemical Company bottle fragments include base and body fragments of at least 7 rectangular bottles with beveled corners. The colorless bottles have basal dimensions of 6.2 cm x 3.7 cm. They exhibited seam lines up from the basal edge line and were probably hand finished with a lip which accommodated a cork stopper style closure.
Comments: The Iron City Chemical Company is first listed in the 1891 Pittsburgh City Directory (Pittsburgh City Directory 1891:457). The company is last listed in 1909 (Pittsburgh City Directory 1909:743).

Group Name: DR. JAYNE'S EXPECTORANT.
Group Number: 120.
No. of Specimens: 1 fragment.
Color of Specimens: 1 aqua.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 rectangular.
Base Diameter: (1) 4.2 cm x 6.4 cm.
Height: (1) 17.7 cm.
Associated Marks/Labels: Embossed down the front of the rectangular bottle is "[DR D.] JAYN[E'S]/[EXPECT]ORANT". The back of the bottle would be embossed with "EXPECTORANT/PHILADA" (Baldwin 1973:272).
Product Name: 1 DR. JAYNE'S EXPECTORANT.
Location of Product Manufacturer: 1 Philadelphia, Pennsylvania.
Date of Product Manufacturer: 1, 1842-1891.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1880-1910.
Description: The JAYNE'S EXPECTORANT bottle fragments include a body fragment of a rectangular bottle. The aqua bottle has reconstructed basal dimensions of 4.2 cm x 6.4 cm and a reconstructed height of 17.7 cm. The bottle was probably hand finished.
Comments: JAYNE'S EXPECTORANT is just one of many products manufactured by Dr. David Jayne of Philadelphia. Jayne was an example of a medicine manufacturer who became very wealthy as a result of the patent medicine industry. Jayne owned several blocks of buildings in

Philadelphia along with a $300,000 mansion. At death, he left an estate of 3 million dollars (Ketchum 1975:86). Advertisements for JAYNE'S EXPECTORANT appear in periodicals dating from 1842 to 1891, such as the December 17, 1845, issue of the North Carolina Standard (Baldwin 1973:272) and the April 26, 1873, issue of the New York Daily Tribune which read:

> It is all together wrong to trifle with a bad cough or cold, when the risk is so great and a remedy so sure, prompt, and thorough as Dr. Jayne's Expectorant can be readily found." (Wilson 1981:40).

Group Name: KEMP'S BALSAM FOR THROAT AND LUNGS.
Group Number: 121.
No. of Specimens: 39 fragments.
Color of Specimens: 39 aqua.
No. of Individual(s) Represented: 9 (minimum).
No. of Individual Shapes Represented: 9 rectangular.
Base Diameter: (2) 5.4 cm x 3.1 cm; (7) 5.3 cm x 2.4 cm.
Height: 7 unknown.
Associated Marks/Labels: Embossed down the fronts of the rectangular bottles is "KEMPS BALSAM/FOR/THROAT AND LUNGS". Embossed down the left sides is "O.F. WOODWARD". Embossed down the right sides is "LEROY, N.Y.".
Product Name: 9 KEMP'S BALSAM FOR THROAT AND LUNGS.
Location of Product Manufacturer: 9 LeRoy, New York.
Date of Product Manufacturer: 9, ca. 1889.
Container Manufacturer Name: 9 unknown.
Location of Container Manufacturer: 9 unknown.
Date of Container Manufacturer: 6, 1880-1910; 3, 1903-1920.
Description: The KEMPS BALSAM bottle fragments include base, body, shoulder, and neck fragments of at least 9 rectangular bottles with beveled corners. The bottles are represented in two sizes with basal dimensions of 5.4 cm x 3.1 cm and 5.3 cm x 2. cm. The larger size has a reconstructed height of 17 cm. All of the bottles were panelled on 4 sides. At least 3 of the bottles exhibit machine cut-off scars, suggesting they were manufactured by an automatic bottle machine. The remaining bottles were probably finished by hand with a square bead lip. KEMPS BALSAM is represented among the whole bottles by specimen 8749-31.
Comments: Advertisements for KEMPS BALSAM appear in periodicals dating to the late 1880's-early 1890's, such as the January 24, 1889, issue of the Lafayette Daily Courier (Indiana)(Baldwin 1973:282).

Group Name: DR. KILMER'S SWAMP ROOT REMEDY.
Group Number: 122.
No. of Specimens: 20 fragments.
Color of Specimens: 20 aqua.
No. of Individual(s) Represented: 5 (minimum).
No. of Individual Shapes Represented: 5 rectangular.
Base Diameter: (1) 6.2 cm x 3.6 cm; (4) 7.6 cm x 4.5 cm.
Height: (1) 19 cm; (4) 21 cm.
Associated Marks/Labels: Embossed across the front of at least one of the rectangular bottles is "THE GREAT (in downturned arc)/DR./KILMER'S/SWAMP/ROOT/KIDNEY/LIVER &/BLADDER (in downturned

arc)/CURE/SPECIFIC". Embossed down the left side is "BINGHAMTON, N.Y.". Embossed down the right side is "DR. KILMER & CO.". The remaining bottles are embossed across the front with "DR. KILMERS (in downturned arc)/SWAMP ROOT (vertically)/KIDNEY LIVER (vertically/AND BLADDER CURE (vertically)/BINGHAMTON (in upturned arc)/NY USA".
Product Name: 5 DR. KILMER'S SWAMP ROOT KIDNEY, LIVER, AND BLADDER CURE.
Location of Product Manufacturer: 5 Binghamton, New York.
Date of Product Manufacturer: 5, ca. 1900.
Container Manufacturer Name: 5 unknown.
Location of Container Manufacturer: 5 unknown.
Date of Container Manufacturer: 5, 1880-1910.
Description: The KILMER'S SWAMP ROOT bottle fragments include base and body fragments of at least five rectangular bottles with beveled corners and four panelled sides. The aqua bottles are represented by at least two sizes with basal dimensions of 6.2 cm x 3.6 cm and 7.6 cm x 4.5 cm. They have corresponding reconstructed heights of 19 cm and 21 cm. The bottles exhibit seam lines which extend up from the basal edge. The bottles were probably hand finished with bead lips (Baldwin 1973:291).
Comments: KILMER'S SWAMP ROOT KIDNEY LIVER & BLADDER CURE was developed by Dr. S. Andral Kilmer of Binghamton, New York. It was Dr. Kilmer's nephew, Willis Sharpe Kilmer, who built a fortune by marketing the panacea. Willis obtained the medicine formulas from his uncle, later removed his uncle and a brother from the company, and introduced a massive advertising campaign. As a result, W.S. Kilmer was able to leave his family with an estate valued at between 10 and 15 million dollars upon his death in 1940 (Ketchum 1975:86). Advertisements for Kilmer's remedy appear in periodicals dating to the turn of the century, including the May 22, 1894, issue of the Boonville Herald (New York) (Baldwin 1973:291).

Group Name: Kilner Brothers Limited.
Group Number: 263.
No. of Specimens: 1 fragment.
Color of Specimens: 1 colorless.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 round.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the base of the round bottle is "K. B. L^{D}".
Product Name: 1 unknown.
Location of Product Manufacturer: 1 unknown.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 Kilner Brothers Limited.
Location of Container Manufacturer: 1 Conisbrough or Yorks, England.
Date of Container Manufacturer: 1, 1873-1937.
Description: The container fragments which were manufactured by and exhibit the trademark of Kilner Brothers, Limited include a base fragment of a bulbous-bodied container with a circular base. The colorless vessel was probably pressed in manufacture by machine.
Comments: "K. B. L^{D}" was the trademark used by Kilner Brothers Limited from 1873 to 1937. In 1847, John Kilner purchased The Noah Turner

Flint Glass Company of Yorkshire, England. After Kilner's death in 1857, his four sons took control and renamed the company Kilner Brothers Glass Company. In 1873 they incorporated the firm as a limited company and once again renamed it Kilner Brothers, Limited. During the 1930's, imported glass competed greatly with the bottle industry in Great Britain. Kilner Brothers lowered their prices until they were to the point of bankruptcy. The company closed in 1937.

Group Name: Kirkpatrick and Company.
Group Number: 123.
No. of Specimens: 1 fragment.
Color of Specimens: 1 colorless.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 rectangular.
Base Diameter: (1) 4.6 cm x 2.1 cm.
Height: 1 unknown.
Associated Marks/Labels: Embossed down the front of the rectangular bottle is "[K]IRKPATRICK & CO./[PI]TTSBURGH".
Product Name: 1 unknown.
Location of Product Manufacturer: 1 Pittsburgh, Pennsylvania.
Date of Product Manufacturer: 1, 1869-1926.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1880-1910.
Description: The Kirkpatrick & Company bottle fragments include a base/body fragment of a rectangular bottle with beveled corners. The colorless bottle has basal dimensions of 4.6 cm x 2.1 cm. It exhibits seam lines extending up from the basal edge, and was probably hand finished with a lip which accommodated a cork stopper closure.
Comments: The Kirkpatrick & Company embossed on the front of the specimens in this group possibly refers to Allen Kirkpatrick & Company, wholesale grocers in Pittsburgh. Kirkpatrick & Company began in 1869 (Pittsburgh & Allegheny City Directory 1869-1870:245). The company is last listed in the Directories in 1926 (Polk's Pittsburgh Directory 1926:1260).

Group Name: The Knox Bottle Company.
Group Number: 124.
No. of Specimens: 1 fragment.
Color of Specimens: 1 colorless.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 rectangular.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the base of the rectangular bottle is a keystone containing a "K".
Product Name: 1 unknown.
Location of Product Manufacturer: 1 unknown.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 The Knox Glass Company.
Location of Container Manufacturer: 1 Knox, Pennsylvania.
Date of Container Manufacturer: 1, 1924-1968.
Description: The container fragments which were manufactured by and exhibit the trademark of The Knox Glass Bottle Company include a base

fragment of a rectangular bottle. The colorless bottle was manufactured by machine, exhibiting seam lines and a cut-off scar. **Comments:** The "K" within a keystone was the trademark used by Knox Glass from 1924 to 1968, and later was the general mark for all Knox plants. The Knox Glass Company was established in 1917. It was Roy R. and Chester Underwood who developed the company to a high degree. Underwood was virtually an emperor in the glass business until his death in 1951. In 1951, Roy's brother Chester Underwood became president of Knox Glass along with several other companies. Because of the unsettled state of the company, a provisional organization was formed in 1953. In 1955, the company was divided into northern and southern divisions and a program of expansion and modernization began. The company's name was changed to "Knox Glass Co., Inc.". In 1968 Knox Glass was acquired by Glass Containers, Inc., of Fullerton, California (Toulouse 1971:293-297).

Group Name: The Larkin Company.
Group Number: 126.
No. of Specimens: 5 fragments.
Color of Specimens: 3 colorless; 2 emerald green.
No. of Individual(s) Represented: 5.
No. of Individual Shapes Represented: 2 rectangular; 2 round; 1 square.
Base Diameter: (2) 4.5 cm x 3.6 cm; 3 unknown.
Height: 5 unknown.
Associated Marks/Labels: Embossed across the body of the emerald green rectangular bottle is ".../Soap (in italics)/BUFFAL[O]". The emerald green round container is embossed across the body with "...N (in downturned arc)/...Y/...". Embossed around the body of the colorless round container is ".../...KIN CO./[BU]FFALO (in upturned arc)". "Larkin (in downturned arc)" is embossed across the front of the colorless square bottle. Embossed down the left or right side of the colorless rectangular bottle is "[L]arki[n]".
Product Name: 1 Larkin soap; 4 Larkin ?.
Location of Product Manufacturer: 5 Buffalo, New York.
Date of Product Manufacturer: 5 unknown.
Container Manufacturer Name: 5 unknown.
Location of Container Manufacturer: 5 unknown.
Date of Container Manufacturer: 5, 1870-1910.
Description: The Larkin Company container fragments include base and body fragments of at least 2 rectangular bottles, one emerald green, and the other colorless. There are 2 cylindrical bottles represented, one emerald green and the other colorless. And there is one emerald green square bottle represented. All but the emerald green rectangular specimen are too fragmentary to determine bottle dimensions. The rectangular bottle has basal dimensions of 4.5 cm x 3.6 cm. All of the bottles were finished by hand with lips which accommodated cork stopper style closures.
Comments: N/A.

Group Name: LARVEX.
Group Number: 128.
No. of Specimens: 2 fragments.
Color of Specimens: 2 cobalt blue.

No. of Individual(s) Represented: 2.
No. of Individual Shapes Represented: 2 oval.
Base Diameter: (2) 7.7 cm.
Height: (2) 19.2 cm.
Associated Marks/Labels: Embossed across the fronts of the oval bottles is "L/A/R/V/E/X".
Product Name: 2 LARVEX.
Location of Product Manufacturer: 2 unknown.
Date of Product Manufacturer: 2 unknown.
Container Manufacturer Name: 2 unknown.
Location of Container Manufacturer: 2 unknown.
Date of Container Manufacturer: 2, 1920-1950.
Description: The LARVEX bottle fragments include body fragments of 2 oval bottles. The cobalt blue bottles have reconstructed diameters of 7.7 cm and reconstructed heights of 19.2 cm. LARVEX bottles are represented among the whole examples by specimen 8848-9. This complete bottle exhibits seam lines extending up from the basal edge line, around the neck and over the lug top finish. These characteristics would suggest that the bottle was manufactured by machine.
Comments: N/A.

Group Name: LAVORIS.
Group Number: 129.
No. of Specimens: 43 fragments.
Color of Specimens: 43 colorless.
No. of Individual(s) Represented: 15 (minimum).
No. of Individual Shapes Represented: 15 round.
Base Diameter: (7) 5.7 cm; (8) 4.6 cm.
Height: (7) 15.5 cm; 8 unknown.
Associated Marks/Labels: Embossed across the bases of the round bottles is "LAVORIS (in downturned arc)/CHEMICAL CO/MINNEAPOLIS (in upturned arc)". Embossed across the shoulders is "LAVORIS".
Product Name: 15 LAVORIS.
Location of Product Manufacturer: 15 Minneapolis, Minnesota.
Date of Product Manufacturer: 15, ?-present.
Container Manufacturer Name: 15 unknown.
Location of Container Manufacturer: 15 unknown.
Date of Container Manufacturer: 15, 1903-1920.
Description: The LAVORIS bottle fragments include base and body fragments of at least 15 cylindrical bottles. The colorless bottles are represented by at least two sizes with basal diameters of 5.7 cm and 4.6 cm. The larger sizes have reconstructed basal heights of 15.5 cm. LAVORIS is represented among the whole bottles by specimen 8839-5. Like the fragmentary specimens, the complete examples were manufactured by machine. They exhibit lines which extend up from the basal edge line and over a flared, medical-style lip. The specimens also exhibit cut-off scars.
Comments: LAVORIS is a mouthwash which continues to be manufactured at the time of this writing. The product is manufactured by Vicks Toiletry Products, a division of Richardson-Vicks Incorporated of Wilton, Connecticut.

Group Name: LASH'S BITTERS.
Group Number: 127.

No. of Specimens: 4 fragments.
Color of Specimens: 4 colorless.
No. of Individual(s) Represented: 4.
No. of Individual Shapes Represented: 4 round.
Base Diameter: 4 unknown.
Height: (4) 18.4 cm.
Associated Marks/Labels: Embossed across the bodies of the round bottles is "LASH'S/BITTERS/[CO.]/NEW Y[ORK CHICAGO]/SAN FRANCISCO".
Product Name: 4 LASH'S BITTERS.
Location of Product Manufacturer: 4 New York, New York; San Francisco, California; or Chicago, Illinois.
Date of Product Manufacturer: 4 unknown.
Container Manufacturer Name: 4 unknown.
Location of Container Manufacturer: 4 unknown.
Date of Container Manufacturer: 4, 1903-1920.
Description: The LASH'S BITTERS bottle fragments include body fragments of at least 4 cylindrical bottles. The colorless bottles have reconstructed heights of 18.4 cm. A complete bottle would exhibit evidence of machine manufacture and a brandy-style finish (Adams 1972:20).
Comments: N/A.

Group Name: The Laurens Glass Works.
Group Number: 130.
No. of Specimens: 1 fragment.
Color of Specimens: 1 pale green.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 round.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the base of the round bottle is "L G W".
Product Name: 1 unknown.
Location of Product Manufacturer: 1 unknown.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 The Laurens Glass Works.
Location of Container Manufacturer: 1 Laurens, South Carolina.
Date of Container Manufacturer: 1, 1913-present.
Description: The container fragments which were manufactured by and exhibit the trademark of The Laurens Glass Works include a base fragment of 1 cylindrical bottle. The pale green bottle was manufactured by machine, exhibiting seam lines and a cut-off scar.
Comments: The Laurens Glass Works were organized in 1910 and opened the following year. The company briefly closed this first year because of financial problems and inexperience. Until 1913 all of the bottles were manufactured by hand. In 1937 Laurens began to undergo a technological expansion which continues today. In 1970, the products listed as being manufactured by the company included soda and food containers in flint, light green, and emerald green (Toulouse 1971:324-326).

Group Name: LEDERLE.
Group Number: 131.
No. of Specimens: 2 fragments.

Group Name: FRANK MILLER'S CROWN DRESSING.
Group Number: 153.
No. of Specimens: 8 fragments.
Color of Specimens: 2 colorless; 6 aqua.
No. of Individual(s) Represented: 5 (minimum).
No. of Individual Shapes Represented: 5 square.
Base Diameter: (5) 4.2 cm x 4.2 cm.
Height: 5 unknown.
Associated Marks/Labels: Embossed across the body of the colorless square bottle is "CROW[N] (in downturned arc)/(a crown)/DRESSING (in upturned arc)/FRAN[K]/MILLE[R]". The aqua bottles are embossed with "FRANK/MILLER'S/CROWN (in downturned arc)/(crown)/DRESSING (in upturned arc)/NEW YORK/U.S.A.".
Product Name: 5 FRANK MILLER'S CROWN DRESSING.
Location of Product Manufacturer: 5 New York.
Date of Product Manufacturer: 5, ca. 1880-ca. 1890.
Container Manufacturer Name: 5 unknown.
Location of Container Manufacturer: 5 unknown.
Date of Container Manufacturer: 5, 1870-1910.
Description: The FRANK MILLER'S CROWN DRESSING bottles include base and body fragments of at least 5 square bottles with beveled corners. The colorless and aqua bottles have basal dimensions of 4.2 cm x 4.2 cm. At least one of the 5 bottles exhibits a machine-made valve mark. Some of the specimens were finished by hand with a lip which accommodated a cork stopper closure.
Comments: MILLER'S CROWN DRESSING bottles have been excavated from western sites such as Fort Laramie, Wyoming. These examples date from 1880-1890 (Wilson 1981:94).

Group Name: The Millville Bottle Works.
Group Number: 262.
No. of Specimens: 1 fragment.
Color of Specimens: 1 colorless.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 oval.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the base of the oval bottle is The Millville Bottle Works trademark of "M.B.W. (in downturned arc)/U.S.A. (in upturned arc)".
Product Name: 1 unknown.
Location of Product Manufacturer: 1 unknown.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 The Millville Bottle Works.
Location of Container Manufacturer: 1 Millville, New Jersey.
Date of Container Manufacturer: 1, 1903-1930.
Description: The container fragment which was manufactured by and exhibit the trademark of The Millville Bottle Works is a base fragment of an oval bottle. The colorless bottle was manufactured by machine exhibiting seam lines and a cut-off scar.
Comments: The Millville Bottle Works is first listed in the glass directories in 1904 with James E. Mitchell as president and manager. In 1906, W. Scott Wheaton is listed as president. Wheaton was

No. of Individual Shapes Represented: 11 round.
Base Diameter: (3) 5.7 cm; (8) 4.1 cm.
Height: (3) 6.75 cm; (8) 5.1 cm.
Associated Marks/Labels: Embossed across the bases of the round jars is "MENTHOLATUM (in downturned arc)/REG/TRADE/MARK (in upturned arc)".
Product Name: 11 MENTHOLATUM.
Location of Product Manufacturer: 11 unknown.
Date of Product Manufacturer: 11, ?-present.
Container Manufacturer Name: 11 unknown.
Location of Container Manufacturer: 11 unknown.
Date of Container Manufacturer: 11, 1903-1930.
Description: The MENTHOLATUM jar fragments include base/body fragments of at least eleven cylindrical jars. The white milk glass jars are represented by two sizes with basal diameters of 5.7 cm, heights of 6.75 cm and diameters of 4.1 cm, heights of 5.1 cm. They were manufactured by machine, exhibiting seam lines which extend up and over continuous thread finishes. MENTHOLATUM jars are represented among the whole examples by Division 1, Category 1,Type 5.
Comments: MENTHOLATUM is a deep-heating medicinal ointment which continues to be manufactured at the time of this writing. It is manufactured by The Mentholatum Company of Buffalo, New York. Whether this was the location of manufacture when the specimens in this group were used is not known.

Group Name: MILK OF MAGNESIA.
Group Number: 152.
No. of Specimens: 124 fragments.
Color of Specimens: 123 cobalt blue; 1 pale blue.
No. of Individual(s) Represented: 7.
No. of Individual Shapes Represented: 7 oval.
Base Diameter: (7) 7.8 cm x 5.8 cm.
Height: (7) 17.5 cm.
Associated Marks/Labels: Embossed across the front of the oval bottles is "MILK OF (in downturned arc)/(a belt in the circular fashion containing a seal)/MAGNESIA (in upturned arc)/REG'D IN U.S. PAT. OFFICE/AUG. 21 1906".
Product Name: 7 MILK OF MAGNESIA.
Location of Product Manufacturer: 7 Glenbrook, Connecticut.
Date of Product Manufacturer: 7, 1874-present.
Container Manufacturer Name: 7 unknown.
Location of Container Manufacturer: 7 unknown.
Date of Container Manufacturer: 7, 1903-1920.
Description: The MILK OF MAGNESIA bottle fragments include base, body, shoulder, neck, and finish fragments of at least 7 oval bottles with strapped sides. The cobalt blue and pale blue bottles have basal dimensions of 7.8 cm x 5.8 cm and reconstructed heights of 17.5 cm. The bottles were manufactured by machine, exhibiting cut-off scars and seam lines which extend up from the basal edge lines and over square bead or continuous thread finishes. MILK OF MAGNESIA bottles are represented among the whole examples by specimen 8738-13.
Comments: MILK OF MAGNESIA is an antacid which continues to be manufactured at the time of this writing. It is manufactured by The Charles H. Phillips Company, Division of Sterling Drugs Incorporated of New York, New York.

into business with Captain John Hay to form The Union Flint Glass Works. Hay eventually moved on and McCully began the business again in 1832 under the name "Phoenix Glass Company". In 1840 McCully took over two Ihmsen Glass plants in Williamsport, Pennsylvania. McCully continued into partnerships with A. W. Buchanan, Frederick Lorenz, and T. Wightman. The partnership dissolved in 1851 and eight years later, McCully died. After his death, McCully and Company continued operations under McCully's son, John McCully. The company closed in 1886 (Toulouse 1971:351-353).

Group Name: The McKennan Pharmacy.
Group Number: 150.
No. of Specimens: 45 fragments.
Color of Specimens: 45 colorless.
No. of Individual(s) Represented: 22 (minimum).
No. of Individual Shapes Represented: 22 rectangular.
Base Diameter: (3) 5.5 cm x ? cm; (15) 5.0 cm x 3.0 cm; (1) 4.1 cm x ? cm; (3) 3.5 cm x 2.0 cm.
Height: 22 unknown.
Associated Marks/Labels: Embossed down the fronts of 8 of the 13 rectangular bottles is "M^{C}KENNAN". Embossed across the bases is "W.T.CO. (in downturned arc): (group 236). Embossed down the fronts of 5 rectangular bottles is "M^{C}KENNAN/PHARMACY". Pressed into the bases is a crescent moon and star. The prima oval bottles are embossed down the fronts with "M^{C}KENNANS PHARMACY/431 MARKET ST./PITTSBURG". Embossed across one base is "S.B.W. (in downturned arc)". Pressed into the base of one bottle is a crescent and a star.
Product Name: 22 unknown.
Location of Product Manufacturer: 22 Pittsburgh, Pennsylvania.
Date of Product Manufacturer: 22, 1871-ca. 1960.
Container Manufacturer Name: 8 The Whitall-Tatum Glass Company; 1 S.B.W.; 13 unknown.
Location of Container Manufacturer: 8 Millville, New Jersey; 14 unknown.
Date of Container Manufacturer: 8, 1857-1935; 14 unknown.
Description: The McKennan Pharmacy bottle fragments include base and body fragments of 22 rectangular bottles. The colorless bottles are represented in at least 4 sizes with basal dimensions of 7.5 cm x ? cm, 5.0 cm x 3.0 cm, 4.1 cm x ? cm, and 3.5 cm x 2.0 cm. The specimens exhibit seam lines which extend up from the basal edge and bottom plate marks.
Comments: J. T. McKennan was a druggist who established his business in Pittsburgh in 1871. His company is described as carrying "...a full line of drugs, chemicals, and proprietary medicines, druggist sundries, and toilet articles." (Pittsburgh of Today 1896:136). The McKennan Drug Company is not listed in the Pittsburgh city directories until 1881 and continues into the 1960's (Pittsburgh and Allegheny City Directory 1881-82:563).

Group Name: MENTHOLATUM.
Group Number: 151.
No. of Specimens: 43 fragments.
Color of Specimens: 43 white milk glass.
No. of Individual(s) Represented: 11 (minimum).

Base Diameter: (3) 5.3 cm x 3.9 cm; (2) 2.7 cm x 2 cm.
Height: 5 unknown.
Associated Marks/Labels: Embossed across the fronts of the rectangular bottles is "(a monogrammed MDC within a keystone)/McCULLOCH DRUG CO (diagonally)/PITTSBURGH". At least one of the bottles is also embossed across the base with "CLGSO./1" (group 037). One bottle is embossed across the base with "W.T.CO." (group 236).
Product Name: 5 unknown.
Location of Product Manufacturer: 5 Pittsburgh, Pennsylvania.
Date of Product Manufacturer: 5, ca. 1880.
Container Manufacturer Name: 1 The Carr Lowery Glass Company; 1 The Whitall-Tatum Glass Company; 3 unknown.
Location of Container Manufacturer: 1 Baltimore, Maryland; 1 Millville, New Jersey; 3 unknown.
Date of Container Manufacturer: 1, 1889-1963; 1, 1857-1935; 3 unknown.
Description: The McCulloch Drug Company bottle fragments include base, body, and shoulder fragments of at least 5 rectangular bottles with beveled corners. The colorless bottles are represented in 2 sizes with basal dimensions of 5.3 cm x 3.9 cm and 2.7 cm x 2 cm. They exhibit bottom plates and seam lines extending up from the basal edge line. The bottles were probably finished by hand with a lip which accommodated a cork stopper closure.
Comments: Although the spelling is different, the McCulloch Drug Company probably refers to the Pittsburgh drug company established by A. J. McCullough circa 1880. "The business was established...by the present proprietor, and has always enjoyed a large lucrative trade. A. J. McCullough, M.D., was born in this county and is highly esteemed by the community..." (Pennsylvania Historical Review 1886:198).

Group Name: McCully and Company.
Group Number: 149.
No. of Specimens: 7 fragments.
Color of Specimens: 2 colorless; 3 aqua; 1 pale green; 1 amber.
No. of Individual(s) Represented: 7.
No. of Individual Shapes Represented: 4 oval; 1 buffalo oval; 1 rectangular; 1 unknown.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the bases of each container is The McCully & Company trademark of "McC".
Product Name: 7 unknown.
Location of Product Manufacturer: 7 unknown.
Date of Product Manufacturer: 7 unknown.
Container Manufacturer Name: 7 McCully and Company.
Location of Container Manufacturer: 7 Pittsburgh, Pennsylvania.
Date of Container Manufacturer: 7, 1832-1886.
Description: The container fragments which were manufactured by and exhibit the trademark of The McCully and Company Glass Company include base/body fragments of 2 colorless oval, 1 colorless rectangular, 1 pale green buffalo oval (Putnam 1965:24), and 2 amber oval bottles. One amber specimen was too fragmentary to determine the bottle shape. All of the bottles were probably finished by hand.
Comments: William McCully was born in Ireland and came to Pittsburgh where he learned the art of glass blowing. In 1829 McCully first went

Group Name: MAY'S DY-IT.
Group Number: 147.
No. of Specimens: 3 fragments.
Color of Specimens: 3 colorless.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 round.
Base Diameter: (1) 5 cm.
Height: (1) 8.8 cm.
Associated Marks/Labels: Embossed around the body of the round bottle is "MAY'S/DY-IT/PITTSBURGH".
Product Name: 1 MAY'S DY-IT.
Location of Product Manufacturer: 1 Pittsburgh, Pennsylvania.
Date of Product Manufacturer: 1, 1900-1939.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1 unknown.
Description: The MAY'S DY-IT bottle fragments include body fragments of a cylindrical bottle. The colorless bottle has a reconstructed basal diameter of 5 cm and a reconstructed height of 8.8 cm. MAY'S DY-IT bottles are represented among the whole examples by specimen 8651-32. This complete example exhibits seam lines up from the basal edge line to the neck where the bottle was hand finished with a square bead lip.
Comments: See group 146 for a history of The May Drug Company.

Group Name: McC & CO. IRON GLUE.
Group Number: 189.
No. of Specimens: 1 fragment.
Color of Specimens: 1 colorless.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 oval.
Base Diameter: 1 unknown.
Height: 1 unknown.
Associated Marks/Labels: Embossed across the colorless oval base is "IRON GLUE/McC & CO./BALTO.".
Product Name: 1 McC & CO. IRON GLUE.
Location of Product Manufacturer: 1 Baltimore, Maryland.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1903-1920.
Description: The McC & CO. IRON GLUE base/body fragment is of a colorless oval bottle. The container was manufactured by machine exhibiting seam lines and a cut-off scar. IRON GLUE is represented among the whole bottles by specimen 8893-1.
Comments: N/A.

Group Name: The McCulloch Drug Company.
Group Number: 148.
No. of Specimens: 10 fragments.
Color of Specimens: 10 colorless.
No. of Individual(s) Represented: 5 (minimum).
No. of Individual Shapes Represented: 5 rectangular.

Height: 1 unknown.
Associated Marks/Labels: Embossed across the base of the rectangular bottle is "MAX FACTOR/HOLLYWOOD".
Product Name: 1 Max Factor cosmetics.
Location of Product Manufacturer: 1 Hollywood, California.
Date of Product Manufacturer: 1, ?-present.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1903-1930.
Description: The Max Factor bottle fragments include a base/body fragment of a rectangular bottle with beveled corners and a panelled front. The colorless bottle has basal dimensions of ? cm x 3.3 cm. The bottle was manufactured by machine, exhibiting seam lines which extend up from the basal edge line and a cut-off scar.
Comments: Max Factor cosmetics continue to be manufactured at the time of this writing. The products are manufactured by a Norton Simon Incorporated Company and distributed out of Hollywood, California.

Group Name: The May Drug Company.
Group Number: 146.
No. of Specimens: 80 fragments.
Color of Specimens: 80 colorless.
No. of Individual(s) Represented: 22 (minimum).
No. of Individual Shapes Represented: 22 rectangular.
Base Diameter: (8) 7.6 cm x 5.7 cm; (5) 5.4 cm x 3.3 cm; (6) 4.3 cm x ? cm; (2) 3.4 cm x 2.2 cm.
Height: (5) 16 cm; (1) 10.1 cm; 16 unknown.
Associated Marks/Labels: Embossed across the fronts of the rectangular bottles is "THE/MAY DRUG/CO./PITTSBURG". At least 8 of the bottles are also embossed on the base with a triangle containing a "J" (group 090).
Product Name: 22 unknown.
Location of Product Manufacturer: 22 Pittsburgh, Pennsylvania.
Date of Product Manufacturer: 22, 1900-1939.
Container Manufacturer Name: 8 J. T. and A. Hamilton Glass Company; 14 unknown.
Location of Container Manufacturer: 8 Pittsburgh, Pennsylvania; 14 unknown.
Date of Container Manufacturer: 8, 1884-1943; 14 unknown.
Description: The May Drug Company bottle fragments include base, body, shoulder, neck, and finish fragments of at least 22 rectangular bottles with rounded corners. The colorless bottles are represented in 5 sizes with bottle dimensions of 7.6 cm x 5.7 cm, unknown height; 5.4 cm x 3.3 cm, 16 cm in height; 4.3 cm x ? cm, unknown height; 3.4 cm x 2.2 cm, unknown height; and 3.2 cm x 1.8 cm, 10.1 cm in height. The bottles consist of hand-finished as well as machine-manufactured examples. The machine-manufactured examples exhibit lug top finishes while the hand-finished bottles exhibit flared medical-style lips which accommodated a cork stopper closure. May Drug bottles of both types are represented among the whole examples by specimens 8749-5, 8756-7, 8926-4, and 8938-8.
Comments: The May Drug Company is first listed in the 1900 Pittsburgh City Directory as being at 504-506 Market Street (Pittsburgh City Directory 1900-01:804). The company is last listed in 1939 as having several locations in Pittsburgh (Pittsburgh City Directory 1939:863).

Tennessee (Toulouse 1971:339-341).

Group Name: JARS.
Group Number: 143.
No. of Specimens: 520 fragments.
Color of Specimens: 520 pale green.
No. of Individual(s) Represented: 50 (minimum).
No. of Individual Shapes Represented: 50 round.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: The specimens in this group are embossed in at least three manners. The first style of jars is embossed across the body with "MASON (in downturned arc)/JAR". The second style of jar is embossed across the body with "MASON'S (in downturned arc)/PATENT/NOV 30th/1858". The third style of embossing takes the form of "(a keystone)/MASON'S/PATENT/NOV 30th/1858". Also included in this group are fragments embossed across the body with "(a maltese cross)/MASONS/PATENT/NOV 30th/1858". Embossed across the base in a circular pattern is "PAT NOV 26 67".
Product Name: 50 unknown.
Location of Product Manufacturer: 50 unknown.
Date of Product Manufacturer: 50 unknown.
Container Manufacturer Name: 50 Mason jars.
Location of Container Manufacturer: 50 Philadelphia, Pennsylvania.
Date of Container Manufacturer: 50, 1858-1920.
Description: The jar fragments which were manufactured by and exhibit the trademark of The Mason Fruit Jar Company include base and body fragments of at least 50 cylindrical jars. The pale green jars were manufactured by machine completely and some finished by hand. Mason jars are represented among the whole examples by Subcategory 1, Group 2, Subgroup 11; Subcategory 1, Group 2, Subgroup 12; Subcategory 1, Group 2, Subgroup 13, Variety 1; and Subcategory 1, Group 2, Subgroup 15.
Comments: John Landis Mason had patented his jar on November 30, 1858, and it was Louis Boyd in 1869 who referred to it as the "so-called Mason jar". After Mason's patent expired, the many makers of Mason jars embossed their jars with "MASON'S PATENT NOV 30th 1858". This practice continued until at least 1912. Around 1900, alternate copies used included "MASON'S", "MASON JAR", or "MASON". The Mason Fruit Jar Company of Philadelphia, Pennsylvania, was formed in 1885 after The Consolidated Fruit Jar Company stopped business and permitted The Hero Fruit Jar Company to use its rights to the Mason jar in 1884. In 1907, a Mason Fruit Jar Company was established in Coffeyville, Kansas, and lasted for two years. Because of the number of different makers for Mason jars, it is impossible, except for a trademark, to establish where or by whom whese jars were manufactured (Toulouse 1971:343-345).

Group Name: Max Factor.
Group Number: 145.
No. of Specimens: 1 fragment.
Color of Specimens: 1 colorless.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 rectangular.
Base Diameter: (1) ? cm x 3.3 cm.

Product Name: 5 MARTINI VERMOUTH.
Location of Product Manufacturer: 5 Italy.
Date of Product Manufacturer: 5 unknown.
Container Manufacturer Name: 2 S.A.C.I.V. S.p.A. Commerciale Industriale Vetrerie; 3 unknown.
Location of Container Manufacturer: 2 Asti, Italy; 3 unknown.
Date of Container Manufacturer: 2, ?-present; 3, 1903-1920.
Description: The MARTINI VERMOUTH bottle fragments include base, body, and shoulder fragments of at least 5 cylindrical bottles. The dark green bottles have basal diameters of 8.4 cm and reconstructed heights of 31.5 cm. They exhibit a high kickup which is misleading because the bottles were manufactured by machine. The bottles exhibit cut-off scars. Whole bottle specimen 8842-6 also exhibits seam lines up from the basal edge line, around the neck, and over the double collar finish. The embossing on the whole bottle differs from the fragmentary specimens.
Comments: N/A.

Group Name: The Maryland Glass Company.
Group Number: 144.
No. of Specimens: 3 fragments.
Color of Specimens: 2 cobalt blue; 1 pale green.
No. of Individual(s) Represented: 3.
No. of Individual Shapes Represented: 2 round; 1 oval.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the bases of the round bottles is an "M" within a circle. The two cobalt bottles are also embossed across the body with "BROMO-SELTZER/EMERSON/DRUG CO./BALTIMORE" (group 024). Embossed below the trademark on the oval bottle is "MADE IN U.S.A.".
Product Name: 2 BROMO-SELTZER; 1 unknown.
Location of Product Manufacturer: 2 Baltimore, Maryland.
Date of Product Manufacturer: 2, 1891-present; 1 unknown.
Container Manufacturer Name: 3 The Maryland Glass Company.
Location of Container Manufacturer: 3 Baltimore, Maryland.
Date of Container Manufacturer: 3, 1916-present.
Description: The container fragments which were manufactured by and exhibit the trademark of The Maryland Glass Company include 1 oval and 2 cylindrical bottles. The cobalt blue cylindrical and pale green oval bottles were manufactured by machine, exhibiting seam lines and cut-off scars. The 2 cylindrical bottles were manufactured for BROMO-SELTZER (group 024). The Maryland Glass Company trademark is represented among the whole bottles by specimens 8768-1, 8756-9, and 8765-1.
Comments: The Maryland trademark used since 1916 is an "M" within a circle embossed around the trademark. The Maryland Glass Company was established in 1907 in order to provide The Emerson Drug Company of Baltimore with bottles for BROMO-SELTZER, among other things. This production of cobalt blue bottles forced The Cumberland Glass Company, which previously produced the bottles, to drop cobalt blue as a glass color. Maryland was the first factory in Baltimore to use automatic machines. Up until 1956 Maryland was a subsidiary of The Emerson Drug Company. In 1956 The Warner-Lambert Pharmaceutical Company was given the title, and in 1968, The Dorsey Corporation of Chattanooga,

and a reconstructed height of 7 cm. The bottle was manufactured by machine. It exhibits seam lines extending up from the basal edge line and over the lug top finish. This lug top finish accommodated a metal cap lined with a paper sealer. Marinello Company bottles are represented among the whole examples by specimen 8926-34. This complete bottle, like the fragmentary jar, was manufactured by machine.
Comments: This fragmentary jar probably contained cold cream.

Group Name: The Marion Fruit Jar and Bottle Company.
Group Number: 141.
No. of Specimens: 3 fragments.
Color of Specimens: 3 emerald green.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 round.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the body fragment is "...[M]ARIO[N]...".
Product Name: 1 unknown.
Location of Product Manufacturer: 1 unknown.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 The Marion Fruit Jar and Bottle Company.
Location of Container Manufacturer: 1 Marion, Converse, or Fairmont, Indiana.
Date of Container Manufacturer: 1, 1888-1904.
Description: The container fragments consist of body fragments or an emerald green round botle. The specimens are too fragmentary to determine the method of manufacture.
Comments: The Marion Fruit Jar was manufactured by The Marion Fruit Jar and Bottle Company. This company was originated in 1888 by Colonel J. L. McCullach. McCullach purchased the old Southern Glass Company in 1887, and moved it to Marion, Indiana, so he could take advantage of the natural gas for glass melting. The Marion factory was destroyed by fire, and immediately rebuilt in 1890. In 1893, the factory once again was destroyed by fire and rebuilt. At this time, McCullach set up factories in Fairmont and Converse, Indiana, but, in December of that year, the Fairmont works burned. In 1904, the Ball Brothers purchased all of the Marion works (Toulouse 1971:356-357).

Group Name: MARTINI VERMOUTH.
Group Number: 142.
No. of Specimens: 45 fragments.
Color of Specimens: 45 dark green.
No. of Individual(s) Represented: 5 (minimum).
No. of Individual Shapes Represented: 5 round.
Base Diameter: (5) 8.4 cm.
Height: (5) 31.5 cm.
Associated Marks/Labels: Embossed across the bodies of 4 of the 5 round bottles is "PER 1/MARTINI COCKTAIL/ESCLUSIVAMENTE/MARTINI VERMOUTH/FOR/MARTINI COCKTAIL/USE ONLY/MARTINI VERMOUTH". The same label is stencilled on the 5th bottle with white frosted lettering. At least 2 of the embossed bottles were also embossed across the lower body with 3 interlocked circles (group 169).

jars by Subcategory 2, Group 2, Subgroup 13.
Comments: The MACLAREN'S IMPERIAL CHEESE jars, like the Armour & Company processed foods jars (group 006) and other glass packed foods of this period, probably represent a transition in the packing industry from the Civil War era when commercially canned foods were introduced.

Group Name: MAJOR'S HORSE RADISH.
Group Number: 139.
No. of Specimens: 2 fragments.
Color of Specimens: 2 colorless.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 square.
Base Diameter: (1) 4.8 cm x 4.8 cm.
Height: 1 unknown.
Associated Marks/Labels: Embossed down the front of the square bottle is "MAJOR'S/HORSE RADISH". Although there are no left or right side fragments in this group, the right side would be embossed with "H.C. MAJORS".
Product Name: 1 MAJOR'S HORSE RADISH.
Location of Product Manufacturer: 1 unknown.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1880-1910.
Description: The MAJOR"S HORSE RADISH bottle fragments include body and shoulder fragments of a square bottle with beveled corners. The colorless bottle has reconstructed basal dimensions of 4.8 cm x 4.8 cm. MAJOR'S HORSE RADISH bottles are represented among the whole examples by specimen 8733-3. This example was finished by hand, exhibiting seam lines which extend up opposite corners from the basal edge line.
Comments: N/A.

Group Name: The Marinello Company.
Group Number: 140.
No. of Specimens: 2 fragments.
Color of Specimens: 2 colorless.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 figural oval.
Base Diameter: (1) 6.3 cm x 2.7 cm.
Height: (1) 7.0 cm.
Associated Marks/Labels: Embossed across the base of the oval bottle is "Marinello Co./design patd.". On the front are remains of a painted label. The screw top cap is embossed with the work "MARINELLO" three times so that the cap is divided in to 3 sections. In these three sections are the profiles of three women's heads.
Product Name: 1 Marinello Company cosmetics.
Location of Product Manufacturer: 1 unknown.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1920-present.
Description: The Marinello Company container fragments include base, body, shoulder, neck, and finish fragments of a figural oval jar. The colorless bottle has reconstructed basal dimensions of 6.3 x 4.9 cm,

No. of Individual Shapes Represented: 1 round.
Base Diameter: 1 unknown.
Height: 1 unknown.
Associated Marks/Labels: Embossed across the base of the round bottle is "5 (The Whitall Tatum trademark of a WT within a triangle) 7" (group 236). Embossed around this in a circular pattern in "BOTTLE MADE IN U.S.A.". Around this, in turn, is "LYSOL INCORPORATED B[LOOMFIELD,] N.J.".
Product Name: 1 LYSOL disinfectant.
Location of Product Manufacturer: 1 Bloomfield, New Jersey.
Date of Product Manufacturer: 1, ?-present.
Container Manufacturer Name: 1 Whitall Tatum.
Location of Container Manufacturer: 1 Millville, New Jersey.
Date of Container Manufacturer: 1, 1935-1938.
Description: The LYSOL bottle fragments include a base fragment of a cylindrical bottle. The amber specimen is too fragmentary to determine bottle dimensions. LYSOL bottles are represented among the whole examples by specimen 8766-2. This complete example was manufactured by machine, exhibiting a cut-off scar and seam lines which extend up from the basal edge line, around the neck, and over a collared, square bead finish.
Comments: LYSOL is the brand name of a number of disinfecting products which continue to be manufactured at the time of this writing. The products are manufactured by Lehn and Fink Products, Division of Sterling Drugs Incorporated, Montvale, New Jersey.

Group Name: MACLAREN'S IMPERIAL CHEESE.
Group Number: 138.
No. of Specimens: 17 fragments.
Color of Specimens: 17 white milk glass.
No. of Individual(s) Represented: 9 (minimum).
No. of Individual Shapes Represented: 9 round.
Base Diameter: (2) 6.5 cm; (1) 6.3 cm; (5) 5.5 cm; (1) 5.2 cm.
Height: 9 unknown.
Associated Marks/Labels: Embossed across the bases of at least 8 of the round jars is the Maclaren trademark of two crossed paddles containing the words "TRADE" and "MARK". At the base of each paddle is a cow's head, and below this is "R.G.S.D.". Embossed around the trademark is "MACLAREN'S IMPERIAL CHEESE". One body fragment in this group is painted with "MACL...IMPERI..." in white lettering on a gold background. The label is not found in association with the embossing described above.
Product Name: 9 MACLAREN'S IMPERIAL CHEESE.
Location of Product Manufacturer: 9 unknown.
Date of Product Manufacturer: 9 unknown.
Container Manufacturer Name: 9 unknown.
Location of Container Manufacturer: 9 unknown.
Date of Container Manufacturer: 9, 1900-1930.
Description: The MACLAREN'S IMPERIAL CHEESE jar fragments include base/body fragments of at least 9 round jars which taper out from the bases. These white milk glass jars come in four sizes with basal diameters of 6.5 cm, 6.3 cm, 5.5 cm, and 5.2 cm. They were pressed by machine in manufacture and exhibit a square bead finish with a smooth lip. MACLAREN'S IMPERIAL CHEESE jars are represented among the whole

colorless bottles are represented by at least 4 sizes with basal diameters of 7.2 cm, 5.8 cm, 4.5 cm, and 3.5 cm, and corresponding heights of ? cm, 14 cm, 10.9 cm, and 7.9 cm. All of the bottles were manufactured by machine, exhibiting cut-off scars and seam lines which extend up and over either square bead or continuous-thread finishes. LISTERINE bottles are represented among the whole examples by specimens 8651-15,33,24,27; 8706-3; 8738-9; 8749-18; 8876-2; 8842-1; 8853-8; 8848-5; 8859-16,17; 8865-4; 8910-6; 8922-5; 8967-1; 8981-7,8.
Comments: LISTERINE is an antiseptic mouthwash which continues to be manufactured at the time of this writing. It is manufactured by The Warner Lambert Company of Morris Plains, New Jersey. It is not known whether this was the location of manufacture when the specimens in this group were in use.

Group Name: LLEWELLYN.
Group Number: 136.
No. of Specimens: 13 fragments.
Color of Specimens: 8 colorless; 5 dark green.
No. of Individual(s) Represented: 5.
No. of Individual Shapes Represented: 2 oval; 2 round; 1 rectangular.
Base Diameter: (2) 5.7 cm x 3.9 cm; 2 unknown; (1) ? cm x 2.5 cm.
Height: (2) 12.5 cm; 3 unknown.
Associated Marks/Labels: Embossed across the bodies of the oval bottles is an oval containing "LLEWELLYN (in downturned arc)/1410 CHESTNUT ST/PHILAD'A (in upturned arc)". At least one of the bottles is also embossed across the base with "W.T.CO. (in downturned arc)/C/U.S.A. (in upturned arc)" (group 236). Embossed across the front of the rectangular bottle is "[LLE]WELLYN". Embossed around the shoulders of the dark green round bottles is "[COC]A LLEWELLYN". Embossed across the bases in a circular pattern is "...LLEWELLYN...".
Product Name: 3 LLEWELLYN ?; 2 COCA LLEWELLYN.
Location of Product Manufacturer: 5 Philadelphia, Pennsylvania.
Date of Product Manufacturer: 5 unknown.
Container Manufacturer Name: 1 Whitall Tatum and Company; 4 unknown.
Location of Container Manufacturer: 1 Millvale, New Jersey; 4 unknown.
Date of Container Manufacturer: 1, 1857-1938; 4 unknown.
Description: The LLEWELLYN product bottle fragments include, base, body, shoulder, and finish fragments of one rectangular and two oval bottles. All of the bottles are colorless. The oval bottles have reconstructed heights of 12.5 cm. The rectangular bottle has basal dimensions of ? cm x 2.5 cm. Both types of bottles were finished by hand, exhibiting square bead lips which accommodated cork stoppers and have seam lines extending up from the basal edge line. The COCA LLEWELLYN bottle fragments in the Neville House assemblage include base/body fragments of two cylindrical bottles. The dark green bottles exhibit a shallow mold-formed kick-up. LLEWELLYN bottles are represented among the whole bottles by specimen 8855-1.
Comments: N/A.

Group Name: LYSOL.
Group Number: 137.
No. of Specimens: 1 fragment.
Color of Specimens: 1 amber.
No. of Individual(s) Represented: 1.

Group Number: 134.
No. of Specimens: 3 fragments.
Color of Specimens: 3 colorless.
No. of Individual(s) Represented: 2.
No. of Individual Shapes Represented: 2 rectangular.
Base Diameter: (2) 5.5 cm x 2.7 cm.
Height: 2 unknown.
Associated Marks/Labels: Embossed across the bases of the rectangular bottles is "LIQUID/VENEER".
Product Name: 2 LIQUID VENEER.
Location of Product Manufacturer: 2 unknown.
Date of Product Manufacturer: 2 unknown.
Container Manufacturer Name: 2 unknown.
Location of Container Manufacturer: 2 unknown.
Date of Container Manufacturer: 2, 1880-1910.
Description: The LIQUID VENEER bottle fragments include base/body fragments of two rectangular bottles. The colorless bottles have basal dimensions of 5.5 cm x 2.7 cm. The specimens exhibit seam lines extending up from the basal edge line. They were probably finished by hand, exhibiting a lip which accommodated a cork stopper closure. LIQUID VENEER bottles are represented among the whole examples by specimen 8651-22.
Comments: N/A.

Group Name: LISTERINE.
Group Number: 135.
No. of Specimens: 66 fragments.
Color of Specimens: 66 colorless.
No. of Individual(s) Represented: 12 (minimum).
No. of Individual Shapes Represented: 12 round.
Base Diameter: (1) 7.2 cm; (3) 5.8 cm; (6) 4.5 cm; (2) 3.5 cm.
Height: (1) unknown; (3) 14 cm; (6) 10.9 cm; (2) 7.9 cm.
Associated Marks/Labels: Embossed across the upper bodies of the round containers is "LISTERINE". Embossed across the lower bodies is "LAMBERT/PHARMACAL COMPANY". One of the specimens is also embossed across the base with The Whitall Brothers and Tatum trademark (group 236). Two bottles are also embossed on the base with The Owens Illinois trademark (group 173). One specimen is embossed with The Illinois Glass trademark (group 116). One specimen is embossed with The Obear-Nester trademark (group 165). One specimen is embossed with The Diamond Glass trademark (group 062).
Product Name: 12 LISTERINE.
Location of Product Manufacturer: 12 unknown.
Date of Product Manufacturer: 12, ?-present.
Container Manufacturer Name: 1 The Whitall Tatum Glass Company; 2 The Owens-Illinois Glass Company; 1 The Illinois Glass Company; 1 The Obear-Nester Glass company; 1 The Diamond Glass Company; 6 unknown.
Location of Container Manufacturer: 1 (see group 236); 2 (see group 173); 1 (see group 116); 1 (see group 165); 1 (see group 062); 6 unknown.
Date of Container Manufacturer: 1, 1857-1938; 2, 1929-present; 1, 1873-1929; 1, 1915-present; 1, 1924-present; 6 unknown.
Description: The LISTERINE bottle fragments include base, body, shoulder, and neck fragments of at least 12 cylindrical bottles. The

Color of Specimens: 2 colorless.
No. of Individual(s) Represented: 2.
No. of Individual Shapes Represented: 2 round.
Base Diameter: (2) 5.7 cm.
Height: (2) 19.1 cm.
Associated Marks/Labels: Embossed diagonally across the bodies of the round bottles is "Lederle (in italics)".
Product Name: 2 Lederle.
Location of Product Manufacturer: 2 unknown.
Date of Product Manufacturer: 2 unknown.
Container Manufacturer Name: 2 unknown.
Location of Container Manufacturer: 2 unknown.
Date of Container Manufacturer: 2, 1903-1930.
Description: The "Lederle" bottle fragments include body and shoulder fragments of two cylindrical bottles. The colorless bottles have basal diameters of 5.7 cm and a reconstructed height of 19.1 cm. The specimens exhibit seam lines extending up the body. Like the whole bottle example specimen 8922-6, the fragmentary examples were manufactured by machine. The complete example exhibits seam lines which extend up and over the crown top finish.
Comments: Lederle Laboratories, at the time of this writing, manufactures nutritional supplements such as vitamins. The modern company is a division of The American Cyanamid Company in Pearl River, New York. It is not known whether this was the location of manufacture at the time the specimens in this group were in use.

Group Name: LINDSAY'S BLOOD SEARCHER.
Group Number: 132.
No. of Specimens: 2 fragments.
Color of Specimens: 2 colorless.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 rectangular.
Base Diameter: (1) 5.9 cm x ? cm.
Height: 1 unknown.
Associated Marks/Labels: Embossed down the front of the rectangular bottle is "LINDSAY'S".
Product Name: 1 LINDSAY'S BLOOD SEARCHER.
Location of Product Manufacturer: 1 Hollidaysburg, Pennsylvania.
Date of Product Manufacturer: 1, 1850-1890.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1880-1910.
Description: The LINDSAY'S BLOOD SEARCHER bottle fragments include body fragments of a rectangular bottle with beveled corners and a panelled front side. The colorless bottle has reconstructed basal dimensions of 5.9 cm x ? cm.
Comments: R. E. Sellers was a Pittsburgh druggist who, circa 1850, closed his business. After the closing, Sellers was sold the rights to make and sell "LINDSAY'S BLOOD SEARCHER". He later moved to Hollidaysburg to establish another business (Personal Communication: Murray). An advertisement for LINDSAY'S BLOOD SEARCHER appeared in the January 6, 1872, issue of Harper's Weekly (Baldwin 1973:312).

Group Name: LIQUID VENEER.

previously involved with the family-owned T. C. Wheaton Glass Company. Wheaton died on January 22, 1924. In 1928, the company is listed as being owned by The T. C. Wheaton Glass Company and is last listed in 1930. The most common bottles displaying the Millville trademark are prescription bottles with individual lettering for western drugstores (Toulouse 1971:349-350).

Group Name: MISSION DRY SPARKLING/MISSION ORANGE DRY.
Group Number: 154.
No. of Specimens: 14 fragments.
Color of Specimens: 14 black glass.
No. of Individual(s) Represented: 8 (minimum).
No. of Individual Shapes Represented: 8 round.
Base Diameter: (8) 6.7 cm.
Height: 8 unknown.
Associated Marks/Labels: Embossed across the bases of 6 of the round bottles is "MISSION/DRY/SPARKLING/PAT PDG.". Also embossed across the bases is a star containing an "S" (group 214). Two of the bottles are embossed across the bases with "MISSION/ORANGE DRY/REG".
Product Name: 6 MISSION DRY SPRAKLING; 2 MISSION ORANGE DRY.
Location of Product Manufacturer: 8 unknown.
Date of Product Manufacturer: 8 unknown.
Container Manufacturer Name: 6 The Southern Glass Company; 2 unknown.
Location of Container Manufacturer: 6 Vernon, California; 2 unknown.
Date of Container Manufacturer: 6, 1917-1931; 2 unknown.
Description: The MISSION DRY SPARKLING and MISSION ORANGE DRY bottle fragments include base/body fragments of at least 8 cylindrical bottles. The black glass bottles have basal diameters of 6.7 cm. They were manufactured by machine, exhibiting cut-off scars and seam lines extending up from the basal edge.
Comments: N/A.

Group Name: MISTOL.
Group Number: 155.
No. of Specimens: 9 fragments.
Color of Specimens: 9 colorless.
No. of Individual(s) Represented: 8 (minimum).
No. of Individual Shapes Represented: 8 rectangular.
Base Diameter: (2) 5.9 cm x 3.5 cm; 6 unknown.
Height: (2) 8 cm; 6 unknown.
Associated Marks/Labels: Embossed across the fronts of the rectangular bottles is "Mistol". Embossed across the base of at least one bottle is a diamond containing an "I" (group 116).
Product Name: 8 MISTOL.
Location of Product Manufacturer: 8 unknown.
Date of Product Manufacturer: 8 unknown.
Container Manufacturer Name: 1 The Illinois Glass Company; 7 unknown.
Location of Container Manufacturer: 1 (see group 116); 7 unknown.
Date of Container Manufacturer: 1, 1873-1929; 7 unknown.
Description: The MISTOL bottle fragments include base, body, and shoulder fragments of at least 8 rectangular bottles. The colorless bottles are represented by at least 2 sizes with the smaller bottles having basal dimensions of 5.9 cm x 3.5 cm and a reconstructed height of 8 cm. All of the specimens were manufactured by machine, exhibiting

cut-off scars and seam lines extending up from the basal edge line and over the continuous thread finish. MISTOL bottles are represented among the whole examples by specimen 8853-3. This complete example includes a metal cap/eye dropper closure.
Comments: N/A.

Group Name: The Moone Chemical Company.
Group Number: 156.
No. of Specimens: 16 fragments.
Color of Specimens: 16 colorless.
No. of Individual(s) Represented: 5 (minimum).
No. of Individual Shapes Represented: 5 rectangular.
Base Diameter: (5) 4.5 cm x 1.8 cm.
Height: (5) 10 cm.
Associated Marks/Labels: Embossed down the left sides of the rectangular bottles is "MOONE CHEMICAL CO.". Embossed down the right sides is "ROCHESTER, N.Y.".
Product Name: 5 unknown.
Location of Product Manufacturer: 5 Rochester, New York.
Date of Product Manufacturer: 5 unknown.
Container Manufacturer Name: 5 unknown.
Location of Container Manufacturer: 5 unknown.
Date of Container Manufacturer: 5, 1903-1920.
Description: The Moone Chemical Company bottle fragments include base and body fragments of at least 5 rectangular bottles with rounded corners. The colorless bottles have basal dimensions of 4.5 cm x 1.8 cm and a reconstructed height of 10 cm. They were manufactured by machine, exhibiting bottom plates and seam lines extending up from the basal edge line. Moone Chemical Company bottles are represented among the whole examples by specimen 8654-2. This complete example was finished by hand with a square bead lip.
Comments: N/A.

Group Name: MOONES EMERALD OIL.
Group Number: 157.
No. of Specimens: 1 fragment.
Color of Specimens: 1 emerald green.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 rectangular.
Base Diameter: (1) 4.8 cm x 2.2 cm.
Height: 1 unknown.
Associated Marks/Labels: Embossed down the left side of the rectangular bottle is "[MOONE'S EMERA]LD OIL". Embossed down the right side is "[ROCHE]STER, N.Y.".
Product Name: 1 MOONE'S EMERALD OIL.
Location of Product Manufacturer: 1 Rochester, New York.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1903-1920.
Description: The MOONE'S EMERALD OIL bottle fragment includes a base, body, and finish fragment of a rectangular bottle with rounded corners. The emerald green bottle has basal dimensions of 4.8 cm x 2.2 cm. It exhibits a machine cut-off scar and seam lines which extend up from the

basal edge line and over a bead lip.
Comments: N/A.

Group Name: Moore and McCormick Chemists.
Group Number: 158.
No. of Specimens: 1 fragment.
Color of Specimens: 1 aqua.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 square or rectangular.
Base Diameter: 1 unknown.
Height: 1 unknown.
Associated Marks/Labels: Embossed down the front of the square or rectangular bottle is "...ormick.../...la Chemis.../
...Baltimore...", in script.
Product Name: 1 unknown.
Location of Product Manufacturer: 1 Baltimore, Maryland.
Date of Product Manufacturer: 1, ca. 1870-1890.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1 unknown.
Description: The Moore and McCormick bottle fragment includes a body fragment of a square or rectangular bottle. The aqua specimen in this group is too fragmentary to determine bottle dimensions. However, the bottle was probably hand finished with a lip which accommodated a cork stopper closure (Personal Communication: Winters).
Comments: This bottle was manufactured for a medicinal or chemical product. Moore and McCormick was the predecessor to The McCormick Spice Company which still operates out of Baltimore.

Group Name: H. K. Mulford Co. Chemists.
Group Number: 159.
No. of Specimens: 1 fragment.
Color of Specimens: 1 amber.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 square.
Base Diameter: 1 unknown.
Height: 1 unknown.
Associated Marks/Labels: Embossed down the front of the square bottle is "[H. K. M]ULFORD [CO.]/[CHE]MISTS/[PHILA]DELPHIA".
Product Name: 1 unknown.
Location of Product Manufacturer: 1 Philadelphia, Pennsylvania.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1870-1910.
Description: The H. K. Mulford Company bottle fragments include a body fragment of a square bottle. The amber specimen is too fragmentary to determine bottle dimensions. Complete bottles of a larger size are known to have been finished with a square bead lip (Adams 1971:92).
Comments: N/A.

Group Name: MUM.
Group Number: 160.
No. of Specimens: 5 fragments.

Color of Specimens: 5 white milk glass.
No. of Individual(s) Represented: 4.
No. of Individual Shapes Represented: 4 round.
Base Diameter: (3) 4.3 cm; (1) 4.5 cm.
Height: (3) 1.9 cm; (1) 2.6 cm.
Associated Marks/Labels: Embossed across the bases of the round containers is "MUM (in downturned arc)/MFG CO/PHILA PA.".
Product Name: 4 MUM.
Location of Product Manufacturer: 4 Philadelphia, Pennsylvania.
Date of Product Manufacturer: 4, ?-present.
Container Manufacturer Name: 4 unknown.
Location of Container Manufacturer: 4 unknown.
Date of Container Manufacturer: 4, 1903-present.
Description: The MUM jar fragments include base, body, and rim fragments of at least 4 cylindrical shallow jars. The white milk glass jars are represented by 2 sizes with basal diameters of 4.3 cm and 4.5 cm, and corresponding heights of 1.9 cm and 2.6 cm. The smaller jars exhibit a plain finish, while the larger sizes exhibit continuous thread finishes. All of the specimens were manufactured by machine. MUM jars are represented among the whole jars by Subcategory 1, Group 1, Subgroup 13.
Comments: MUM deodorant continues to be manufactured at the time of this writing. The product is manufactured by The Bristol-Myers Company of New York, New York. It is not known whether this was the location of manufacture at the time the specimens in this group were in use.

Group Name: The Mutual Union Brewing Company.
Group Number: 161.
No. of Specimens: 2 fragments.
Color of Specimens: 2 amber.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 round.
Base Diameter: 1 unknown.
Height: 1 unknown.
Associated Marks/Labels: Embossed across the shoulder of the round bottle is "MUTUAL UNION BREWING CO (in downturned arc)/ALIQUIPPA PA".
Product Name: 1 MUTUAL UNION beer.
Location of Product Manufacturer: 1 Aliquippa, Pennsylvania.
Date of Product Manufacturer: 1, 1906-1921.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1900-1920.
Description: The Mutual Union beer bottle fragments include body and shoulder fragments of a cylindrical bottle. The amber specimens in this group are too fragmentary to determine bottle dimensions. The bottle was manufactured by machine.
Comments: The Mutual Union Brewing Company was formed in 1906 by the liquor dealers of Allegheny County. The company established as its underlying principle

> "To secure absolute independence of action as well as the generous profits upon the manufacture and distribution of beer." (Pennsylvania Historical Review 1886:250).

The company is last listed in the Pittsburgh Directories in 1921 (Polk's Pittsburgh Directory 1921:1930).

Group Name: A. NICHOLSON MINERAL WATER.
Group Number: 162.
No. of Specimens: 16 fragments.
Color of Specimens: 16 aqua.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 round.
Base Diameter: (1) 6.85 cm.
Height: 1 unknown.
Associated Marks/Labels: Embossed across the body of the round bottle is "A. NICHOLSON (in downturned arc)/MINERAL WATER/PITTSBURG". Embossed across the opposite side in script is "A.N.".
Product Name: 1 A. NICHOLSON MINERAL WATER.
Location of Product Manufacturer: 1 Pittsburgh, Pennsylvania.
Date of Product Manufacturer: 1, ca. 1850.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1 unknown.
Description: The NICHOLSON MINERAL WATER bottle fragments include base and body fragments of a cylindrical bottle. The aqua bottle has a basal diameter of 6.85 cm. It was blown in a two-piece mold and exhibits an improved iron pontil scar.
Comments: N/A.

Group Name: The North British Bottle Manufacturing Company, Limited.
Group Number: 163.
No. of Specimens: 1 fragment.
Color of Specimens: 1 colorless.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 round.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the base of the round bottle is "NB/31".
Product Name: 1 unknown.
Location of Product Manufacturer: 1 unknown.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 The North British Bottle Manufacturing Company, Limited.
Location of Container Manufacturer: 1 Shettleston (Glasgow), Scotland.
Date of Container Manufacturer: 1, 1903-1937.
Description: The container fragments were manufactured by and exhibit the trademark of The North British Bottle Manufacturing Company, Limited and include a base fragment of one cylindrical bottle. The colorless bottle was manufactured by machine.
Comments: The North British Bottle Manufacturing Company was established on July 4, 1903. Although this specimen is of clear glass, the North British specialty was green glass used in making scotch whiskey bottles. World War I curtailed business for a while but, with the end of prohibition in the United States and increased marketing in Latin America, business grew. In 1937, Distillers Company, Limited, exchanged its interests in North British, along with several companies,

for stock in The United Glass Bottle Company, Limited (Toulouse 1971:377-378).

Group Name: NOXZEMA.
Group Number: 264.
No. of Specimens: 1 fragment.
Color of Specimens: 1 cobalt blue.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 round.
Base Diameter: (1) 4.25 cm.
Height: 1 unknown.
Associated Marks/Labels: Embossed across the base of the round jar is "NOXZEMA" in such a manner that "NOX" and "EMA" are separated by an oversized "Z".
Product Name: 1 NOXZEMA cold cream.
Location of Product Manufacturer: 1 unknown.
Date of Product Manufacturer: 1, ?-present.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1930-present.
Description: The NOXZEMA jar fragments include a base/body fragment of a cylindrical jar. The cobalt blue jar has a reconstructed diameter of 4.25 cm. It was manufactured by machine and exhibits seam lines which extend up from the basal edge line.
Comments: NOXZEMA is a cosmetic cleansing cream which is still manufactured at the time of this writing. It is manufactured by the Noxell Corporation of Baltimore, Maryland. Whether this was the location of manufacture when the specimens in this group were used is not known.

Group Name: Unidentified Nursing Bottles.
Group Number: 247.
No. of Specimens: 1 fragment.
Color of Specimens: 1 colorless.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 rectangular.
Base Diameter: 1 unknown.
Height: 1 unknown.
Associated Marks/Labels: Embossed across the side is "[NU]RSIN[G]/BOTTLE".
Product Name: 1 N/A.
Location of Product Manufacturer: 1 N/A.
Date of Product Manufacturer: 1 N/A.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1880-1915.
Description: The unidentified nursing bottle fragments include a body fragment of a rectangular bottle with rounded corners.
Comments: N/A.

Group Name: The Obear-Nester Glass Company.
Group Number: 165.
No. of Specimens: 7 fragments.
Color of Specimens: 7 colorless.

No. of Individual(s) Represented: 7.
No. of Individual Shapes Represented: 6 round; 1 rectangular.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the bases of the round and rectangular bottles is The Obear-Nester trademark of an "N" within a square. At least three of the six round bottles are also embossed across the bodies with "LISTERINE/LAMBERT/PHARMACAL COMPANY" (group 135).
Product Name: 3 LISTERINE; 4 unknown.
Location of Product Manufacturer: 7 unknown.
Date of Product Manufacturer: 3, ?-present; 4 unknown.
Container Manufacturer Name: 7 The Obear-Nester Glass Company.
Location of Container Manufacturer: 7 East St. Louis, Illinois.
Date of Container Manufacturer: 7, 1915-present.
Description: The container fragments which were manufactured by and exhibit the trademark of The Obear-Nester Glass Company include those of one rectangular and six cylindrical bottles. All of the colorless bottles were manufactured by machine, exhibiting the characteristic full seam lines and/or cut-off scars and/or valve marks. At least three of the six cylindrical bottles were manufactured for LISTERINE (group 135). The Obear-Nester trademark is represented among the whole bottles by specimens 8651-23 and 8967-1.
Comments: The Obear-Nester Glass Company was begun in 1894 by the sons of Joseph Nester. Nester was a supervisor at the Alton, Illinois, plant of The Illinois Glass Company. In 1915, Obear-Nester installed its first semi-automatic machine and also introduced the company's present-day trademark. Obear-Nester established a plant in Kansas City, Missouri, and, in 1953, acquired the Lincoln, Illinois, plant of The Knox Glass Company. This operation was eventually renamed "Lincoln Container Corporation" (Toulouse 1971:373-375).

Group Name: O-CEDAR.
Group Number: 166.
No. of Specimens: 9 fragments.
Color of Specimens: 9 colorless.
No. of Individual(s) Represented: 6 (minimum).
No. of Individual Shapes Represented: 6 rectangular.
Base Diameter: (5) 7.6 cm x 4.5 cm; 1 unknown.
Height: (5) 20 cm; (1) 16 cm.
Associated Marks/Labels: Embossed across the bases of the rectangular bottles is "O-Cedar/MADE IN U.S.A.".
Product Name: 6 O-CEDAR cleaner.
Location of Product Manufacturer: 6 unknown.
Date of Product Manufacturer: 6 unknown.
Container Manufacturer Name: 6 unknown.
Location of Container Manufacturer: 6 unknown.
Date of Container Manufacturer: 6, 1903-1920.
Description: The O-CEDAR bottle fragments include base and body fragments of at least 6 rectangular bottles with rounded corners. The colorless bottles are represented by at least two sizes with basal dimensions of 7.6 cm x 4.5 cm and ? cm x ? cm, and corresponding heights of 20 cm and 16 cm. All of the bottles were manufactured by machine, exhibiting the characteristic full seam lines extending up to

the double bead finish and around the neck. They also exhibit cut-off scars. O-CEDAR bottles are represented among the whole examples by specimen 8653-8.
Comments: The O-CEDAR trademark is also associated today in the form of brooms, mops, etc. O-CEDAR products are distributed by The Drackett Products Co., Cincinnati, Ohio.

Group Name: OLD WITCH.
Group Number: 168.
No. of Specimens: 4 fragments.
Color of Specimens: 4 colorless.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 rectangular.
Base Diameter: (1) 8.1 cm x ? cm.
Height: 1 unknown.
Associated Marks/Labels: The fronts of the rectangular bottles are molded into vertical ribbed patterns. Embossed across the lower fronts is "OLD WITCH".
Product Name: 1 OLD WITCH liquor.
Location of Product Manufacturer: 4 unknown.
Date of Product Manufacturer: 4 unknown.
Container Manufacturer Name: 4 unknown.
Location of Container Manufacturer: 4 unknown.
Date of Container Manufacturer: 4, 1903-1920.
Description: The OLD WITCH bottle fragments include body fragments of a rectangular bottle with a panelled front which is also ribbed. The colorless bottle has basal dimensions of 8.1 cm x ? cm. It was manufactured by machine, exhibiting a cut-off scar.
Comments: OLD WITCH was probably an alcoholic beverage.

Group Name: J. M. OLIN'S STOMACH BITTERS.
Group Number: 167.
No. of Specimens: 4 fragments.
Color of Specimens: 4 dark green.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 square.
Base Diameter: (1) 7.6 cm x 7.6 cm.
Height: 1 unknown.
Associated Marks/Labels: Embossed down the front of the square bottle is "J. M. OLIN'S/[S]TOMACH BI[TT]ER[S]".
Product Name: 1 J. M. OLIN'S STOMACH BITTERS.
Location of Product Manufacturer: 1 Pittsburgh, Pennsylvania.
Date of Product Manufacturer: 1, ca. 1860-ca. 1880.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1 unknown.
Description: The J. M. OLIN'S STOMACH BITTERS bottle fragments include fragments of a square bottle with bevelled corners. The dark green bottle has reconstructed basal dimensions of 7.6 cm x 7.6 cm. It was probably finished by hand, exhibiting a lip which accommodated a cork stopper closure.
Comments: N/A.

Group Name: OLYMPIA PINT.

Group Number: 170.
No. of Specimens: 2 fragments.
Color of Specimens: 2 colorless.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 eight-sided.
Base Diameter: 1 unknown.
Height: 1 unknown.
Associated Marks/Labels: Embossed down one side of the eight-sided bottle is "OLYMPIA PINT".
Product Name: 1 OLYMPIA PINT.
Location of Product Manufacturer: 1 unknown.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1903-1920.
Description: The OLYMPIA PINT bottle fragments include base and body fragments of an eight-sided bottle. The colorless specimens are too fragmentary to determine bottle dimensions. However, the bottle was manufactured by machine, exhibiting a cut-off scar.
Comments: N/A.

Group Name: OMEGA OIL.
Group Number: 171.
No. of Specimens: 2 fragments.
Color of Specimens: 2 colorless.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 round.
Base Diameter: (1) 3.4 cm.
Height: 1 unknown.
Associated Marks/Labels: Embossed across the body of the round bottle is "OMEGA/(a tree containing [OI]L/IT'S GREEN)/TRADE MARK". Although there are no lower body fragments in this group, it would be embossed with "THE OMEGA/CHEMICAL CO./NEW YORK" (Blumenstein 1966:94-95).
Product Name: 1 OMEGA OIL.
Location of Product Manufacturer: 1 New York.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1903-1920.
Description: The OMEGA OIL bottle fragments include body fragments of a cylindrical bottle. The colorless bottle has a basal diameter of 3.4 cm. OMEGA OIL bottles are represented among the whole examples by specimen 8938-4. This complete example exhibits a machine-made cut-off scar and seam lines extending up the body, around the collared neck and over the medical-style lip.
Comments: N/A.

Group Name: OVOFERRIN.
Group Number: 012.
No. of Specimens: 2 fragments.
Color of Specimens: 2 colorless.
No. of Individual(s) Represented: 2.
No. of Individual Shapes Represented: 2 crown oval.
Base Diameter: 2 unknown.

Height: 2 unknown.
Associated Marks/Labels: Embossed across the bases of these crown oval bottles is "A. C. BARNES CO. (in downturned arc)/OVOFERRIN (in upturned arc)". Embossed in the center of one of the bases is "4".
Product Name: 2 OVOFERRIN.
Location of Product Manufacturer: 2 unknown.
Date of Product Manufacturer: 2 unknown.
Container Manufacturer Name: 2 unknown.
Location of Container Manufacturer: 2 unknown.
Date of Container Manufacturer: 2, 1880-1910.
Description: The OVOFERRIN bottle fragments include base/body fragments of two crown oval (Putnam 1965:28) bottles. The colorless specimens of this group are too fragmentary to determine bottle dimensions. Their bases exhibit a depressed base and seam lines running up opposite corners of the body. The bottles were probably hand finished and exhibited a lip which accommodated a cork stopper closure.
Comments: N/A.

Group Name: The Owens Bottle Company.
Group Number: 172.
No. of Specimens: 65 fragments.
Color of Specimens: 47 colorless; 1 pale blue; 7 aqua; 10 amber.
No. of Individual(s) Represented: 45 (minimum).
No. of Individual Shapes Represented: 18 round; 8 rectangular; 7 square; 6 oval; 2 8-sided; 1 9-sided; 1 12-sided; 1 prima oval; 1 buffalo oval.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the bases of the containers is The Owens Bottle Company trademark of an "O" within a square. Also embossed across the bases of at least 10 bottles is "H. J. HEINZ CO. (in downturned arc)/(plant number)(bottle mold number)(date)/(mold number)/PATD" (group 101). Four bottles are embossed down the left and right sides with "BELL & CO. INC./ORANGEBURG/NEW YORK.U.S.A./BELL-ANS/FOR/INDIGESTION" (group 016). Two bottles are also embossed across the base with "HELLMANN'S/BLUE RIBBON/REGISTERED" (group 102). One bottle is embossed with "GLOVER'S IMPERIAL/MANGE MEDICINE" (group 081).
Product Name: 10 HEINZ condiments; 4 BELL-ANS; 2 HELLMANN'S mayonnaise; 1 GLOVER'S IMPERIAL MANGE MEDICINE; 29 unknown.
Location of Product Manufacturer: 10 Pittsburgh, Pennsylvania; 4 Orangeburg, New York; 2 unknown; 1 New York; 29 unknown.
Date of Product Manufacturer: 10, 1888-present; 4 unknown; 2, ?-present; 1, ca. 1860-?; 29 unknown.
Container Manufacturer Name: 45 The Owens Bottle Company.
Location of Container Manufacturer: 45 Toledo, Ohio; or Fairmont, West Virginia.
Date of Container Manufacturer: 45, 1911-1929.
Description: The container fragments which were manufactured by and exhibit the trademark of The Owens Bottle Company include base/body fragments of one colorless nine-sided, one colorless rectangular, one colorless 12-sided, two colorless prima oval (Putnam 1965:25), two colorless 8-sided, 12 colorless cylindrical, six colorless oval, five

colorless square, three aqua cylindrical, two aqua square, three amber cylindrical, and seven amber rectangular bottles. All of the specimens were manufactured by machine, exhibiting tyhe characteristic full seam lines and/or valve marks and/or cut-off scars. At least 10 of the colorless round specimens were manufactured for HEINZ condiments (group 101). At least 4 of the rectangular amber specimens were manufactured for BELL-ANS antacid (group 016). At least one of the amber rectangular bottles was manufactured for GLOVER'S MANGE MEDICINE (group 081). The Owens Bottle Company is represented among the whole bottles by specimens 8651-7; 8652-1,2; 8766-3; 8748-11; 8768-2; 8749-6; 8853-4; 8848-1; 8859-22; 8926-10; 8907-2; 8904-1,3,5; 8966-10; 8938-5,7; 8910-2,5; 8922-4,6,7; 8905-1; 8948-1; 8769-2; 8839-2; 8781-2; 8933-2,5; and 8961-3.
Comments: The development of The Owens Bottle Company can be traced back to The Toledo Glass Company which was established in 1896 by Edward D. Libbey. The purpose was to provide facilities for the research of technological developments established by Michael Owens. It was in 1903 that the Owens Bottle Machine was perfected in the Toledo glass plant on Libbey Street. On September 3, 1903, this plant became plant no. 1 of The Owens Bottle Machine Company. The plant at first manufactured beers and sodas for The American Bottle Company, then catsups, and, in 1912, production of pharmaceutical and proprietary medicine bottles was added. Production continued until the plant's closing in 1927. Meanwhile, Libbey organized The Northwestern Ohio Bottle Company and The Owens West Virginia Bottle Company. In 1911 The Northwestern Ohio Bottle Company of Fairmont, West Virginia, merged to form The Owens Bottle Company. From 1911 until the merger with The Illinois Glass Company in 1929, Owens established plants in Clarksburg and Charleston, West Virginia, purchased The American Bottle Company of Streater, Illinois, and Newark, Ohio, and, in 1919, gained control of The Charles Boldt Glass Company of Cincinnati, Ohio, and Huntington, West Virginia (Toulouse 1971:393-394, 396-397).

Group Name: The Owens Illinois Glass Company.
Group Number: 173.
No. of Specimens: 79 fragments.
Color of Specimens: 58 colorless; 13 amber; 5 green; 1 aqua; 1 pale blue; 1 pale green.
No. of Individual(s) Represented: 64 (minimum).
No. of Individual Shapes Represented: 33 round; 13 rectangular; 10 oval; 6 square; 2 unknown.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the bases of the containers is the Owens Illinois trademark of an "I" within an "O" which is interlocked with a diamond. To the left of the mark is a number indicating the manufacturing plant. To the right is the manufacturing date and below the mark is the mold number. At least 7 specimens were manufactured in Alton, Illinois, and one of these is embossed with "Duraglass" in script lettering, a trademark used since 1940 (Toulouse 1971:403). Three specimens were manufactured in Streator, Illinois; 9 in Bridgeton, New Jersey; at least 17 in Huntington, West Virginia; 2 in Fairmont, West Virginia; 5 in Charleston, West Virginia; 3 in Clarksburg, West Virginia or Brockport, New Jersey; 1 in Evansville,

Indiana, or North Bergen, New Jersey; 2 in Gas City, Indiana; and 3 in Toledo, Ohio (Toulouse 1971:395). Also embossed across the bases of 3 containers is "HELLMANN'S/BLUE RIBBON/REGISTERED" (group 102). Two bases are embossed with "H. J. HEINZ CO. (in downturned arc)/(plant number)(bottle mold number)(date)/(mold number)/PATD" (group 101). Embossed across the body of at least 2 bottles is "LISTERINE" (group 135). One specimen is embossed with "SILVER/WRIGHT'S/CREAM" (group 241). One specimen is embossed with "FLEISCHMANN'S" (group 076).
Product Name: 3 HELLMANN'S mayonnaise; 2 HEINZ condiments; 2 LISTERINE; 1 WRIGHT'S SILVER CREAM; 1 FLEISCHMANN'S DRY GIN; 55 unknown.
Location of Product Manufacturer: 3 unknown; 2 Pittsburgh, Pennsylvania; 2 unknown; 1 Keene, Massachusetts; 1 unknown; 55 unknown.
Date of Product Manufacturer: 3, ?-present; 2, 1888-present; 2, ?-present; 1, ?-present; 1 unknown; 55 unknown.
Container Manufacturer Name: 64 The Owens Illinois Glass Company.
Location of Container Manufacturer: Same as location of Product Manufacturer.
Date of Container Manufacturer: 64, 1929-present.
Description: The container fragments, which were manufactured by and exhibit the trademark of The Owens-Illinois Glass Company include base/body fragments of 1 pale green cylindrical, 1 pale blue cylindrical, 1 aqua rectangular, 2 amber square, 2 amber cylindrical, 3 amber oval, 9 colorless oval, 4 colorless square, 10 colorless rectangular, 24 colorless cylindrical, 6 amber,rectangular, 5 green cylindrical, and 11 colorless bottles of unknown shapes. All of the bottles were manufactured by machine, exhibiting the characteristic full seam lines and/or cut-off scars and/or valve marks. At least 3 of the colorless round specimens were manufactured for HELLMANN'S mayonnaise (group 102). At least 2 of the round specimens were manufactured for HEINZ condiments (group 101). At least one of the colorless round specimens was manufactured for WRIGHT'S SILVER CREAM (group 241). At least one of the colorless rectangular bottles was manufactured for FLEISCHMANN'S DRY GIN (group 076). The Owens-Illinois trademark is represented among the whole bottles by specimens 8651-2,3,11,28,30,35; 8652-8,11; 8967-4; 8981-6,8; 8982-2; 8876-1; 8776-2,4,5; 8877-2; 8812-1; 8785-1,2,3; 8893-4; 8738-2,7,8,9,10,11; 8747-3,4,13; 8749-7,9,16,17,24,26,28; 8983-2; 8768-4,5,10,11,12; 8737-1; 8842-5,8,12,13,19; 8850-2,12; 8848-2; 8859-12,18,21,23,24,25; 8932-3; 8926-1,6; 8904-4; 8966-4,5,12,13,14,16,20; 8959-1; 8913-1; 8720-1; 8840-2; 8843-3; 8852-9; 8678-1; 8961-4.
Comments: The Owens-Illinois Glass Company was formed in 1929 as a result of the merger between The Owens Bottle Company and The Illinois Glass Company. The Owens Bottle Company brought with it five plants under its own name, The Cincinnati Boldt plant, 2 of 6 American Bottle Company plants, The Graham Glass Company plants, and 12 Berney-Bond Glass Company plants, along with other single plants. The Illinois Glass Company furnished 6 plants, with 4 in the east and midwest, and 2 on the Pacific coast. The Owens-Illinois Glass Company was based in Toledo, Ohio, and William E. Levis was the president. Levis was considered the guiding force behind the company until his death in 1950. In 1966, The Owens-Illinois Glass company became known as "Owens-Illinois Incorporated" (Toulouse 1971:403-406).

Group Name: The Pacific Coast Glass Company.
Group Number: 174.
No. of Specimens: 1 fragment.
Color of Specimens: 1 colorless.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 oval.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the lower body of the oval bottle is a divided rectangle containing the letters "PC".
Product Name: 1 unknown.
Location of Product Manufacturer: 1 unknown
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 The Pacific Coast Glass Company.
Location of Container Manufacturer: 1 San Francisco, California.
Date of Container Manufacturer: 1, 1925-1930.
Description: The container fragments which were manufactured by and exhibit the trademark of The Pacific Coast Glass Company include a base fragment of 1 oval bottle. The colorless bottle was manufactured by machine exhibiting a cut-off scar.
Comments: The Pacific Coast trademark found on this specimen was one of five marks used by the company. The Pacific Coast Glass Company began in 1925 as a successor to The Pacific Coast Glass Works. Products produced by this company included flint bottles and jars for prescriptions, milks, sodas, packers, and preservers. In 1930, Pacific Coast and The Illinois Pacific Glass Company joined to form The Illinois Pacific Coast Glass company (Toulouse 1971:414-415).

Group Name: PADDEN.
Group Number: 253.
No. of Specimens: 2 fragments.
Color of Specimens: 2 aqua.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 6-, 8-, or 12-sided.
Base Diameter: 1 unknown.
Height: 1 unknown.
Associated Marks/Labels: Embossed down two adjacent sides of the multisided bottle is "[PA]DDEN/[PITTSBUR]G[H P]A.".
Product Name: 1 PADDEN soda.
Location of Product Manufacturer: 1 Pittsburgh, Pennsylvania.
Date of Product Manufacturer: 1, ca. 1887.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1 unknown.
Description: The PADDEN bottle fragments include base and body fragments of a multi-sided bottle. The aqua specimens in this group were too fragmentary to determine bottle dimensions or the method of manufacture.
Comments: N/A.

Group Name: PAINES CELERY COMPOUND.
Group Number: 175.
No. of Specimens: 13 fragments.
Color of Specimens: 13 amber.

No. of Individual(s) Represented: 5 (minimum).
No. of Individual Shapes Represented: 5 square.
Base Diameter: (5) 6.7 cm x 6.7 cm.
Height: (5) 25.5 cm.
Associated Marks/Labels: Embossed down the fronts of the square bottles is "PAINE'S". Embossed down the backs is "CELERY COMPOUND".
Product Name: 5 PAINE'S CELERY COMPOUND.
Location of Product Manufacturer: 5 Burlington, Vermont.
Date of Product Manufacturer: 5, 1872-?.
Container Manufacturer Name: 5 unknown.
Location of Container Manufacturer: 5 unknown.
Date of Container Manufacturer: 5 unknown.
Description: The PAINE'S CELERY COMPOUND bottle fragments include base and body fragments of at least five square bottles with beveled corners. The amber bottles have basal dimensions of 6.7 cm x 6.7 cm and a reconstructed height of 25.5 cm. The bottles were blown in post bottom molds and exhibit four panelled sides. A complete example would exhibit a brandy-style lip (Baldwin 1973:371).
Comments: PAINE'S CELERY COMPOUND was produced by Wells, Richardson, and Company of Burlington, Vermont. Advertisements for this product appear in periodicals dating to the late 1880's, including the January 25, 1889, issue of the Lafayette Daily Courier (Indiana) (Baldwin 1973:371).

Group Name: PARAGON.
Group Number: 178.
No. of Specimens: 2 fragments.
Color of Specimens: 2 colorless.
No. of Individual(s) Represented: 2.
No. of Individual Shapes Represented: 2 round.
Base Diameter: 2 unknown.
Height: 2 unknown.
Associated Marks/Labels: Embossed across the base of one of two round bottles is "16OZ (in downturned arc)/PARAGON/PATENTED". Embossed across the base of the second bottle is "12OZ (in downturned arc)/PARAGON/PATENTED".
Product Name: 2 PARAGON.
Location of Product Manufacturer: 2 unknown.
Date of Product Manufacturer: 2 unknown.
Container Manufacturer Name: 2 unknown.
Location of Container Manufacturer: 2 unknown.
Date of Container Manufacturer: 2, 1880-1910.
Description: The PARAGON bottle fragments include base/body fragments of two cylindrical bottles. The colorless bottles are represented by 12- and 16-ounce sizes. The bottles were probably finished by hand.
Comments: Located on the North Side of Pittsburgh is The Paragon Wholesale Foods Corporation. The company was established in 1954 (Pittsburgh City Directory 1954:1158). It is not known whether the specimens in this group were related to any predecessor of The Paragon Wholesale Foods Corporation.

Group Name: Parke, Davis, and Company.
Group Number: 176.
No. of Specimens: 2 fragments.

CREAM/[REGIST]ERED". Embossed across the body of one bottle is a circle containing "REICK'S".
Product Name: 5 Reick's Dairy products.
Location of Product Manufacturer: 5 Pittsburgh, Pennsylvania.
Date of Product Manufacturer: 5, 1890-1958.
Container Manufacturer Name: 5 unknown.
Location of Container Manufacturer: 5 unknown.
Date of Container Manufacturer: 5, 1903-?.
Description: The Reick's dairy bottle fragments include base and body fragments of at least 5 cylindrical bottles. The colorless bottle fragments are represented by at least 2 sizes with basal diameters of 7.6 cm and 6.3 cm. The smaller bottle has a reconstructed height of 14.0 cm. The specimens were manufactured by machine, exhibiting seam lines up from the basal edge line and around the bead lip. REICK'S bottles are represented among the whole examples by specimen 8651-40, which was also manufactured by machine.
Comments: Reick's Dairy is first listed in the 1890-91 Pittsburgh Directory (Pittsburgh and Allegheny City Directory 1890-91:675) and continues to be listed until 1958. The company was operated by E. Reick (Polk's Pittsburgh Directory 1958:1002).

Group Name: L. Rose & Co.
Group Number: 199.
No. of Specimens: 5 fragments.
Color of Specimens: 5 pale green.
No. of Individual(s) Represented: 1 (minimum).
No. of Individual Shapes Represented: 1 round.
Base Diameter: 1 unknown.
Height: 1 unknown.
Associated Marks/Labels: Embossed around the body and shoulder of the round bottle is a design of intertwined rose stems, leaves, etc. Embossed across the shoulder is "...L.Rose & Co".
Product Name: 1 L. ROSE & CO. ?.
Location of Product Manufacturer: 1 England.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1880-1910.
Description: The L. Rose & Co. fragments include body fragments of at least five pale green cylindrical bottles. The fragments exhibit seam lines which extend up the sides of the bottles. The bottles were probably finished by hand.
Comments: N/A.

Group Name: ROYAL LUNCHEON CHEESE.
Group Number: 200.
No. of Specimens: 8 fragments.
Color of Specimens: 8 white milk glass.
No. of Individual(s) Represented: 4 (minimum).
No. of Individual Shapes Represented: 4 round.
Base Diameter: (4) 6.4 cm.
Height: 4 unknown.
Associated Marks/Labels: Embossed across the bases of the round jars is "ROYAL/LUNCHEON/CHEESE".

Height: 2 unknown.
Associated Marks/Labels: Embossed across the bases of the round jars is "RESINOL (in downturned arc)/BALTO MD./CHEMICAL CO. (in upturned arc)".
Product Name: 2 RESINOL.
Location of Product Manufacturer: 2 Baltimore, Maryland.
Date of Product Manufacturer: 2 unknown.
Container Manufacturer Name: 2 unknown.
Location of Container Manufacturer: 2 unknown.
Date of Container Manufacturer: 2, 1903-present.
Description: The RESINOL jar fragments include base/body fragments of a round jar which tapers out from the base. This white milk glass jar has a basal diameter of 5.2 cm. It was machine-manufactured and exhibits seam lines extending up from the basal edge line, over the continuous thread finish, and to the smooth lip. RESINOL jars are represented among the whole jars by Subcategory 1, Group 2, Subgroup 8.
Comments: N/A.

Group Name: RIDGWAYS ACME LINIMENT.
Group Number: 133.
No. of Specimens: 3 fragments.
Color of Specimens: 3 amber.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 rectangular.
Base Diameter: (1) 7.9 cm x 4.4 cm.
Height: (1) 19.9 cm.
Associated Marks/Labels: Embossed across the body of the rectangular bottle is "RIDGWAYS (in downturned arc)/[ACME]/LINIM[ENT]/[SAMUEL RIDGWA]Y (in downturned arc)/PROPRIETER/[H]YDETOWN PA/[U.S.]A.".
Product Name: 1 RIDGWAYS ACME LINIMENT.
Location of Product Manufacturer: 1 Hydetown, Pennsylvania.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1880-1910.
Description: The RIDGWAYS ACME LINIMENT bottle fragments include body fragments of a rectangular bottle with rounded sides. The amber bottle has reconstructed basal dimensions of 7.9 cm x 4.4 cm and a reconstructed height of 19.9 cm. A complete example would exhibit a square bead/collared finish (Baldwin 1973:414).
Comments: N/A.

Group Name: Reick's Dairy.
Group Number: 198.
No. of Specimens: 16 fragments.
Color of Specimens: 16 colorless.
No. of Individual(s) Represented: 5 (minimum).
No. of Individual Shapes Represented: 5 round.
Base Diameter: (1) 6.3 cm; (4) 7.6 cm.
Height: (1) 14.0 cm; 4 unknown.
Associated Marks/Labels: Embossed around the bodies of 3 of the round bottles is "REICK'S REICK'S/US1/2 PT (or 1 PT) REGISTERED". Embossed across the bases is "ERG/E". One bottle is embossed across the body with "LIQ[UID]/1PT./[R]EICK'S (in downturned arc)/PURE/...&

Height: N/A.
Associated Marks/Labels: Embossed across the base of the round container is the Reed Glass trademark of an "R" within a triangle/4 46".
Product Name: 1 unknown.
Location of Product Manufacturer: 1 unknown.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 The Reed Glass Company.
Location of Container Manufacturer: 1 Rochester, New York.
Date of Container Manufacturer: 1, 1927-1956.
Description: The container fragments which were manufactured by and exhibit the trademark of The Reed Glass Company include a base fragment of a cylindrical bottle. The amber bottle was manufactured by machine, exhibiting a cut-off scar.
Comments: The Reed Glass Company began in 1865 as The Rochester Glass Works. Eugene B. Reed, who was employed by the company as a bookkeeper, invested money in the company, and, in 1887, took it over with a Mr. Kelley. Kelley, Reed, and Company survived until 1898. In 1898, Frank E. Reed, Eugene's son, took over the business and renamed the company "The F. E. Reed Glass Company". In 1947, the name was changed once again to "The Reed Glass Company". The company was closed in 1956 (Toulouse 1971:433-434).

Group Name: The Reizenhauser Distillery.
Group Number: 196.
No. of Specimens: 1 fragment.
Color of Specimens: 1 colorless.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 square or rectangular.
Base Diameter: 1 unknown.
Height: 1 unknown.
Associated Marks/Labels: Embossed across the front of the square or rectangular bottle is a circle containing ".../...[COP]PER DIS[TILLED] (in upturned arc)". Below the circle is "TRADE MARK (in upturned arc)/[PI]TTSBURG[H]".
Product Name: 1 The Reizenhauser Distillery whiskey.
Location of Product Manufacturer: 1 Pittsburgh, Pennsylvania.
Date of Product Manufacturer: 1, ca. 1900.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1 unknown.
Description: The Reizenhauser Distillery bottle fragments include a body fragment of a square or rectangular bottle with beveled corners. The colorless specimen is too fragmentary to determine bottle dimensions or method of manufacture.
Comments: N/A.

Group Name: The Resinol Chemical Company.
Group Number: 197.
No. of Specimens: 2 fragments.
Color of Specimens: 2 white milk glass.
No. of Individual(s) Represented: 2.
No. of Individual Shapes Represented: 2 round.
Base Diameter: (2) 5.2 cm.

Location of Container Manufacturer: 1 Corning, New York.
Date of Container Manufacturer: 1, 1915-present.
Description: The PYREX container fragments include a base fragment of a cylindrical container. The colorless specimen has a basal diameter of 8.3 cm. It was manufactured by machine, exhibiting a faint cut-off scar.
Comments: PYREX is the registered trademark used by Corning Glass on their heat-resistant glassware. It was discovered by Corning in 1915 (Haskell 1981:52).

Group Name: RAWLEIGH'S EXTRACT.
Group Number: 255.
No. of Specimens: 4 fragments.
Color of Specimens: 4 colorless.
No. of Individual(s) Represented: 3 (minimum).
No. of Individual Shapes Represented: 3 rectangular.
Base Diameter: (3) 7.5 cm x 4.5 cm.
Height: (3) 21.5 cm.
Associated Marks/Labels: Embossed down the fronts of the rectangular bottles is "Rawleigh's (in script)/TRADE MARK/BOTTLE MADE IN U.S.A. (horizontally).".
Product Name: 3 RAWLEIGH'S extract.
Location of Product Manufacturer: 3 Freeport, Illinois.
Date of Product Manufacturer: 3 unknown.
Container Manufacturer Name: 3 unknown.
Location of Container Manufacturer: 3 unknown.
Date of Container Manufacturer: 3, 1880-1936.
Description: The RAWLEIGH'S bottle fragments include base and body fragments of at least three rectangular bottles. The colorless bottles have basal dimensions of 7.5 cm x 4.5 cm and reconstructed heights of 21.5 cm. These bottles are panelled on the front. They exhibit bottom plates and cut-off scars which suggest that they were manufactured by machine. RAWLEIGH'S bottles are represented among the whole examples by specimen 8767-4. This complete example exhibits the above-mentioned attributes as well as a continuous thread finish.
Comments: RAWLEIGH products were manufactured by The Rawleigh Company of Freeport, Illinois (Adams, Gray, Leonhardy 1975:249). This company was probably related to The W. T. Rawleigh Manufacturing Company which opened in Freeport in 1925. The company, at first, operated with one continuous tank and three glass-making machines, producing flint glass for medicines, extracts, toilet ware, vinegar, condiment, catsup, sodas, proprietary, and private mold ware. In 1936, the company was sold to The Owens-Illinois Glass Company who closed it (Toulouse 1971:444-445). Bottles exhibiting the Rawleigh's label come in hand-finished corkers (1880-1910), machine-made corkers (1903-1920), and machine-made screwtops (1925-1936).

Group Name: The Reed Glass Company.
Group Number: 195.
No. of Specimens: 1 fragment.
Color of Specimens: 1 amber.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 round.
Base Diameter: N/A.

dimensions of 8.6 cm x 6.6 cm and 6.4 cm x 4.9 cm. Both of the bottles exhibit the strapped sides characteristic of union oval bottles and were probably finished by hand with an extract style lip (Baldwin 1973:393).
Comments: POND'S EXTRACT was manufactured by The Pond's Extract Company of Utica, New York. The 1852-53 Utica Directory lists the company and reads "The peoples remedy for internal and external use." (Baldwin 1973:393). Advertisements for POND'S EXTRACT appear in periodicals dating from 1878-1892 (Wilson 1981:139). One such periodical advertises POND'S EXTRACT as the WONDER OF HEALING. It was a cure-all sold in various forms such as liquids, creams, soaps, plasters, and nasal sprays. The advertisement also states "In sickness every drop is worth its weight in gold" (Blumenstein 1966:143).

Group Name: PRETZINGER'S CATARRH BALM.
Group Number: 258.
No. of Specimens: 2 fragments.
Color of Specimens: 2 colorless.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 round.
Base Diameter: 1 unknown.
Height: 1 unknown.
Associated Marks/Labels: Embossed down the body of the round bottle is "PRETZINGER'S/CATARRH BALM/DAYTON, OHIO".
Product Name: 1 PRETZINGER'S CATARRH BALM.
Location of Product Manufacturer: 1 Dayton, Ohio.
Date of Product Manufacturer: 1, ca. 1898.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1 unknown.
Description: The PRETZINGER'S CATARRH BALM bottle fragments include body and finish fragments of a cylindrical bottle. The colorless specimens in this group are too fragmentary to determine bottle dimensions. However, the specimens do exhibit seam lines extending up the body to a continuous thread finish with a ground lip.
Comments: PRETZINGER'S CATARRH BALM was manufactured by Pretzinger Brothers Chemists of Dayton, Ohio. An advertisement for the balm appears in the November 26, 1898, issue of Detroit Free Press (Baldwin 1973:399).

Group Name: PYREX.
Group Number: 259.
No. of Specimens: 1 fragment.
Color of Specimens: 1 colorless.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 round.
Base Diameter: (1) 8.3 cm.
Height: 1 unknown.
Associated Marks/Labels: Embossed across the base of the round container is "PYREX/REG U.S. PAT. OFF/TRADE IN U.S.A.".
Product Name: 1 N/A.
Location of Product Manufacturer: 1 N/A.
Date of Product Manufacturer: 1 N/A.
Container Manufacturer Name: 1 The Corning Glass Works.

Group Number: 193.
No. of Specimens: 12 fragments.
Color of Specimens: 12 white milk glass.
No. of Individual(s) Represented: 6 (minimum).
No. of Individual Shapes Represented: 4 square; 2 oval.
Base Diameter: (2) 8.45 cm x 8.45 cm; (2) 5.4 cm x 5.4 cm; (2) 8.6 cm x ?.
Height: (2) 7.9 cm; (2) 4.9 cm; 2 unknown.
Associated Marks/Labels: Embossed across the bases of the oval jars is "POND'S". Embossed down the left and right sides of the square jars is "POND'S".
Product Name: 6 POND'S COLD CREAM.
Location of Product Manufacturer: 6 unknown.
Date of Product Manufacturer: 6, ?-present.
Container Manufacturer Name: 6 unknown.
Location of Container Manufacturer: 6 unknown.
Date of Container Manufacturer: 6, 1903-present.
Description: The POND'S jar fragments include base, body, and rim fragments of four square jars and two oval jars. The white milk glass square jars are of two sizes with basal dimensions of 8.45 cm x 8.45 cm and 5.4 cm x 5.4 cm, and heights of 7.9 cm and 4.9 cm respectively. The jars exhibit seam lines up from the basal edge, around the upper body, and over the continuous thread finish. These machine-made jars are represented among the whole jars by Subcategory 1, Group 2, Subgroup 4, Variety 2. The oval jars are also of white milk glass and were machine manufactured. They have basal dimensions of 8.6 cm x ? cm. The jars exhibit seam lines extending up from the basal edge and over the continuous thread, smooth lip finish. This type of jar is represented among the whole jars by Subcategory 1, Group 2, Subgroup 20.
Comments: POND'S cold cream continues to be manufactured at the time of this writing. It is manufactured by Chesebrough-Ponds Incorporated of New York, New York. Whether this was the location of manufacture when the specimens in this group were used is not known.

Group Name: POND'S EXTRACT.
Group Number: 194.
No. of Specimens: 34 fragments.
Color of Specimens: 34 aqua.
No. of Individual(s) Represented: 7 (minimum).
No. of Individual Shapes Represented: 7 union oval.
Base Diameter: (6) 8.6 cm x 6.6 cm; (1) 6.4 cm x 4.9 cm.
Height: 7 unknown.
Associated Marks/Labels: Embossed down the fronts of the union oval bottles is "POND'S EXTRACT". Embossed across the bases is "1846".
Product Name: 7 POND'S EXTRACT.
Location of Product Manufacturer: 7 Utica, New York.
Date of Product Manufacturer: 7, ca. 1852-1892.
Container Manufacturer Name: 7 unknown.
Location of Container Manufacturer: 7 unknown.
Date of Container Manufacturer: 7, 1880-1910.
Description: The POND'S EXTRACT bottles include base and body fragments of at least seven union oval (Putnam 1965:32) bottles. The aqua bottles are represented by two sizes of bottles with basal

Color of Specimens: 3 pale green.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 round.
Base Diameter: (1) 7.7 cm.
Height: 1 unknown.
Associated Marks/Labels: Embossed across the body of the round bottle is "PLUT[O WATER]/AM[E]RICAS PHYSIC".
Product Name: 1 PLUTO-WATER.
Location of Product Manufacturer: 1 French Lick, Indiana.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1903-1930.
Description: The PLUTO-WATER bottle fragments include base and body fragments of a cylindrical bottle. The pale green bottle has a basal diameter of 7.7 cm. It exhibits a valve mark and cut-off scar, suggesting its manufacture by machine. The specimens also exhibit seam lines extending up the body from the basal edge line.
Comments: Although this specimen was manufactured during the early 20th century, there have been PLUTO WATER bottles excavated from western gold mining towns which date to the 1880's (Toulouse 1970:62).

Group Name: The Polar Water Company.
Group Number: 192.
No. of Specimens: 25 fragments.
Color of Specimens: 25 colorless.
No. of Individual(s) Represented: 8 (minimum).
No. of Individual Shapes Represented: 8 round.
Base Diameter: (8) 8.0 cm.
Height: (8) 29.0 cm.
Associated Marks/Labels: Embossed across the body of one of the eight round bottles is "[PO]LAR [WATER] (in downturned arc)/COMPANY/(a maltese cross)/[REGISTE]RED (in upturned arc)/[PITTSBUR]GH (in upturned arc)". Embossed across the bodies of seven of the bottles is "POLAR/(a maltese cross)".
Product Name: 8 POLAR WATER.
Location of Product Manufacturer: 8 Pittsburgh, Pennsylvania.
Date of Product Manufacturer: 8, 1904-present.
Container Manufacturer Name: 8 unknown.
Location of Container Manufacturer: 8 unknown.
Date of Container Manufacturer: 8 unknown.
Description: The Polar Water Company bottle fragments include body fragments of at least 8 cylindrical bottles. The colorless bottles are represented among the whole bottles by specimen 8842-18. This complete example has a basal diameter of 8.0 cm, and a height of 29.0 cm. The fragmentary specimens represent at least 2 sizes. The bottles were manufactured by machine, exhibiting the characteristic seam lines which extend up and over a crown top finish. The bottle also exhibits a cut-off scar.
Comments: The Polar Water Company is first listed in the Pittsburgh City Directories in 1904 and continues to be listed at the time of this writing (Pittsburgh and Allegheny City Directory 1904:1291).

Group Name: POND'S COLD CREAM.

Color of Specimens: 14 aqua.
No. of Individual(s) Represented: 8 (minimum).
No. of Individual Shapes Represented: 8 rectangular.
Base Diameter: (8) 4.9 cm x 2.5 cm.
Height: (8) 15.2 cm.
Associated Marks/Labels: Embossed up the left sides of the rectangular bottles is "DR.S.PITCHER'S". Embossed up the right sides is "CASTORIA".
Product Name: 8 DR. S. PITCHER'S CASTORIA.
Location of Product Manufacturer: 8 unknown.
Date of Product Manufacturer: 8, ca. 1881.
Container Manufacturer Name: 8 unknown.
Location of Container Manufacturer: 8 unknown.
Date of Container Manufacturer: 8, 1870-1910.
Description: The PITCHER'S CASTORIA bottle fragments include base and body fragments of at least eight rectangular bottles. The colorless bottles have basal dimensions of 4.9 cm x 2.5 cm and a reconstructed height of 15.2 cm. A complete example exhibits four panelled sides and a hand-finished bead lip (Baldwin 1973:391).
Comments: An advertisement for PITCHER'S CASTORIA occurs in the December 3, 1881, issue of Harper's Weekly. It reads, "Old Dr. Pitcher's remedy for children" (Baldwin 1973:390). Another advertisement in an 1881 issue of The Evening Express, Los Angeles, reads "Pitcher's Castoria is not narcotic. Children grow fat upon, mothers like, and physicians recommend Castoria. It regulates the bowels, cures wind colic, allays feverishness, and destroys worms" (Wilson 1981:41).

Group Name: PLATTS CHLORIDES.
Group Number: 190.
No. of Specimens: 1 fragment.
Color of Specimens: 1 aqua.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 round.
Base Diameter: (1) 9.1 cm.
Height: 1 unknown.
Associated Marks/Labels: Embossed across the base of the round bottle is "Platts/Chlorides/HOUSEHOLD/DISINFECTANT/10".
Product Name: 1 PLATTS CHLORIDES.
Location of Product Manufacturer: 1 unknown.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1870-1910.
Description: The PLATTS CHLORIDES bottle fragments include a base/body fragment of a cylindrical bottle. The aqua bottle has a basal diameter of 9.1 cm. It exhibits seam lines extending up from the basal edge and was probably finished by hand with a finish which accommodated a cork stopper closure.
Comments: N/A.

Group Name: PLUTO-WATER.
Group Number: 191.
No. of Specimens: 3 fragments.

Location of Container Manufacturer: 3 unknown.
Date of Container Manufacturer: 3, 1903-1910.
Description: The E. D. Pinaud bottle fragments include base, body, shoulder, and finish fragments of three cylindrical bottles. The colorless bottles are represented in three sizes with basal diameters of 6.2 cm, an unknown diameter, and 4.5 cm. All of the bottles were manufactured by machine, exhibiting cut-off scars and seam lines up and over the square bead lips.
Comments: N/A.

Group Name: PINKHAMS VEGETABLE COMPOUND.
Group Number: 187.
No. of Specimens: 2 fragments.
Color of Specimens: 2 aqua.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 oval.
Base Diameter: (1) 9.3 cm x 4.7 cm.
Height: (1) 21.6 cm.
Associated Marks/Labels: Embossed down the front of the oval bottle is "[LYDIA E. PINK]HAMS/[VEGETABLE C]OMPOUND". Embossed across the base is "C/9".
Product Name: 1 LYDIA E. PINKHAMS VEGETABLE COMPOUND.
Location of Product Manufacturer: 1 Lynn, Massachusetts.
Date of Product Manufacturer: 1, 1873-ca. 1910.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1 unknown.
Description: The PINKHAMS VEGETABLE COMPOUND bottle fragments include base and body fragments of an oval bottle. The aqua bottle has basal dimensions of 9.3 cm x 4.7 cm and a reconstructed height of 21.6 cm. The bottle was probably finished by hand and exhibited a flared square bead lip (baldwin 1973:390).
Comments: Lydia Estes Pinkham was born in 1819. She spent the earlier part of her life as a school teacher, but married Isaac Pinkham in 1843. Pinkham was involved in movements such as temperance (ironic, since her vegetable compound was mostly alcohol), abolition, and women's suffrage. In 1873, because of a family financial crisis, the Pinkhams decided to market Lydia's remedy. Lydia Pinkham's Vegetable Compound became a success because of the salesmanship of her sons and daughters. Their advertising (forty million dollars worth, over the years), which featured photographs of Mrs. Pinkham, was further enhanced by a booklet written by Lydia before her death in 1883. The booklet, Guide for Women, talked about female problems in nonmedical language. Because of the extensive advertising, Lydia E. Pinkham became the most populat face of the 19th century. An example of this popularity took place when Queen Victoria died. The obituary included a picture of Pinkham because the newspaper did not have one of the queen (Munsey 1970:68,266). One advertisement which appears during the late nineteenth century, can be found in the September 20, 1884, issue of the Amboy News (Illinois) (Baldwin 1973:389-390).

Group Name: PITCHER'S CASTORIA.
Group Number: 188.
No. of Specimens: 14 fragments.

Location of Container Manufacturer: 3 unknown.
Date of Container Manufacturer: 3 unknown.
Description: The unidentified perfume bottle fragments include colorless fragments which can be identified as perfume bottles with some degree of certainty, based on their morphological attributes.
Comments: N/A.

Group Name: The Pierce Glass Company.
Group Number: 185.
No. of Specimens: 2 fragments.
Color of Specimens: 1 colorless; 1 pale green.
No. of Individual(s) Represented: 2.
No. of Individual Shapes Represented: 1 oval; 1 rectangular.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the bases of the oval and rectangular bottles is a "P" within a circle. Embossed along with the trademark on the oval bottle is "MADE IN (in downturned arc)/3/U.S.A. (in upturned arc)".
Product Name: 2 unknown.
Location of Product Manufacturer: 2 unknown.
Date of Product Manufacturer: 2 unknown.
Container Manufacturer Name: 2 The Pierce Glass Company.
Location of Container Manufacturer: 2 St. Mary's, Pennsylvania, or Hamburg, New York.
Date of Container Manufacturer: 2, 1905-1917.
Description: The container fragments which were manufactured by and exhibit the trademark of The Pierce Glass Company include those of one oval and one rectangular bottle. The colorless oval bottle and pale green rectangular bottle were manufactured by machine, exhibiting the characteristic full seam lines and/or cut-off scars.
Comments: The Pierce Glass Company was founded in 1905 by Dr. V. Mott Pierce and Charles G. Herger. Prior to this, the company operated out of Brockway, Pennsylvania, as The Pierce Medical Company. In 1912 the St. Mary's plant was destroyed by fire and the company moved to Hamburg, New York. Since 1917, The Pierce Glass Company has operated out of Port Allegheny, Pennsylvania (Toulouse 1971:412-413).

Group Name: E. D. Pinaud.
Group Number: 186.
No. of Specimens: 14 fragments.
Color of Specimens: 14 colorless.
No. of Individual(s) Represented: 3 (minimum).
No. of Individual Shapes Represented: 3 round.
Base Diameter: (1) 6.2 cm; (1) 4.5 cm; 1 unknown.
Height: 3 unknown.
Associated Marks/Labels: Embossed across the bodies of the round bottles is "(a basket of flowers)/E.D.PINAUD (in downturned arc)/(a circle)/PARIS (in upturned arc)/REGISTERED". Embossed across at least one base is "...Z & CO. BOTTLE PRO..." in a circular pattern.
Product Name: 3 E. D. Pinaud perfume.
Location of Product Manufacturer: 3 Paris, France.
Date of Product Manufacturer: 3 unknown.
Container Manufacturer Name: 3 unknown.

No. of Individual Shapes Represented: 5 six-sided.
Base Diameter: (5) 6.2 cm.
Height: (5) 17.1 cm.
Associated Marks/Labels: Embossed down one side of the six-sided bottle is "PEPTO-MANGAN(GUDE)/CONTENTS 11 FLUID OUNCES".
Product Name: 5 PEPTO MANGAN (GUDE).
Location of Product Manufacturer: 5 unknown.
Date of Product Manufacturer: 5 unknown.
Container Manufacturer Name: 5 unknown.
Location of Container Manufacturer: 5 unknown.
Date of Container Manufacturer: 5, 1903-1920.
Description: The PEPTO MANGAN (GUDE) bottle fragments include body fragments of at least five six-sided bottles. The aqua bottles have reconstructed basal diameters of 6.2 cm and reconstructed heights of 17.1 cm. The bottles were manufactured by machine, exhibiting cut-off scars and seam lines extending up from the basal edge. A complete example would also exhibit a square bead finish (Baldwin 1973:382).
Comments: PEPTO MANGAN (GUDE) was manufactured by Dr. A. Gude and Company (Baldwin 1973:382).

Group Name: PEPTONOIDS.
Group Number: 182.
No. of Specimens: 5 fragments.
Color of Specimens: 5 amber.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 square.
Base Diameter: 1 unknown.
Height: 1 unknown.
Associated Marks/Labels: Embossed down the front of the square bottle is "PEPTONOIDS/ARLINGTON CHEMICAL CO./YONKERS, N.Y.".
Product Name: 1 PEPTONOIDS.
Location of Product Manufacturer: 1 Yonkers, New York.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1903-1920.
Description: The PEPTONOIDS bottle fragments include body fragments of a square bottle. The amber specimens are too fragmentary to determine bottle dimensions. The bottle was, however, manufactured by machine.
Comments: N/A.

Group Name: Unidentified Perfume Bottle.
Group Number: 249.
No. of Specimens: 3 fragments.
Color of Specimens: 3 colorless.
No. of Individual(s) Represented: 3.
No. of Individual Shapes Represented: 3 oval or rectangular.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: N/A.
Product Name: 3 unknown.
Location of Product Manufacturer: 3 unknown.
Date of Product Manufacturer: 3 unknown.
Container Manufacturer Name: 3 unknown.

Container Manufacturer Name: 2 The Pennsylvania Glass Products Company.
Location of Container Manufacturer: 2 Pittsburgh, Pennsylvania.
Date of Container Manufacturer: 2, 1928-present.
Description: The container fragments which were manufactured by and exhibit the trademark of The Pennsylvania Glass Products Company include base/body fragments of 2 square bottles with beveled corners. The colorless and cobalt bottles have basal dimensions of 2.6 cm x 2.6 cm and reconstructed heights of 6.7 cm. The specimens were manufactured by machine exhibiting bottom plate marks and cut-off scars. The Pennsylvania Glass Products trademark is represented among the whole bottles by specimen 8932-8. This complete example exhibits seam lines which extend up, around the neck, and over a bead lip.
Comments: The Pennsylvania Glass Products Company, which is still in operation at the time of this writing, was first listed in the Pittsburgh Directories in 1928 (Polks Pittsburgh Directory 1928:1548). The company manufactures drug and pharmaceutical bottles, dropper bottles, droppers, applicators, vials, etc. (American Glass Review 1981:114,185).

Group Name: PEPSI-COLA.
Group Number: 180.
No. of Specimens: 4 fragments.
Color of Specimens: 4 colorless.
No. of Individual(s) Represented: 2.
No. of Individual Shapes Represented: 2 round.
Base Diameter: (2) 6.4 cm.
Height: 2 unknown.
Associated Marks/Labels: The shoulder and neck of the round bottles are embossed with a crosshatched pattern. Applied in red and white lettering to the shoulder of the bottles are "spirals" containing "PEPSI COLA". Applied in white lettering across the lower body is "...AUTHORITY OF/...COMPANY/...ORK N.Y.".
Product Name: 2 PEPSI-COLA.
Location of Product Manufacturer: 2 New York, New York.
Date of Product Manufacturer: 2, 1896-present.
Container Manufacturer Name: 2 unknown.
Location of Container Manufacturer: 2 unknown.
Date of Container Manufacturer: 2, 1950-present.
Description: The PEPSI-COLA bottle fragments include body, shoulder, and neck fragments of two cylindrical bottles. The colorless bottles have reconstructed basal diameters of 6.4 cm. They were manufactured by machine, exhibiting seam lines which extend up and over the crown top finishes.
Comments: PEPSI-COLA continues to be manufactured at the time of this writing. It was first bottled in 1896 as "Brad's Drink" out of New Bern, North Carolina. It adopted the name "Pepsi Cola" in 1901 (Paul and Parmalee 1973:119).

Group Name: PEPTO MANGAN (GUDE).
Group Number: 181.
No. of Specimens: 19 fragments.
Color of Specimens: 19 aqua.
No. of Individual(s) Represented: 5 (minimum).

Color of Specimens: 589 not recorded.
No. of Individual(s) Represented: 585.
No. of Individual Shapes Represented: 585 not recorded.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Not individually recorded.
Product Name: 585 unknown.
Location of Product Manufacturer: 585 unknown.
Date of Product Manufacturer: 585 unknown.
Container Manufacturer Name: 585 unknown.
Location of Container Manufacturer: 585 unknown.
Date of Container Manufacturer: 585 unknown.
Description: The specimens in this group consist of those fragments embossed with no other information than patent numbers, mold numbers, graduated scales, volume, etc.
Comments: N/A.

Group Name: PEE CHEE.
Group Number: 179.
No. of Specimens: 1 fragment.
Color of Specimens: 1 pale green.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 round.
Base Diameter: (1) 5.2 cm.
Height: 1 unknown.
Associated Marks/Labels: Embossed across the base is "PEE CHEE (in downturned arc)/7/CLEVELAND L. (in upturned arc)".
Product Name: 1 PEE CHEE.
Location of Product Manufacturer: 1 Cleveland, Ohio.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1903-1920.
Description: The PEE CHEE bottle fragment includes a base/body fragment of a cylindrical bottle. The pale green bottle was manufactured by machine, exhibiting a cut-off scar and seam lines extending up from the basal edge.
Comments: N/A.

Group Name: The Pennsylvania Glass Products Company.
Group Number: 183.
No. of Specimens: 2 fragments.
Color of Specimens: 1 colorless; 1 cobalt blue.
No. of Individual(s) Represented: 2.
No. of Individual Shapes Represented: 2 square.
Base Diameter: (2) 2.6 cm x 2.6 cm.
Height: (2) 6.7 cm.
Associated Marks/Labels: Embossed across the bases of the square bottles is The Pennsylvania Glass Products trademark of a "P" within a pennant. Below the pennant on the colorless bottle is "2". Below the pennant on the cobalt blue bottle is "4".
Product Name: 2 unknown.
Location of Product Manufacturer: 2 unknown.
Date of Product Manufacturer: 2 unknown.

Color of Specimens: 2 amber.
No. of Individual(s) Represented: 2.
No. of Individual Shapes Represented: 2 round.
Base Diameter: 2 unknown.
Height: 2 unknown.
Associated Marks/Labels: Embossed across the bases of the round bottles is "P.D. & CO.".
Product Name: 2 unknown.
Location of Product Manufacturer: 2 unknown.
Date of Product Manufacturer: 2 unknown.
Container Manufacturer Name: 2 Parke, Davis, and Company.
Location of Container Manufacturer: 2 Detroit, Michigan.
Date of Container Manufacturer: 2, 1875-present.
Description: The Parke, Davis, and Company bottle fragments include base and body fragments of two cylindrical bottles. The amber specimens in this group are too fragmentary to determine bottle dimensions.
Comments: "P.D. & CO." is the trademark used by Parke, Davis, and Company since 1875 (Toulouse 1971:417). The forerunner to Parke, Davis, and Company was a drugstore owned by Dr. Samuel Duffield of Detroit. Duffield began his business in 1862 as a drug manufacturer. In 1866, he was joined by Harvey C. Parke and, in 1867, by George S. Davis. A factory was built in 1874 and, in the following year, the name "Parke, Davis, and Company" came into use. A sales branch of the company was established in New York City in 1881 and since then the company has expanded throughout the world (Toulouse 1971:417-418).

Group Name: ...J. Parker Pray.
Group Number: 177.
No. of Specimens: 1 fragment.
Color of Specimens: 1 colorless.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 square.
Base Diameter: (1) 4.2 cm x 4.2 cm.
Height: 1 unknown.
Associated Marks/Labels: Embossed down a side of the square bottle is "[PRE]PARED ONLY BY/...J. PARKER PRAY/[AME]RICAS FIRST MANICURE/...NEW YORK U.S.A.".
Product Name: 1 ...J. Parker Pray cosmetic.
Location of Product Manufacturer: 1 New York.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1903-1920.
Description: The Parker Pray bottle fragments include a body/base fragment of a square bottle with rounded corners. The colorless bottle has basal dimensions of 4.2 cm x 4.2 cm. It was manufactured by machine, exhibiting a cut-off scar and seam lines extending up from the basal edge.
Comments: N/A.

Group Name: Patent Numbers, Mold Numbers, Graduations, Etc.
Group Number: 248.
No. of Specimens: 589 fragments.

Product Name: 4 ROYAL LUNCHEON CHEESE.
Location of Product Manufacturer: 4 unknown.
Date of Product Manufacturer: 4 unknown.
Container Manufacturer Name: 4 unknown.
Location of Container Manufacturer: 4 unknown.
Date of Container Manufacturer: 4, 1900-1930.
Description: The ROYAL LUNCHEON CHEESE jar fragments include base and body fragments of at least four round jars whose diameters increase from the base to the lip. The white milk glass jars have basal diameters of 6.4 cm. They were probably pressed by machine in manufacture.
Comments: N/A.

Group Name: The Abner Royce Co.
Group Number: 201.
No. of Specimens: 16 fragments.
Color of Specimens: 16 aqua.
No. of Individual(s) Represented: 5.
No. of Individual Shapes Represented: 5 rectangular.
Base Diameter: (2) 6.2 cm x 3.9 cm; (2) 5.3 cm x 3.05 cm; (1) 4.3 cm x 2.5 cm.
Height: (1) 11.0 cm; 4 unknown.
Associated Marks/Labels: Embossed down the fronts of the rectangular bottles is "THE ABNER ROYCE CO/PURE FRUIT FLAVORS/CLEVELAND O.".
Product Name: 5 THE ABNER ROYCE CO. PURE FRUIT FLAVORS.
Location of Product Manufacturer: 5 Cleveland, Ohio.
Date of Product Manufacturer: 5 unknown.
Container Manufacturer Name: 5 unknown.
Location of Container Manufacturer: 5 unknown.
Date of Container Manufacturer: 5, 1903-1920.
Description: The Abner Royce Company bottle fragments include base and body fragments of at least five rectangular bottles with beveled corners. The aqua bottles are represented in three sizes with basal dimensions of 6.2 cm x 3.9 cm, 5.3 cm x 3.05 cm, and 4.3 cm x 2.5 cm. The smallest of these bottles has a reconstructed height of 11.0 cm. The specimens were manufactured by machine, exhibiting either cut-off scars or valve marks. Abner Royce Company bottles are represented among the whole examples by specimen 8760-1. This complete example, like the fragmentary specimens, was manufactured by machine.
Comments: N/A.

Group Name: RUBIFOAM.
Group Number: 202.
No. of Specimens: 1 fragment.
Color of Specimens: 1 colorless.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 rectangular.
Base Diameter: 1 unknown.
Height: 1 unknown.
Associated Marks/Labels: Embossed down the front of the rectangular bottle is "Rubifoam (in downturned arc)/[F]OR THE/[TE]ETH".
Product Name: 1 RUBIFOAM FOR THE TEETH.
Location of Product Manufacturer: 1 Lowell, Massachusetts.
Date of Product Manufacturer: 1 unknown.

Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1880-1910.
Description: The RUBIFOAM bottle fragments include a body fragment of a rectangular bottle. The colorless specimen of this group is too fragmentary to determine bottle dimensions. However, the bottle was probably finished by hand with a lip which accommodated a cork stopper closure.
Comments: N/A.

Group Name: S.A.C.I.V. S.p.A. Commerciale Industriale Vetrerie.
Group Number: 169.
No. of Specimens: 2 fragments.
Color of Specimens: 2 dark green.
No. of Individual(s) Represented: 2.
No. of Individual Shapes Represented: 2 round.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the lower bodies of the round bottles is the S.A.C.I.V. trademark of 3 interlocked circles. Also embossed across the sides is "PER 1/MARTINI COCKTAIL/ESCLUSIVAMENTE/MARTINI VERMOUTH/FOR/MARTINI COCKTAIL/USE ONLY/MARTINI VERMOUTH" (group 142).
Product Name: 2 MARTINI VERMOUTH.
Location of Product Manufacturer: 2 unknown.
Date of Product Manufacturer: 2 unknown.
Container Manufacturer Name: 2 S.A.C.I.V. S.p.A. Commerciale Industriale Vetrerie.
Location of Container Manufacturer: 2 Ast., Italy.
Date of Container Manufacturer: 2, ?-present.
Description: The container fragments which were manufactured by and exhibit the trademark of S.A.C.I.V. S.p.A. Commerciale Industriale Vetrerie include those of 2 cylindrical bottles. The dark green bottles were manufactured by machine, exhibiting the characteristic full seam lines and cut-off scars. The bottles were manufactured for MARTINI VERMOUTH (group 142).
Comments: N/A.

Group Name: The Saegertown Bottling Works.
Group Number: 203.
No. of Specimens: 3 fragments.
Color of Specimens: 3 aqua.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 round.
Base Diameter: (1) 8.2 cm.
Height: (1) 29.5 cm.
Associated Marks/Labels: Embossed across the upper body of the round bottle is "SAEGERTOWN (in downturned arc)".
Product Name: 1 SAEGERTOWN beverage.
Location of Product Manufacturer: 1 Saegertown, Pennsylvania.
Date of Product Manufacturer: 1, 1930-1950.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1 unknown.

Description: The Saegertown beverage bottle fragments include body/shoulder fragments of a cylindrical bottle. The aqua bottle has a reconstructed basal diameter of 8.2 cm and a reconstructed height of 29.5 cm. Saegertown Bottling Works bottles are represented among the whole examples by specimen 8767-2. This complete example was manufactured by machine, exhibiting seam lines which extend up from the basal edge line, around the neck, and over the crown top finish. The bottle is embossed slightly different than the fragmentary specimens.
Comments: The Saegertown Bottling Works was known to have bottled spring water and sodas.

Group Name: DR. SAGES CATARRH REMEDY.
Group Number: 204.
No. of Specimens: 1 fragment.
Color of Specimens: 1 aqua.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 rectangular.
Base Diameter: (1) 3.5 cm x 2.1 cm.
Height: (1) 5.7 cm.
Associated Marks/Labels: Embossed down the front of the rectangular bottle is "[CA]TARRH/[RE]MEDY". Although there are no side fragments in the group assemblage, the right side would be embossed with "DR SAGE'S". Embossed down the left side would be "BUFFALO".
Product Name: 1 DR. SAGES CATARRH REMEDY.
Location of Product Manufacturer: 1 Buffalo, New York.
Date of Product Manufacturer: 1, ca. 1869-ca. 1894.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1 unknown.
Description: The DR. SAGES CATARRH REMEDY bottle fragments include a body fragment of a rectangular bottle with beveled corners and a panelled front. The aqua bottle has reconstructed basal dimensions of 3.5 cm x 2.1 cm and a reconstructed height of 5.7 cm. A complete example would exhibit a square bead finish (Baldwin 1973:427).
Comments: DR. SAGES CATARRH REMEDY was manufactured by Dr. R. V. Pierce of Buffalo, New York, according to the June 2, 1869, issue of the Angelica Reporter (New York)(Baldwin 1973:427). Advertisements for the remedy also occur from 1874 to 1894, including one in an 1875 Harpers Weekly which reads:

> "...DR. SAGES CATARRH REMEDY, when used warm and applied with DR. PIERCE'S NASAL DOUCHE, effects cures upon common sense, rational, and scientific principles, by its mild, soothing, and healing properties, to which the disease gradually yields, when the system has been put in perfect order by the use of GOLDEN MEDICAL DISCOVERY....DISCOVERY, CATARRH REMEDY, and DOUCHE are sold by dealers in medicines, the world over" (Wilson 1981:42,139).

Group Name: SANFORD Ink.
Group Number: 205.
No. of Specimens: 2 fragments.
Color of Specimens: 1 colorless, 1 aqua.
No. of Individual(s) Represented: 2.

No. of Individual Shapes Represented: 2 round.
Base Diameter: 2 unknown.
Height: 2 unknown.
Associated Marks/Labels: Embossed across the bases of the round containers is "SANFORD (in downturned arc)". Below this on the colorless base is "8" and "28" on the aqua base.
Product Name: 2 SANFORD ink.
Location of Product Manufacturer: 2 Chicago, Illinois.
Date of Product Manufacturer: 2 ca. 1850-?.
Container Manufacturer Name: 2 unknown.
Location of Container Manufacturer: 2 unknown.
Date of Container Manufacturer: 2, 1870-1910.
Description: The SANFORD bottle fragments include base fragments of two conical ink wells. The aqua and colorless specimens of this group are too fragmentary to determine bottle dimesions. They were probably finished by hand with a lip which accommodated a cork stopper closure.
Comments: SANFORD ink containers have been excavated from western sites including gold mining towns dating from 1850 to 1890 (Toulouse 1970:65) and Fort Laramie, Wyoming, where a SANFORD ink well dates from 1875-1890 (Wilson 1981:101). Adams (1976) lists Chicago, Illinois, as the location of SANFORD ink manufacturers.

Group Name: SANITOL.
Group Number: 207.
No. of Specimens: 25 fragments.
Color of Specimens: 25 white milk glass.
No. of Individual(s) Represented: 7 (minimum).
No. of Individual Shapes Represented: 7 rectangular.
Base Diameter: (7) 5.8 cm x 3.0 cm.
Height: (7) 13.0 cm.
Associated Marks/Labels: Embossed down the right sides of the rectangular bottles is "SANITOL". Embossed down the left sides is "FOR/THE TEETH".
Product Name: 7 SANITOL FOR THE TEETH.
Location of Product Manufacturer: 7 unknown.
Date of Product Manufacturer: 7 unknown.
Container Manufacturer Name: 7 unknown.
Location of Container Manufacturer: 7 unknown.
Date of Container Manufacturer: 7, 1870-1910.
Description: The SANITOL bottle fragments include base and body fragments of at least seven rectangular bottles with beveled corners. The white milk glass bottles have reconstructed basal dimensions of 5.8 cm x 3.0 cm and reconstructed heights of 13.0 cm. SANITOL bottles are represented among the whole examples by specimen 8969-3. This complete example exhibits seam lines which extend up from the basal edge line to the neck where they were tooled off during the hand-finishing process. The bottle is finished with a bead lip.
Comments: N/A.

Group Name: SAUER'S EXTRACTS.
Group Number: 206.
No. of Specimens: 3 fragments.
Color of Specimens: 3 colorless.
No. of Individual(s) Represented: 2.

No. of Individual Shapes Represented: 2 rectangular.
Base Diameter: (2) 4.1 cm x 2.8 cm.
Height: 2 unknown.
Associated Marks/Labels: Embossed down the left and right sides of the rectangular bottle is "SAUER'S EXTRACTS".
Product Name: 2 SAUER'S EXTRACTS.
Location of Product Manufacturer: 2 unknown.
Date of Product Manufacturer: 2 unknown.
Container Manufacturer Name: 2 unknown.
Location of Container Manufacturer: 2 unknown.
Date of Container Manufacturer: 2, 1903-1920.
Description: The SAUER'S EXTRACTS bottle fragments include base and body fragments of at least two rectangular bottles with beveled corners. The colorless bottles have basal dimensions of 4.1 cm x 2.8 cm. They were manufactured by machine, exhibiting cut-off scars and seam lines which extend up from the basal edge.
Comments: N/A.

Group Name: SAXLEHNER'S HUNYADI JANOS.
Group Number: 208.
No. of Specimens: 7 fragments.
Color of Specimens: 7 olive green.
No. of Individual(s) Represented: 3 (minimum).
No. of Individual Shapes Represented: 3 round.
Base Diameter: (3) 7.7 cm.
Height: 3 unknown.
Associated Marks/Labels: Embossed across the bases of the round bottles is "SACLEHNERS (in downturned arc)/HUNYADI JANOS/BITTERQUELLE (in upturned arc)".
Product Name: 3 SAXLEHNER'S HUNYADI JANOS BITTERQUELLE.
Location of Product Manufacturer: 3 Buda-Pesth, Austria-Hungary.
Date of Product Manufacturer: 3, 1863-1900.
Container Manufacturer Name: 3 Saxlehners.
Location of Container Manufacturer: 3 Buda-Pesth, Austria-Hungary.
Date of Container Manufacturer: 3, 1863-1900.
Description: The SAXLEHNER'S HUNYADI JANOS bottle fragments include base/body fragments of at least three cylindrical bottles. The olive green bottles are whittle marked and exhibit embossing in a Rickett's Ring style. Seam lines extend up the side from the basal edge.
Comments: The name "Hunyadi Janos" was patented in 1863 for this product which was a "Natural Aperient Water", or water with gentle laxative properties. "Bitterquelle" is defined as spring water containing magnesium sulfate, which gives it a bitter taste. The name Hunyadi Janos is derived from John Hunyadi (1385-1456), a national hero of Hungary. Hunyadi held back the Turkish conquest of Hungary (Toulouse 1971:257-258).

Group Name: Wm. Schmider.
Group Number: 209.
No. of Specimens: 5 fragments.
Color of Specimens: 5 colorless.
No. of Individual(s) Represented: 2.
No. of Individual Shapes Represented: 2 round.
Base Diameter: 2 unknown.

Height: 2 unknown.
Associated Marks/Labels: Embossed across the bodies of the round bottles is an oval containing "W^m SCHMIDER (in downturned arc)/CARNEGIE PA. (in upturned arc)". On the opposite side is "[REGISTERED] (in downturned arc)/[CONTENTS 7FL.OZS.]". Embossed across the bases is "W.S.".
Product Name: 2 W^m Schmider beverage.
Location of Product Manufacturer: 2 Carnegie, Pennsylvania.
Date of Product Manufacturer: 2, ca. 1930.
Container Manufacturer Name: 2 unknown.
Location of Container Manufacturer: 2 unknown.
Date of Container Manufacturer: 2, 1903-1930.
Description: The Wm. Schmider bottle fragments include base and body fragments of at least 2 cylindrical bottles. The colorless bottles were manufactured by machine, exhibiting bottom plates and full seam lines. Wm. Schmider bottles are represented among the whole examples by specimen 8853-1. This complete example exhibits a crown top finish.
Comments: William Schmider is listed in the 1930 volume of the Carnegie Directories (Polk's Carnegie Directory 1930:159), but is not listed in the 1912-12 or 1924 volumes.

Group Name: SCOTT'S EMULSION.
Group Number: 210.
No. of Specimens: 6 fragments.
Color of Specimens: 6 pale blue.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 oval.
Base Diameter: 1 unknown.
Height: 1 unknown.
Associated Marks/Labels: Embossed across the body of the oval bottle is "SCOTT'S EMULSION/(a man carrying a fish)/COD LIVER OIL/WITH/LIME & SODA".
Product Name: 1 SCOTT'S EMULSION.
Location of Product Manufacturer: 1 New York.
Date of Product Manufacturer: 1, ca. 1885-?.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1 unknown.
Description: The SCOTT'S EMULSION bottle fragments include body fragments of an oval bottle. The pale blue specimens of this group are too fragmentary to determine bottle dimensions.
Comments: SCOTT'S EMULSION was manufactured by Scott and Bowne, proprietors, New York. An advertisement for their product appears in the May 2, 1885, issue of Harper's Weekly and reads "For consumption, coughs, etc. It is almost as palatable as milk" (Baldwin 1973:437). An "emulsion" is defined as "a preparation containing an oleaginous or resinous substance in suspension in a watery fluid, the suspension being aided by gum or yolk of egg" (Baldwin 1973:23).

Group Name: The Seville Packing Company.
Group Number: 211.
No. of Specimens: 11 fragments.
Color of Specimens: 10 colorless; 1 emerald green.
No. of Individual(s) Represented: 4 (minimum).

No. of Individual Shapes Represented: 4 round.
Base Diameter: (4) 5.2 cm.
Height: 4 unknown.
Associated Marks/Labels: Embossed across the shoulders of the round bottles is the Seville Packing Company trademark. Embossed across the base is "SEVILLE PACKING CO. (in downturned arc)/(the Seville trademark)/NEW YORK (in upturned arc)".
Product Name: 4 unknown.
Location of Product Manufacturer: 4 New York.
Date of Product Manufacturer: 4 unknown.
Container Manufacturer Name: 4 unknown.
Location of Container Manufacturer: 4 unknown.
Date of Container Manufacturer: 4, 1880-1910.
Description: The Seville Packing Company bottle fragments include base and body fragments of at least four round bottles whose diameters increase from the base to the shoulder. The colorless and emerald green bottles have basal diameters of 5.2 cm. They exhibit seam lines which extend up from the basal edge. A complete example would exhibit a wide aperture with a square bead (packer) lip.
Comments: N/A.

Group Name: Sharp & Dohme.
Group Number: 212.
No. of Specimens: 1 fragment.
Color of Specimens: 1 amber.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 six-sided.
Base Diameter: (1) 2.5 cm.
Height: (1) 6.0 cm.
Associated Marks/Labels: Embossed down one side of the six-sided bottle is "SHARP & DOHME/BALTIMORE". Embossed across the center of the base is "29".
Product Name: 1 unknown.
Location of Product Manufacturer: 1 Baltimore, Maryland.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1903-1920.
Description: The Sharp & Dohme bottle fragments include a base/body fragment of a six-sided bottle with a round base. The amber bottle has a reconstructed basal diameter of 2.5 cm and a reconstructed height of 6.0 cm. Sharp & Dohme bottles are represented among the whole examples by specimen 8810-2. This complete example was manufactured by machine, exhibiting seam lines which extend over a square bead lip.
Comments: N/A.

Group Name: DR. JGB SIEGERT & SONS ANGOSTURA BITTERS.
Group Number: 105.
No. of Specimens: 2 fragments.
Color of Specimens: 2 green.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 round.
Base Diameter: (1) 4.7 cm.
Height: (1) 15.5 cm.

Associated Marks/Labels: Embossed around the shoulder of the round bottle is "DR [JGB SIEGERT & SO]NS". Although there are no basal fragments in this group, the base would be embossed with "ANGOSTURA/BITTERS".
Product Name: 1 DR. JGB SIEGERT & SONS ANGOSTURA BITTERS.
Location of Product Manufacturer: 1 unknown.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1903-1930.
Description: The DR. JGB SIEGERT AND SONS bottle fragments include body/shoulder fragments of a cylindrical bottle. The dark green bottle has a reconstructed height of 15.5 cm and a reconstructed basal diameter of 4.7 cm. DR. JGB SIEGERT AND SONS bottles are represented among the examples by specimen 8853-6. This complete bottle exhibits a crown top finish and seam lines around the neck and over the lip suggesting it was manufactured by machine.
Comments: N/A.

Group Name: SLOAN'S LINIMENT.
Group Number: 213.
No. of Specimens: 1 fragment.
Color of Specimens: 1 pale green.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 rectangular.
Base Diameter: 1 unknown.
Height: 1 unknown.
Associated Marks/Labels: Embossed down the front of the rectangular bottle is "SLOAN'S/LINIMENT".
Product Name: 1 SLOAN'S LINIMENT.
Location of Product Manufacturer: 1 Boston, Massachusetts.
Date of Product Manufacturer: 1, ?-present.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1880-1910.
Description: The SLOAN'S LINIMENT bottle fragments include a body fragment of a rectangular bottle. The pale green specimen of this group is too fragmentary to determine bottle dimensions. The bottle was probably finished by hand with a lip which accommodated a cork stopper style closure.
Comments: SLOAN'S LINIMENT (for Man or Beast) was one of several medicinal products manufactured by Dr. Earl S. Sloan of Boston (Baldwin 1973:452). The liniment is still being produced at the time of this writing. It is produced by The Warner Lambert Company of New Jersey.

Group Name: The Southern Glass Company.
Group Number: 214.
No. of Specimens: 12 fragments.
Color of Specimens: 12 black glass.
No. of Individual(s) Represented: 6.
No. of Individual Shapes Represented: 6 round.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the bases of the round

bottles is The Southern Glass Company trademark of an "S" within a star. Also embossed across the bases is "MISSION/DRY/SPARKLING/PAT PDG." (group 154).
Product Name: 6 MISSION DRY SPARKLING.
Location of Product Manufacturer: 6 unknown.
Date of Product Manufacturer: 6 unknown.
Container Manufacturer Name: 6 The Southern Glass Company.
Location of Container Manufacturer: 6 Vernon, California.
Date of Container Manufacturer: 6, 1917-1931.
Description: The container fragments which were manufactured by and exhibit the trademark of The Southern Glass Company include those of at least six cylindrical bottles. The opaque black glass bottles were all manufactured for MISSION DRY SPARKLING water (group 154).
Comments: The Southern Glass Company was established in 1917 by W. J. Latchford, W. H. Dean, and F. G. Bennison. In 1925, Latchford separated from the company when a dispute arose over his possible connection with The Monarch Glass Company. In 1931, The Illinois Pacific Coast Glass Company bought Southern and closed it the same year (Toulouse 1971:457,458).

Group Name: Squibb.
Group Number: 215.
No. of Specimens: 3 fragments.
Color of Specimens: 2 emerald green; 1 cobalt blue.
No. of Individual(s) Represented: 2.
No. of Individual Shapes Represented: 2 rectangular.
Base Diameter: (1) 6.2 cm x 3.6 cm; (1) 6.3 cm x 4.3 cm.
Height: (1) 11.8 cm; 1 unknown.
Associated Marks/Labels: Embossed across the body of the emerald green rectangular bottle is "SQUIBB". Embossed across the base is "[B]OTTLE MADE/(the Anchor-Hocking trademark)/[IN U.S.]A." (group 005). Embossed across the base of the cobalt blue bottle is "SQUIBB/5".
Product Name: 1 Squibb cod liver oil; 1 SQUIBB ?.
Location of Product Manufacturer: 2 Brooklyn, New York; Brunswick, New Jersey; or Princeton, New Jersey.
Date of Product Manufacturer: 2, 1858-present.
Container Manufacturer Name: 1 The Anchor-Hocking Glass Corporation; 1 unknown.
Location of Container Manufacturer: 1 Lancaster, Ohio; 1 unknown.
Date of Container Manufacturer: 1, 1938-present; 1 unknown.
Description: The Squibb bottle fragments include base, body and neck/finish fragments of 2 rectangular bottles, 1 with beveled corners. The beveled emerald green bottle has basal dimensions of 6.2 cm x 3.6 cm and a reconstructed height of 11.8 cm. The cobalt blue specimen has basal dimensions of 6.3 cm x 4.3 cm. The green specimen was manufactured by machine, exhibiting seam lines which extend up and over the continuous thread finish. The bottle is represented among the whole examples by specimen 8651-30 which was also manufactured by machine exhibiting a cut-off scar, along with full seam lines. The cobalt blue specimen was also manufactured by machine, exhibiting a cut-off scar.
Comments: After a career as a teacher, naval doctor, physician, and surgeon, Edward Robinson Squibb established his own laboratories in Brooklyn, New York, in 1858. It was here in the same year that Squibb

was almost killed by a disastrous fire. In 1895, Squibb's sons took over the business and, in 1900, their father died. In 1905, the company was purchased by L. M. Palmer and T. Wicker who began to expand the business. In 1938, The Squibb Institute for Medical Research was opened and, since a merger with the Olen Mathieson Chemical Corporation in 1952, Squibb has operated as a division of Monsanto Chemical Company under its own name (Toulouse 1971:479-480).

Group Name: B. F. STINSON & CO. EASY BRIGHT.
Group Number: 216.
No. of Specimens: 14 fragments.
Color of Specimens: 13 colorless; 1 aqua.
No. of Individual(s) Represented: 7 (minimum).
No. of Individual Shapes Represented: 7 monarch oval.
Base Diameter: (2) 6.9 cm x 3.9 cm; (5) 5.3 cm x 3.6 cm.
Height: 7 unknown.
Associated Marks/Labels: Embossed down the fronts of three of the monarch oval bottles is "EASY BRIGHT POLISHES/B.F.STINSON & CO./BUFFALO, N.Y. U.S.A.". Embossed across at least one base is a triangle containing a "T" (group 221). Two of the colorless and aqua bottles are embossed down the front with "B.F.STINSON & CO./BUFFALO, N.Y./U.S.A.". One bottle is embossed down the front with "[E]ASY BRIGH[T]/IMPROVED/[S]HOE DRESSIN[G]".
Product Name: 7 B.F. STINSON & CO. EASY BRIGHT shoe polish.
Location of Product Manufacturer: 7 Buffalo, New York.
Date of Product Manufacturer: 7 unknown.
Container Manufacturer Name: 1 The Turner Brothers Glass Company; 6 unknown.
Location of Container Manufacturer: 1 Terre Haute, Indiana; 6 unknown.
Date of Container Manufacturer: 1, 1915-1929; 6, 1903-1920.
Description: The B. F. STINSON bottle fragments include base and body fragments of at least seven monarch oval (Putnam 1965:26) bottles. The aqua and colorless bottles are represented by two sizes with basal dimensions of 6.9 cm x 3.9 cm and 5.3 cm x 3.6 cm. The specimens exhibit panelled fronts, bottom plates, cut-off scars, and seam lines extending up the sides from the basal edge. These morphological attributes would suggest that the bottles were manufactured by machine.
Comments: N/A.

Group Name: STRONTIUM PARAF-LAVAL.
Group Number: 217.
No. of Specimens: 10 fragments.
Color of Specimens: 10 aqua.
No. of Individual(s) Represented: 2 (minimum).
No. of Individual Shapes Represented: 2 oval.
Base Diameter: 2 unknown.
Height: 2 unknown.
Associated Marks/Labels: Embossed down the fronts of the oval bottles is "Strontium/Paraf-Laval".
Product Name: 2 STRONTIUM PARAF-LAVAL.
Location of Product Manufacturer: 2 unknown.
Date of Product Manufacturer: 2 unknown.
Container Manufacturer Name: 2 unknown.
Location of Container Manufacturer: 2 unknown.

Date of Container Manufacturer: 2, 1903-1920.
Description: The STRONTIUM PARAF-LAVAL bottle fragments include body fragments of at least two oval bottles. The aqua specimens are too fragmentary to determine bottle dimensions. The bottles were manufactured by machine, exhibiting a cut-off scar.
Comments: N/A.

Group Name: TALCOLETTE.
Group Number: 218.
No. of Specimens: 4 fragments.
Color of Specimens: 4 colorless.
No. of Individual(s) Represented: 3.
No. of Individual Shapes Represented: 3 eight-sided.
Base Diameter: (3) 6.1 cm.
Height: 3 unknown.
Associated Marks/Labels: Embossed across the base of the eight-sided container is "H.B.G.CO. (in downturned arc)/TALCOLETTE/BALTIMORE (in upturned arc)".
Product Name: 3 TALCOLETTE.
Location of Product Manufacturer: 3 Baltimore, Maryland.
Date of Product Manufacturer: 3 unknown.
Container Manufacturer Name: 3 unknown.
Location of Container Manufacturer: 3 unknown.
Date of Container Manufacturer: 3, 1903-present.
Description: The TALCOLETTE bottle fragments include base/body fragments of at least three eight-sided bottles. The colorless bottles have basal diameters of 6.1 cm. They were manufactured by machine, exhibiting the characteristic valve marks and cut-off scars. The specimens also have seam lines extending up their bodies from the basal edge lines.
Comments: N/A.

Group Name: THOMAS ECELECTIC OIL.
Group Number: 219.
No. of Specimens: 2 fragments.
Color of Specimens: 2 colorless.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 rectangular.
Base Diameter: (1) 4.5 cm x 2.5 cm.
Height: (1) 10.8 cm.
Associated Marks/Labels: Embossed down the front of the rectangular bottle is "THOMAS/ECELECTIC OIL". Although there are no side fragments in the group assemblage, the right side would be embossed with "INTERNAL & EXTERNAL". Embossed down the left side would be "FOSTER MILBURN CO.".
Product Name: 1 THOMAS ECELECTIC OIL.
Location of Product Manufacturer: 1 unknown.
Date of Product Manufacturer: 1, ca. 1885.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1880-1910.
Description: The THOMAS ECELECTIC OIL bottle fragments include body fragments of a rectangular bottle with beveled corners. The colorless bottle has reconstructed basal dimensions of 4.5 cm x 2.5 cm and a

reconstructed height of 10.8 cm. It was panelled on at least the front. A complete bottle would exhibit an extract-style lip (Baldwin 1973:481).
Comments: An advertisement for THOMAS ECELECTIC OIL appears in the August 13, 1885, issue of the Weekly Union (Manchester, New Hampshire). The advertisement declares the oil as a cure for croup (Baldwin 1973:481-482).

Group Name: THREE IN ONE OIL.
Group Number: 220.
No. of Specimens: 9 fragments.
Color of Specimens: 9 aqua.
No. of Individual(s) Represented: 4.
No. of Individual Shapes Represented: 4 rectangular.
Base Diameter: (1) 5 cm x 2.7 cm; (3) ? cm x 4.2 cm.
Height: (1) 13.5 cm; 3 unknown.
Associated Marks/Labels: Embossed down the left side of the rectangular bottles is "THREE IN ONE". Embossed down the right sides is "3°IN°ONE OIL CO".
Product Name: 4 THREE IN ONE OIL.
Location of Product Manufacturer: 4 New York.
Date of Product Manufacturer: 4, ca. 1885-present.
Container Manufacturer Name: 4 unknown.
Location of Container Manufacturer: 4 unknown.
Date of Container Manufacturer: 4, 1903-1920.
Description: The THREE IN ONE OIL bottle fragments include base and body fragments of at least 4 rectangular bottles with beveled corners, and panelled on the left and right sides. The aqua bottles are represented by at least 2 sizes with basal dimensions of 5 cm x 2.7 cm and ? cm x 4.2 cm. The smaller bottle is 13.5 cm in height. All of the bottles exhibit seam lines which extend up from the basal edge line and are erased on the neck by the hand finishing process. The bottles were probably finished with a square bead lip (Wilson 1981:94).
Comments: THREE IN ONE bottles have been excavated from western sites including Fort Laramie, Wyoming, where the bottles date from 1885-1890 (Wilson 1981:94). THREE IN ONE OIL continues to be manufactured at the time of this writing. The oil is manufactured by Boyle-Midway Incorporated of New York, New York. It is not known whether this was the location of manufacture at the time the specimens in this group were used. Adams (1976) lists the location of manufacture for this product as New York, New York.

Group Name: The Turner Brothers Company.
Group Number: 221.
No. of Specimens: 6 fragments.
Color of Specimens: 6 colorless.
No. of Individual(s) Represented: 6.
No. of Individual Shapes Represented: 3 rectangular; 1 round; 1 monarch oval; 1 oval.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the bases of the rectangular, round, monarch oval, and oval bottles is The Turner Brothers Glass Company trademark of an inverted triangle containing a "T". Embossed

down the front of the monarch oval bottle is "EASY BRIGHT POLISHES/B.F. STINSON & CO./BUFFALO, N.Y. U.S.A." (group 216).
Product Name: 1 B.F. STINSON & CO. EASY BRIGHT POLISHES; 5 unknown.
Location of Product Manufacturer: 1 Buffalo, New York; 5 unknown.
Date of Product Manufacturer: 6 unknown.
Container Manufacturer Name: 6 The Turner Brothers Glass Company.
Location of Container Manufacturer: 6 Terre Haute, Indiana; or Winchester, Indiana.
Date of Container Manufacturer: 6, 1915-1929.
Description: The container fragments which were manufactured by and exhibit the trademark of The Turner Brothers Glass Company include those of one oval, one monarch oval (Putnam 1965:26), one cylindrical, and three rectangular bottles. All of these colorless bottles were manufactured by machine, exhibiting the characteristic full seam lines, and/or valve marks, and/or cut-off scars. At least one of the rectangular bottles was manufactured for B.F. STINSON & CO. EASY BRIGHT POLISHES (group 216).
Comments: The Turner Brothers Company originally grew out of a branch of The Indiana Bottle and Glass Company known as The Modes-Turner Glass Company. In 1910 when the company changed names, it produced prescriptions, packers, and turn-mold bottles of flint and amber glass. In 1923, the company started operating a plant in Winchester, Indiana, and in 1927 further expansion took place. A sudden change of names to the "Turner Glass Corporation" took place in 1929 and the company became the property of Hocking Glass (Toulouse 1971:490-492).

Group Name: UNION MADE flask.
Group Number: 222.
No. of Specimens: 3 fragments.
Color of Specimens: 3 colorless.
No. of Individual(s) Represented: 2 (minimum).
No. of Individual Shapes Represented: 2 oval shoofly flasks.
Base Diameter: (2) ? cm x 4.4 cm.
Height: 2 unknown.
Associated Marks/Labels: Embossed across the fronts of the oval shoofly flasks is a circle containing "...[UNION] MADE... (in downturned arc)/(an inner circle containing TRADE/MARK/...BBA OF US...(in upturned arc)".
Product Name: 2 UNION MADE whiskey.
Location of Product Manufacturer: 2 unknown.
Date of Product Manufacturer: 2 unknown.
Container Manufacturer Name: 2 unknown.
Location of Container Manufacturer: 2 unknown.
Date of Container Manufacturer: 2, 1880-1910.
Description: The UNION MADE flask fragments include body/shoulder fragments of at least two shoofly flasks (Putnam 1965:177). The colorless bottles have reconstructed basal dimensions of ? cm x 4.4 cm. They exhibit seam lines which extend up to a brandy style finish. The bottles were hand finished with this finish which accommodated a cork stopper closure.
Comments: N/A.

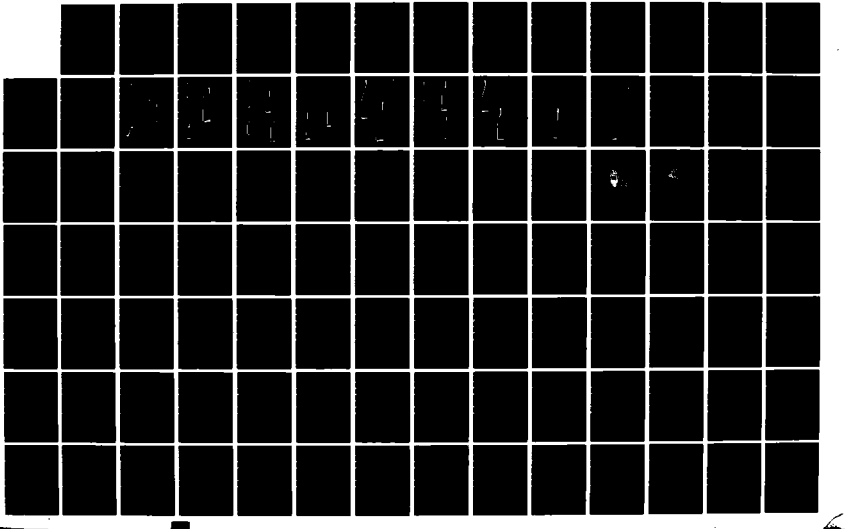
Group Name: The United Drug Company.
Group Number: 223.

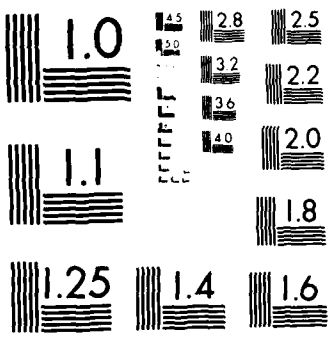
No. of Specimens: 8 fragments.
Color of Specimens: 6 colorless, 1 cobalt blue, 1 amber.
No. of Individual(s) Represented: 8.
No. of Individual Shapes Represented: 7 ideal oval, 1 square.
Base Diameter: (3) 6.6 cm x 4.9 cm; (1) 5.9 cm x 4.3 cm; (2) 4.1 cm x 2.4 cm; 1 unknown.
Height: 8 unknown.
Associated Marks/Labels: Embossed across the colorless rectangular and cobalt blue square bases is "U.D.CO. (in downturned arc)". Embossed across the amber rectangular base is "WT/U.D.CO.". Although it is not verified, the "WT" may stand for Whitall-Tatum who may have made the bottle for United Drug.
Product Name: 8 unknown.
Location of Product Manufacturer: 8 unknown.
Date of Product Manufacturer: 8 unknown.
Container Manufacturer Name: 8 unknown.
Location of Container Manufacturer: 8 unknown.
Date of Container Manufacturer: 8, 1910-1930.
Description: The United Drug Company bottle fragments include base/body fragments of at least one square bottle and seven ideal oval (Putnam 1965:32) bottles. The colorless square bottle fragments in this group are too fragmentary to determine bottle dimensions. However, the colorless ideal oval bottles are represented by three sizes with basal dimensions of 6.6 cm x 4.9 cm, 5.0 cm x 4.3 cm, and 4.1 cm x 2.4 cm. All of the specimens exhibit cut-off scars and seam lines extending up opposite corners from the basal edge line.
Comments: N/A.

Group Name: United Glass Glass Containers Limited.
Group Number: 224.
No. of Specimens: 2 fragments.
Color of Specimens: 2 dark green.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 round.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the base of the round bottle is "...NSON & SONS (in downturned arc)/M 43 8/S (below M)/1 (below 8)/UGB/LEITH SCOTLAND (in upturned arc)" (group 226).
Product Name: 1 VAT 69 SCOTCH WHISKEY.
Location of Product Manufacturer: 1 Leith, Scotland.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 United Glass Glass Containers Limited.
Location of Container Manufacturer: 1 United Kingdom.
Date of Container Manufacturer: 1, 1913-present.
Description: The container fragments which were manufactured by and exhibit the trademark of United Glass Glass Containers Limited include those of a cylindrical bottle. The dark green bottle was manufactured by machine for VAT 69 SCOTCH WHISKEY (group 226).
Comments: United Glass Glass Containers Limited was started with the combination of several independent glass manufacturers throughout the British Isles. Many of the independent glass companies have histories going back centuries. In 1970, United Glass reorganized into U.G. Glass Containers, Limited; U.G. Closures and Plastics, Limited; U.G.

AD-A153 688 ANALYSIS OF ARCHAEOLOGICAL GEOLOGICAL AND HISTORICAL ARTIFACTS AND DOCUME.. (U) CARNEGIE MUSEUM OF NATURAL HISTORY PITTSBURGH PA J B RICHARDSON MAR 85 9/10

UNCLASSIFIED DACW59-81-C-0003 F/G 5/6 NL





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS 1963-A

Tableware, Limited; and U.G. Engineering, Limited. The glass division produces containers in white, amber, green, pale green, and blue for drinks, toiletries, and chemical products (Toulouse 1971:510,513).

Group Name: VALAZE.
Group Number: 225.
No. of Specimens: 1 fragment.
Color of Specimens: 1 white milk glass.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 cylindrical (fragmentary).
Base Diameter: 1 unknown.
Height: 1 unknown.
Associated Marks/Labels: Embossed across the base of the bottle is "VAL[AZE]".
Product Name: 1 VALAZE.
Location of Product Manufacturer: 1 unknown.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1903-present.
Description: The VALAZE jar fragments include a base/body fragment of a round jar which tapers out from the base. This white milk glass jar was pressed by machine in manufacture by means of a cup and 2-piece ring mold. It exhibits seam lines up from the basal edge, over the continuous thread finish, to the smooth lip. VALAZE jars are represented among the whole jars by Subcategory 1, Group 2, Subgroup 7.
Comments: N/A.

Group Name: VAT 69 SCOTCH WHISKEY.
Group Number: 226.
No. of Specimens: 2 fragments.
Color of Specimens: 2 dark green.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 round.
Base Diameter: (1) 9.3 cm.
Height: 1 unknown.
Associated Marks/Labels: Embossed across the lower body of the round bottle is "VAT 69/SCOTCH WHISKEY". Embossed across the base is "...NSON & SONS (in downturned arc)/M 43 8/S (below "M")/1 (below "8")OUGB/LEITH SCOTLAND (in upturned arc)" (group 224).
Product Name: 1 VAT 69 SCOTCH WHISKEY.
Location of Product Manufacturer: 1 Leith, Scotland.
Date of Product Manufacturer: 1, ?-present.
Container Manufacturer Name: 1 United Glass Contaienrs Limited.
Location of Container Manufacturer: 1 United Kingdom.
Date of Container Manufacturer: 1, 1913-present.
Description: The VAT 69 SCOTCH WHISKEY bottle fragments include base/body fragments of a cylindrical bottle. The dark green bottle has a basal diameter of 9.3 cm. It exhibits a slight kickup which could be misleading because the bottle was manufactured by machine. This is demonstrated by a machine cut-off scar on the base.
Comments: VAT 69 SCOTCH WHISKEY is still in production at the time of this writing.

Group Name: VICI LEATHER DRESSING.
Group Number: 227.
No. of Specimens: 4 fragments.
Color of Specimens: 4 aqua.
No. of Individual(s) Represented: 2.
No. of Individual Shapes Represented: 2 square with beveled corners (fragmentary).
Base Diameter: (2) 4.8 cm x 4.8 cm.
Height: 2 unknown.
Associated Marks/Labels: Embossed down the front of the square bottles is a downturned horseshoe with the word "VICI" embossed inside it. To the left of the horseshoe is "VICI/LEATHER DRESSING/ROETH FOERDERER/PHILADELPHIA, U.S.A.". Embossed in the center of the base of one bottle is "2".
Product Name: 2 VICI LEATHER DRESSING.
Location of Product Manufacturer: 2 Philadelphia, Pennsylvania.
Date of Product Manufacturer: 2 unknown.
Container Manufacturer Name: 2 unknown.
Location of Container Manufacturer: 2 unknown.
Date of Container Manufacturer: 2, 1870-1910.
Description: The VICI LEATHER DRESSING bottle fragments include base and body fragments of two square bottles with beveled corners. The aqua bottles have basal dimensions of 4.8 cm x 4.8 cm. They are panelled on the front, exhibit bottom plates and seam lines which extend up opposite corners from the basal edge line. The bottles were probably finished by hand with a lip which accommodated a cork stopper closure.
Comments: N/A.

Group Name: VICKS VAPORUB.
Group Number: 228.
No. of Specimens: 19 fragments.
Color of Specimens: 19 cobalt blue.
No. of Individual(s) Represented: 17 (minimum).
No. of Individual Shapes Represented: 17 cylindrical (fragmentary).
Base Diameter: (10) 4.4 cm; (7) 3.1 cm.
Height: 17 unknown.
Associated Marks/Labels: Embossed across the bases of the cylindrical jars is the VICK'S trademark of a triangle within a triangle.
Product Name: 17 VICKS [VAPORUB].
Location of Product Manufacturer: 17 unknown.
Date of Product Manufacturer: 17, ?-present.
Container Manufacturer Name: 17 unknown.
Location of Container Manufacturer: 17 unknown.
Date of Container Manufacturer: 17, 1903-present.
Description: The VICKS jar fragments include base/body fragments of at least seventeen cylindrical jars. The cobalt blue jars are represented by at least two sizes, with basal diameters of 4.4 cm and 3.1 cm. They were manufactured by machine, exhibiting cut-off scars and/or valve marks. VICKS jars are represented among the whole examples by Subcategory ., Group 1, Subgroup 3. These complete examples exhibit continuous t...ead finishes.
Comments: VICKS products are aromatic medicinal products (in this instance, salves) which continue to be manufactured at the time of this

writing. They are manufactured by the Vicks Health Care Division of Richardson-Merrell Incorporated. The company is based in Wilton, Connecticut. Whether this was the location of manufacture when the specimens in this group were used is not known.

Group Name: VINOL.
Group Number: 229.
No. of Specimens: 2 fragments.
Color of Specimens: 2 amber.
No. of Individual(s) Represented: 2.
No. of Individual Shapes Represented: 2 oval (fragmentary).
Base Diameter: 2 unknown.
Height: (2) 17.8 cm.
Associated Marks/Labels: Embossed across the upper fronts of these bottles is "Vinol" in italicized lettering. Although there are no base fragments in this group assemblage, the base would be embossed with "PRIVATE MOULD/PATENTED APRIL 19, 1898".
Product Name: 2 VINOL.
Location of Product Manufacturer: 2 unknown.
Date of Product Manufacturer: 2 unknown.
Container Manufacturer Name: 2 unknown.
Location of Container Manufacturer: 2 unknown.
Date of Container Manufacturer: 2, ca. 1898-1910.
Description: The VINOL bottle fragments include shoulder/neck fragments of two oval, in profile, bottles. A frontal view of the bottles shows then to be circular with flattened bases. The amber bottles have reconstructed heights of 17.8 cm. They were blown in molds and hand finished with collared lips (Adams 1972:51).
Comments: VINOL was possibly a wine (Adams 1972:51).

Group Name: WALKER'S GRAPE JUICE.
Group Number: 230.
No. of Specimens: 9 fragments.
Color of Specimens: 9 colorless.
No. of Individual(s) Represented: 5 (minimum).
No. of Individual Shapes Represented: 5 round (fragmentary).
Base Diameter: (5) 6.2 cm.
Height: (5) 28.7 cm.
Associated Marks/Labels: Embossed across the bases of these round bottles is "GRAPE PRODUCTS CO. (in downturned arc)/WALKERS (in downturned arc)/GRAPE JUICE (in upturned arc)/NORTH EAST, PA (in upturned arc)". Embossed in the center of one base is "3".
Product Name: 5 WALKER'S GRAPE JUICE.
Location of Product Manufacturer: 5 North East, Pennsylvania.
Date of Product Manufacturer: 5 unknown.
Container Manufacturer Name: 5 unknown.
Location of Container Manufacturer: 5 unknown.
Date of Container Manufacturer: 5, 1903-1940.
Description: The WALKERS GRAPE JUICE bottle fragments include base fragments of at least five round bottles whose diameters increase from base to shoulder. The colorless bottles have basal diameters of 6.2 cm and reconstructed heights of 28.7 cm. The specimens were manufactured by machine, and, if whole, would exhibit a crown top style finish (Adams 1972:46).

Comments: N/A.

Group Name: Henry K. Wampole & Company.
Group Number: 231.
No. of Specimens: 3 fragments.
Color of Specimens: 3 colorless.
No. of Individual(s) Represented: 1 (minimum).
No. of Individual Shapes Represented: 1 rectangular with beveled corners.
Base Diameter: 1 unknown.
Height: 1 unknown.
Associated Marks/Labels: Embossed down the front of the rectangular bottle is "HENRY K. WAMPOLE & CO.INC./[PHI]LADELPHIA, PA. U.S.A.". Embossed in the center of the base is "C".
Product Name: 1 unknown.
Location of Product Manufacturer: 1 Philadelphia, Pennsylvania.
Date of Product Manufacturer: 1, ca. 1860-?.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1903-1920.
Description: The Henry K. Wampole & Company bottle fragments include base and body fragments of at least one rectangular bottle and beveled corners. The colorless specimens of this group are too fragmentary to determine bottle dimensions. The specimens do, however, exhibit a cut-off scar which suggests the bottle was manufactured by machine. Seam lines on the specimens extend up opposite corners from the basal edge line.
Comments: Although the exact contents of this bottle are not known, Henry K. Wampole and Company of Philadelphia is known to have manufactured pharmaceuticals. A package for WAMPOLE's PREPARATION, one product mnufactured by the company, explains that the product originated in 1860 and the package was completely revised in 1936 (Bartholomew 1971:86).

Group Name: William R. Warner & Company.
Group Number: 232.
No. of Specimens: 1 fragment.
Color of Specimens: 1 colorless.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 cylindrical (fragmentary).
Base Diameter: (1) 2.25 cm.
Height: 1 unknown.
Associated Marks/Labels: Embossed down the body of the cylindrical bottle is "[WILLIAM R. WA]RNER & CO./[PHIL]ADA.".
Product Name: 1 unknown.
Location of Product Manufacturer: 1 Philadelphia, Pennsylvania.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1920-1940.
Description: The William R. Warner & Company fragments include a base/body fragment of a cylindrical bottle. The colorless bottle has a basal diameter of 2.25 cm. William R. Warner & Co. bottles are represented among the whole examples by specimen 8768-14. This

complete example was manufactured by machine, exhibiting seam lines extending from the basal edge over a continuous thread finish.
Comments: N/A.

Group Name: WARNER'S SAFE KIDNEY AND LIVER CURE.
Group Number: 233.
No. of Specimens: 29 fragments.
Color of Specimens: 29 amber.
No. of Individual(s) Represented: 2.
No. of Individual Shapes Represented: 2 oval.
Base Diameter: (2) 8.9 cm x 4.1 cm.
Height: (2) 26.5 cm.
Associated Marks/Labels: Embossed across the front of the oval bottles is "WARNER'S (in downturned arc)/SAFE/DIABETES/CURE/(a safe)/ROCHESTER, N.Y.". Embossed across the bases is "C".
Product Name: 1 WARNER'S SAFE KIDNEY & LIVER CURE.
Location of Product Manufacturer: 1 Rochester, New York.
Date of Product Manufacturer: 1, ca. 1879-?.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1 unknown.
Description: The WARNER'S SAFE KIDNEY AND LIVER CURE bottle fragments include base and body fragments of at least two oval bottles. The amber bottles have reconstructed basal dimensions of 8.9 cm x 4.1 cm, and reconstructed heights of 26.5 cm. They exhibit seam lines characteristic of bottles blown in post bottom molds. A complete bottle would have been finished with a bead lip (Adams 1971:57).
Comments: WARNER'S SAFE KIDNEY AND LIVER CURE was one of several medicines manufactured by H.H. Warner and Company of Rochester. The product was originally known as DR. CRAIG'S KIDNEY CURE (Baldwin 1973:508). Hulbert Harrington Warner was a former safe salesman who began to issue proprietary medicines in 1879. The medicines were developed by Dr. Craig and numbered about twenty. Warner's products were accepted so well that offices were opened in London, Melbourne, Frankfort, and Prague (Ketchum 1975:86). WARNER'S KIDNEY AND LIVER CURE was the most common of the Warner medicines. Advertisements for it appeared in the April 15, 1880, issue of Farmer's Cabinet (Amherst, New Hampshire)(Baldwin 1973:508). An article in an 1889 Oklahomian presents H. H. Warner as somewhat of a hero:

> "...through his instrumentality hundreds of thousands, in both hemispheres, have been restored to health and happiness.
>
> Hon. H.H. Warner, then, is a leading and honored resident of Rochester, not only a prominent and influential citizen of the United States...he has been a member of the Republican State Committee and of its Executive Committee. He is a member of the American Institution for the Advancement of Science; President of the Rochester Chamber of Commerce;...The celebrated and costly Warner Observatory of Rochester was conceived, endowed, and is maintained by him..."

The article goes on to explain Warner's personal recovery from a "fatal kidney disease" via WARNER'S SAFE KIDNEY AND LIVER CURE (Bartholomew 1971:88).

Group Name: The Wellcome Chemical Works.
Group Number: 234.
No. of Specimens: 1 fragment.
Color of Specimens: 1 colorless.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 oval (fragmentary).
Base Diameter: (1) 5.3 cm x 3.4 cm.
Height: 1 unknown.
Associated Marks/Labels: Embossed across the base of the oval bottle is "WELLCOME (in downturned arc)/CHEM. WORKS (in upturned arc).
Product Name: 1 unknown.
Location of Product Manufacturer: 1 unknown.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1903-present.
Description: The Wellcome Chemical Works bottle fragments include a basal body fragment of an oval bottle. This colorless bottle has basal dimensions of 5.3 cm x 3.4 cm. It was machine manufactured, exhibiting a machine cut-off scar, valve mark, and seam lines extending up the body from the basal edge line. Wellcome Chemical jars are represented among the whole jars by Subcategory 1, Group 2, Subgroup 1.
Comments: N/A.

Group Name: The T. C. Wheaton Glass Company.
Group Number: 235.
No. of Specimens: 3 fragments.
Color of Specimens: 3 colorless.
No. of Individual(s) Represented: 3.
No. of Individual Shapes Represented: 3 rectangular.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the three rectangular bases is "T C W Co. (in downturned arc)/U.S.A. (in upturned arc)".
Product Name: 3 unknown.
Location of Product Manufacturer: 3 unknown.
Date of Product Manufacturer: 3 unknown.
Container Manufacturer Name: 3 The T. C. Wheaton Glass Company.
Location of Container Manufacturer: 3 Millville, New Jersey.
Date of Container Manufacturer: 3, 1888-present.
Description: The container fragments which were manufactured by and exhibit the trademark of The T. C. Wheaton Glass Company include those of three rectangular bottles. The colorless bottles were manufactured by machine, exhibiting the characteristic full seam lines, and/or valve marks and/or cut-off scars.
Comments: The T. C. Wheaton Company was begun by Dr. Theodore Corson Wheaton of Cape May, New Jersey. Dr. Wheaton began the company in order to manufacture glassware and laboratory and scientific glass. Wheaton is known for establishing the largest glass stopper grinding department in the United States. Many of the Wheaton products were manufactured by hand and still are because of their specialty nature (i.e., hand-pressed stoppers). In 1938, Wheaton acquired his first automatic feeding machine. The T. C. Wheaton Glass Company is just one

of many subsidiaries operated by The T. C. Wheaton Company (Toulouse 1971:527,528).

Group Name: Whitall Tatum.
Group Number: 236.
No. of Specimens: 69 fragments.
Color of Specimens: 55 colorless; 6 amber; 7 aqua; 1 white milk glass.
No. of Individual(s) Represented: 55 unknown.
No. of Individual Shapes Represented: 25 square (fragmentary); 12 rectangular (fragmentary); 10 cylindrical (fragmentary); 2 oval (fragmentary); 5 prima oval (fragmentary).
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the bases of 43 of the containers is "W.T. & Co.". Embossed across the bases of twelve of the containers is an inverted triangle containing "W/T". Three rectangular bottles embossed with "W.T. & Co." are also embossed down the fronts with "[McKEN]NANS" (group 150). One rectangular bottle embossed with "W.T. & Co." is also embossed down the front with the Hardy Druggist label (group 092). One rectangular bottle embossed with "W.T. & Co." is also embossed down the front with the McCullouch Drug label (group 148). One oval bottle embossed with "W.T. & Co." is also embossed across the body with a Llewellyn label (group 136). One cylindrical bottle embossed with the triangular Whitall-Tatum trademark is also embossed across the body with the LISTERINE label (group 135). One cylindrical bottle embossed with the triangular Whitall-Tatum mark is also embossed across the base with the LYSOL label (group 137). One rectangular bottle embossed with the triangular Whitall-Tatum trademark is also embossed across the front with the HIND'S HONEY AND ALMOND CREAM label (group 106). One rectangular bottle is also embossed with GLOVERS IMPERIAL MANGE MEDICINE (group 081).
Product Name: 3 McKENNEN; 1 McCULLOCH DRUG COMPANY; 1 LLEWELLYN; 1 LISTERINE; 1 HIND'S HONEY AND ALMOND CREAM; 1 LYSOL; 1 GLOVERS IMPERIAL MANGE MEDICINE.
Location of Product Manufacturer: see appropriate groupes.
Date of Product Manufacturer: see appropriate groupes.
Container Manufacturer Name: Whitall-Tatum and Company/Whitall, Bro. and Tatum.
Location of Container Manufacturer: Millvale, New Jersey.
Date of Container Manufacturer: 1857-1938.
Description: The container fragments which were manufactured by and exhibit the trademark of The Whitall, Tatum, and Company/Whitall, Brothers, and Tatum Glass Company include base/body fragments of at least one amber rectangular, four aqua cylindrical, three amber cylindrical, one white milk glass cylindrical, five colorless prima oval (Putnam 1965:25), three aqua rectangular, eight colorless rectangular, one amber square, three colorless cylindrical, two colorless oval, and twenty-four colorless square bottles. The bottles were manufactured completely by machine or hand finished. At least three of the colorless rectangular bottles were manufactured for McKENNAN drugs (group 150). At least one of the colorless square bottles were manufactured for The McCulloch Drug Company (group 148). At least one of the colorless oval bottles was manufactured for LLEWELLYN (group 136). At least one of the colorless cylindrical

bottles was manufactured for LISTERINE (group 135). At least one of the colorless rectangular bottles was manufactured for HIND'S HONEY AND ALMOND CREAM (group 106). At least one of the amber rectangular bottles was manufactured for GLOVER'S IMPERIAL MANGE MEDICINE (group 081). The Whitall, Tatum, and Company, and Whitall Brothers & Tatum Company trademarks are represented among the whole bottles by specimens 8651-33,18; 8652-5; 8981-4; 8801-1; 8749-15,12; 8853-7,17; 8842-3; 8926-5; 8775-1; 8852-6,4,3; 8865-2; 8733-2; and 8704-2.
Comments: The Whitall-Tatum glass industry began as a cylinder window-glass house operated by James Lee in 1806. In 1848, Whitall, Bro. & Tatum was formed out of Scattergood, Haverstick & Co. (the Co. being John Whitall). When Scattergood retired, Israel F. Whitall entered the company and Edward Tatum bought it. Meanwhile, in 1854, a glass plant owned by Lewis Mulford operated in Millvale, New Jersey. Mulford, wanting to get out of the glass business, eventually pressured the Whitalls to buy his plant in 1857. Later that year, Israel Whitall left the company and Whitall-Tatum was formed. The Millvale company relied on hand mold-making for products such as demi-johns, vials, druggists' bottles, snuffs, chemicals, etc., until 1900 when semi-automatic machines were installed. In 1912, Whitall was using a narrow-neck machine which he had developed, and, by 1929, the plant operated with five continuous tanks.

The Whitall-Tatum trademark of "W.T. & Co." was used by this company until 1935. From 1935 to 1938 an inverted triangle containing "W/T" was used (Toulouse 1971:544-547).

Group Name: WHITE CROSS CREAM.
Group Number: 237.
No. of Specimens: 2 fragments.
Color of Specimens: 2 white milk glass.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 round (fragmentary).
Base Diameter: (1) 7.5 cm.
Height: 1 unknown.
Associated Marks/Labels: Embossed across the base of this round jar is "[WH]ITE CROSS (in downturned arc)/[CREA]M/[CLEVEL]AND O (in upturned arc)".
Product Name: 1 WHITE CROSS CREAM.
Location of Product Manufacturer: 1 Cleveland, Ohio.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1903-present.
Description: The WHITE CROSS CREAM jar fragments include base fragments of a round jar. The white milk glass jar has a basal diameter of 7.5 cm. It was manufactured by machine exhibiting a cut-off scar and valve mark on its base.
Comments: N/A.

Group Name: WHITEHOUSE VINEGAR.
Group Number: 238.
No. of Specimens: 1 fragment.
Color of Specimens: 1 colorless.
No. of Individual(s) Represented: 1.

No. of Individual Shapes Represented: 1 cylindrical (fragmentary).
Base Diameter: (1) 12.2 cm.
Height: 1 unknown.
Associated Marks/Labels: Embossed across the body of this cylindrical bottle is a square containing "...HOUSE (in downturned arc)/...".
Product Name: 1 WHITEHOUSE VINEGAR.
Location of Product Manufacturer: 1 unknown.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1903-1920.
Description: The WHITEHOUSE VINEGAR bottle fragments include a shoulder/body fragment of a cylindrical bottle. The colorless bottle has a reconstructed basal diameter of 12.2 cm. The bottle was manufactured by machine, exhibiting seam lines which extend up and over a continuous thread finish.
Comments: N/A.

Group Name: The Whitney Glass Works.
Group Number: 265.
No. of Specimens: 1 fragment.
Color of Specimens: 1 cobalt blue.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 square.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: Embossed across the base of the square bottle is The Whitney Glass Works trademark of a "W" within a diamond.
Product Name: 1 unknown.
Location of Product Manufacturer: 1 unknown.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 The Whitney Glass Works.
Location of Container Manufacturer: 1 Glassboro, New Jersey.
Date of Container Manufacturer: 1, 1900-1937.
Description: The container fragments which were manufactured by and exhibit the trademark of The Whitney Glass Works, include a base fragment of one square bottle. The cobalt blue bottle was manufactured by machine. The Whitney Glass Works trademark is represented among the whole bottles by specimens 8910-3, 8913-3, and 8871-4.
Comments: The Whitney Glass Works can be traced back to a glass company established in Glassboro, N.J., and operated by 7 brothers named Stanger. The Stanger brothers established their factory in 1779 but by 1784 all Stanger shares in the company had been sold. One of the men to buy up the shares was Colonel Thomas Heston. Heston became the manager of the new firm Heston & Carpenter. In 1808, the firm changed hands again and became Edward Carpenter & Co. until 1913 when Carpenter (the original Carpenter's son) died. The glass plant in Glassboro remained closed for a period, reopened, underwent several more management changes and, in 1835 the Whitneys appeared. Whitney Bros. was formed in 1839 when Thomas & Samuel Whitney (grandson of Col. Heston) combined the interest they had in the Glassboro firm. The Whitneys progressed their company by using coal instead of wood, manufacturing the "Booz" bottle, and other flasks. Thomas Whitney died in 1882 and his brother retired, passing the ownership of the company

to their grandsons J. P. Whitney and Thomas Whitney Synnat. In 1887, they changed the company name to Whitney Glass Works and controlled factories in Glassboro, Salem, and Camden, New Jersey, and Blairsville, Pennsylvania. In 1918, The Owens Bottle Co. purchased The Whitney Glass Works without changing the name. The Owens Bottle Co.-Illinois Glass merger resulted in the closing of the former Whitney Glass Works as a glass plant (Toulouse 1971:519-524).

Group Name: WHITTEMORE FRENCH GLOSS.
Group Number: 239.
No. of Specimens: 3 fragments.
Color of Specimens: 3 colorless.
No. of Individual(s) Represented: 2.
No. of Individual Shapes Represented: 1 cylindrical; 1 rectangular.
Base Diameter: 2 unknown.
Height: 2 unknown.
Associated Marks/Labels: Embossed down the front of the rectangular bottle is "FRENCH GLOSS". Embossed down the left or right side is "[B]OSTON". Embossed across teh base of the round bottle is "WHITTEMORE (in downturned arc)/(monogrammed CL)(a boy)6/..." (group 037).
Product Name: 2 WHITTEMORE FRENCH GLOSS.
Location of Product Manufacturer: 2 Boston, Massachusetts.
Date of Product Manufacturer: 2 unknown.
Container Manufacturer Name: 1 Carr-Lowrey Glass Company; 1 unknown.
Location of Container Manufacturer: 1 Baltimore, Maryland; 1 unknown.
Date of Container Manufacturer: 1, 1920-1960; 1, 1880-1910.
Description: The WHITTEMORE FRENCH GLOSS bottle fragments include base and body fragments of a cylindrical and a rectangular bottle. The colorless specimens in this group are too fragmentary to determine the bottle dimensions of either bottle. The cylindrical bottle, which was manufactured by The Carr-Lowrey Glass Company via the automatic bottle machine, exhibits a cut-off scar. The rectangular bottle was probably finished by hand with a lip which accommodated a cork stopper closure.
Comments: N/A.

Group Name: WISHART'S PINE TREE TAR CORDIAL.
Group Number: 240.
No. of Specimens: 13 fragments.
Color of Specimens: 13 green blue.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 square.
Base Diameter: (1) 6.2 cm x 6.2 cm.
Height: (1) 24.0 cm.
Associated Marks/Labels: Embossed down the front of this square bottle is "PINE TREE/[T]AR CORDI[AL]/PHILA.". Embossed down the right side is "[L.Q.C. WIS]HART'S". Embossed across the left side is "TRADE/(a pine tree)/MARK".
Product Name: 1 WISHART'S PINE TREE TAR CORDIAL.
Location of Product Manufacturer: 1 Philadelphia, Pennsylvania.
Date of Product Manufacturer: 1, 1859-?.
Container Manufacturer Name: 1 unknown.
Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1810-1880.

Description: The WISHART'S PINE TREE TAR CORDIAL bottle fragments include base and body fragments of a square bottle with beveled corners. The green-blue bottle has basal dimensions of 6.2 cm x 6.2 cm and a reconstructed height of 24 cm. It was blown in a mold and exhibits an improved, bare iron pontil scar. Seam lines extend from the pontil mark up opposite corners of the bottle. A complete bottle would exhibit a brandy style finish (Baldwin 1973:530).
Comments: Possibly the most interesting part of L. Q. C. Wishart's proprietary medicine was the bottle. The emerald green bottle was popular not only for its color but also the pine tree decorating the body. This type of embossing is one of the better examples of folk art being applied to glass bottle making (Ketchum 1975:92). Wishart's bottles were available in two sizes and several shades of green. An amber variant was also produced but was somewhat scarce (Baldwin 1973:530). The contents of these bottles is advertised as a cordial. A cordial can be identified as "a stimulating liqueur composed of aromatics and alcohol" (Baldwin 1973:22). Advertisements for WISHART'S PINE TREE TAR CORDIAL appear in periodicals dating to the 1860's and 1870's, including one in the January 20, 1864, issue of the New York Daily Times. The advertisement lists Dr. L. Q. C. Wishart as proprietor and his cordial as a remedy for consumption, etc. (Baldwin 1973:529).

Group Name: WRIGHT'S SILVER CREAM.
Group Number: 241.
No. of Specimens: 3 fragments.
Color of Specimens: 3 colorless.
No. of Individual(s) Represented: 2.
No. of Individual Shapes Represented: 2 cylindrical (fragmentary).
Base Diameter: (2) 7.25 cm.
Height: 2 unknown.
Associated Marks/Labels: Embossed across the bases of these two cylindrical jars is "SILVER (in downturned arc)/WRIGHT'S (container manufacturers mark)/CREAM (in upturned arc)". One jar is embossed with the Owens-Illinois trademark (group 173). One jar is embossed with the Hazel-Atlas trademark (group 098).
Product Name: 2 WRIGHT'S SILVER CREAM.
Location of Product Manufacturer: 2 Keene, New Hampshire.
Date of Product Manufacturer: 2, ?-present.
Container Manufacturer Name: 2 The Hazel-Atlas Glass Company, Owens-Illinois Incorporated.
Location of Container Manufacturer: 2 Wheeling, West Virginia; Toledo, Ohio.
Date of Container Manufacturer: 1, 1920-1964; 1, 1929-present.
Description: The WRIGHT'S SILVER CREAM jar fragments include base fragments of at least two cylindrical jars. The colorless jars have basal diameters of 7.25 cm. They were manufactured by machine, exhibiting a valve mark and seam lines extending from the basal edge line, up over the elongated, inclined lug finish. This type of finish appears on whole jar examples in Subcategory 1, Group 2, Subgroup 26.
Comments: WRIGHT'S SILVER CREAM continues to be manufactured at the time of this writing. It is manufactured by J. A. Wright and Company of Keene, New Hampshire. Whether this was the location of manufacture when the specimens in this group were used is not known.

Group Name: Wyeth & Bro.
Group Number: 242.
No. of Specimens: 28 fragments.
Color of Specimens: 1 amber; 2 cobalt blue; 25 colorless.
No. of Individual(s) Represented: 15 (minimum).
No. of Individual Shapes Represented: 2 square (fragmentary); 2 oval (fragmentary); 3 prima oval (fragmentary); 8 rectangular (fragmentary); 1 round (fragmentary).
Base Diameter: (2) 5.5 cm x 5.5 cm; 13 unknown.
Height: 15 unknown.
Associated Marks/Labels: Embossed around the necks of the square bottles is "TAKE NEXT DOSE AT-". This referred to a glass dose cap embossed with numbers 1-12 and "THIS CUP HOLDS A DOSE" (Adams 1972:108). Embossed down the front is "JOHN WYETH & BRO.". Embossed across the base is "PAT. MAY16th1899 (in downturned arc)/PH[ILAD'A] (in upturned arc)". The prima oval and 3 rectangular bottles are embossed across the base with "WYETH (in downturned arc)". Three rectangular bottles are embossed down the right sides with "WYETH & BRO". Two rectangular bottles are embossed across the lower front with "WYETH". The round bottle is embossed down the body with "[JOHN WYE]TH [& BRO]/[PHILADE]L[PHIA]".
Product Name: 15 Wyeth & Bro. drugs.
Location of Product Manufacturer: 15 Philadelphia, Pennsylvania.
Date of Product Manufacturer: 15, 1899-?.
Container Manufacturer Name: 15 unknown.
Location of Container Manufacturer: 15 unknown.
Date of Container Manufacturer: 15, 1880-1920.
Description: The Wyeth bottle fragments include base and body fragments of at least 2 square, 2 oval, 3 prima oval, 1 round, and 8 rectangular bottles. The cobalt blue square bottles have basal dimensions of 5.5 cm x 5.5 cm. It was manufactured by machine, exhibiting seam lines which extend up and over a collared finish. The remaining colorless oval, prima oval (Putnam 1965:25), and rectangular bottle fragments, along with the amber round bottle fragment, are too fragmentary to determine bottle dimensions. However, they were probably hand finished with lips which accommodated cork or glass stoppers.
Comments: N/A.

Group Name: The Zemmer Company.
Group Number: 245.
No. of Specimens: 1 fragment.
Color of Specimens: 1 colorless.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 square (fragmentary).
Base Diameter: 1 unknown.
Height: 1 unknown.
Associated Marks/Labels: Embossed down the front of this square bottle is " TH[E Z]EMMER CO. /[M]ANUFACTU[RING CHEMISTS]/PITTS[BURG, PA.]".
Product Name: 1 unknown.
Location of Product Manufacturer: 1 Pittsburgh, Pennsylvania.
Date of Product Manufacturer: 1, 1905-1954.
Container Manufacturer Name: 1 unknown.

The lifespan of a bottle involves the interplay of time and behavior. The interplay occurs during eight possible stages: manufacturing; filling; distributing; selling; purchasing; consuming; recycling; and discarding (Hill 1982:294). Hill has looked at each of the stages and the behavior patterns which might affect the period of time a bottle occupies each stage.

> "...based on the examination of the factors contributing to lag, three general hypotheses can be proposed. These represent ideal patterns that can be tested with the archaeological evidence. Discrepancies between the patterns and the evidence may indicate behavioral processes.
>
> Hypothesis 1: The length of time between manufacture and deposition of a bottle increases in inverse proportion to the importance of freshness and the immediacy of the product's use.
>
> Hypothesis 2: The length of time between the manufacture and deposition of a bottle increases in inverse proportion to the frequency of the product's use.
>
> Hypothesis 3: Those bottles expressing the shortest manufacture-deposition lag will be containers for fresh beverages, followed in order by whiskey, food, medicine, personal-utilitarian products, and wine."
>
> (Ibid: 298-99)

Hill's personal-utilitarian group includes categories of artifacts which I have divided into personal care and domestic care products.

Calculation of the Manufacture-deposition lag is essentially a two-part process. First, South's Mean Ceramic Date Formula is used to determine mean manufacturing dates for each functional category.

$$\text{Mean manufacturing date} = \frac{\text{median dates} \times \text{container frequencies}}{\text{total number of containers in the category}}$$

The lag is then calculated by subtracting the category's mean manufacturing date from the site's documented terminal date. Because the Neville House trash midden was an area of deposition up until its excavation, the terminal date is 1979. This accounts for rather lengthy lag times which must be compared relative to Hill's data, which have shorter lag times.

Figure 34 is a representation of the differential lag between the functional categories. The lag for liquor containers is the shortest of all the categories and, therefore, does not confirm Hypotheses 1, 2, or

further divided into Beer, Liquor, and Fresh beverage. Table 1 lists each of the 261 artifact groups and the functional categories to which they have been assigned. Figure 30 illustrates the percentage make-up of each category. Table 1 also lists the locations of the product or glass container manufacturers as well and median dates calculated for each container. The locations were assigned on the basis of three possible sources of information: the product labels or trademarks on the containers; documentation which is cited in the bibliography; or personal communications with bottle enthusiasts who are cited in the acknowledgements.

The median dates assigned to the groups (see figures 40 to 45) were calculated with the use of South's Mean Ceramic Date Formula (South 1977:217-21).

> "Use of the Mean Ceramic Data Formula has traditionally been restricted to ceramics, primarily those from eighteenth-century and early nineteenth-century sites. However, this technique can be utilized to determine the mean manufacturing date of any class of artifacts for which initial manufacturing dates can be established.... By applying the Mean Ceramic Date Formula to other classes of artifacts and to sites of different periods, it is possible to expand the usefulness of the formula from a dating tool to a method for exploring behavioral processes."
> (Hill 1982:292)

Again, the initial and terminal dates used in South's formula were assigned on the basis of information gathered from three sources: the morphological attributes of the containers, reflective of dated technological developments in glass manufacture; documentation cited in the bibliography; and personal communications with bottle enthusiasts. Figures 31, 32, and 33 plot the median dates of products horizontally over the site. In these figures, each letter corresponds to one field catalogue group (F.C.). Only the beverage containers were considered in the figures because of the long time span they represent and for reasons of practicality. In each successive figure, the date groups are collapsed into larger groups. Although it is not decisively clear, Figures 32 and 33 indicate later median dates for the eastern end of the midden. The average median date calculated for the GMM containers was 1916. In all but the consumables category the largest percentages of the containers date from 1911 to 1930.

Sarah H. Hill's research strategy pertaining to Manufacture-deposition lag proved to be very applicable to the GMM assemblage. Hill explains Manufacture-deposition lag as:

> "...the difference between the time of manufacture and deposition of an artifact or class of artifacts. It is assumed that the calculated difference, measured in years, reflects not only a segment of time but also a set of behavioral processes."
> (Hill 1982:291)

CONCLUSIONS

The number and diversity of specimens in the GMM artifact category offered the opportunity to treat the assemblage as more than a descriptive data inventory. Beyond their descriptions, these artifacts offered a "testing ground" for research strategies and theories developed by archaeologists such as South, Sprague, Hill, and Adams. It must be remembered that the GMM assemblage is only one of several categories which compose the entire glass assemblage of 36AL29. However, with 5945 specimens representing at least 2013 containers, GMM is the largest of the glass container categories and hopefully the most representative. The difference between the number of specimens and the minimum number of individual forms represented by the specimens is an important distinction when analyzing these artifacts. Several groups consist of one or two specimens which represent one or two containers. On the other hand, a group such as BROMO-SELTZER (group 024) consists of 803 specimens representing only 35 individual forms. The use of specimens as the unit of analysis would skew the interpretations and conclusions in this section. Figures 29 and 30 demonstrate the differences between specimen counts and individual form counts in the percentages of artifacts divided into functional categories. From this point on, percentages and frequencies will be based on the minimum number of individual forms.

The first step involved in interpreting the GMM containers was the development of a system of classification which would be reflective of the container's role when it was utilized by residents of Neville House. In other words, the classification had to be functional. The descriptions of the artifacts in this section were primarily morphologically oriented. The analysis of the described artifacts had to be dealt with in terms of the containers' places in the social and behavioral patterns of their users.

> "If historical archaeologists are ever to reach this goal (to understand people) they must recognize that descriptive typologies based on technology simply will not suffice."
> (Sprague 1980:252)

Sprague recognized in his classification that categories must be mutually exclusive and exhaustive. The interpretations of the GMM containers acknowledge this but it was difficult to abide by these "rules". In cases such as bitters and patent medicines, it is impossible to ascertain from the archeological record whether the consumers of these products used them for strictly medicinal purposes or for the enjoyment of the products' high alcoholic content. In fact, products such as GOLDEN WEDDING brand whiskey (class 084) were advertised as "For Medicinal Purposes Only..." as a loophole to prohibition laws. All containers are subjected to the possibility of secondary use. Probably the most representative of secondary use patterns are preserve jars. Nevertheless, the artifacts were organized into the six broad functional categories defined in the introduction of this section. For the purposes of Sarah H. Hill's research strategy, the beverage category will be

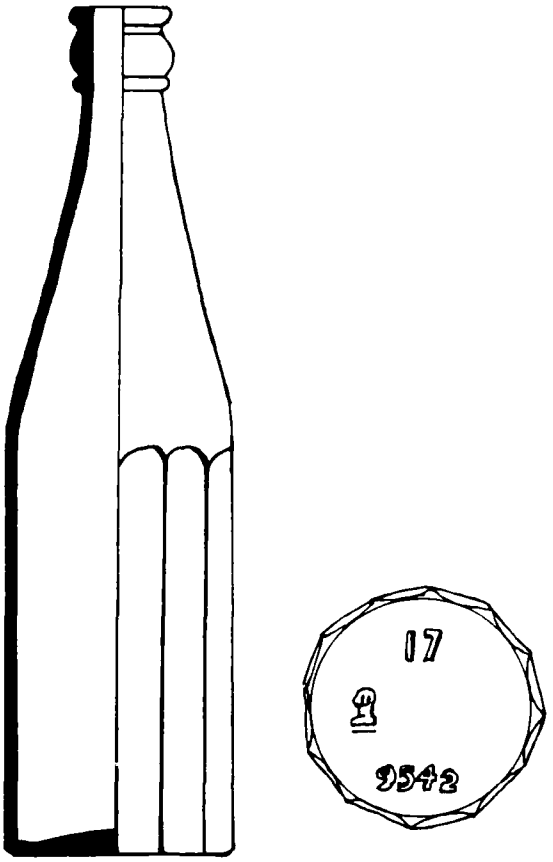


Fig. 26 (½ actual size)

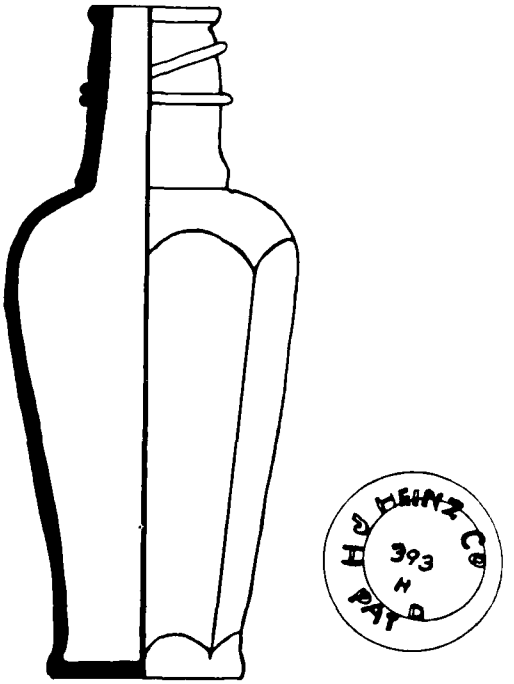


Fig. 27 (½ actual size)

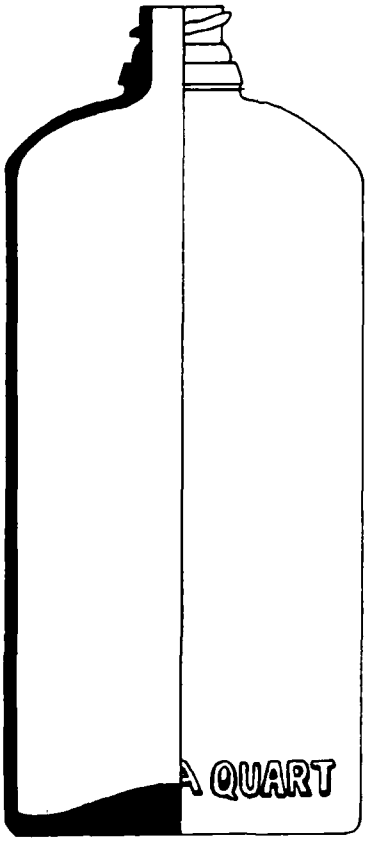
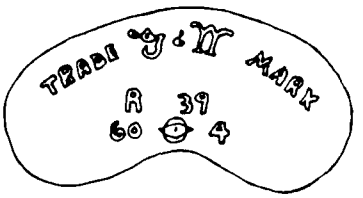


Fig. 28 (½ actual size)



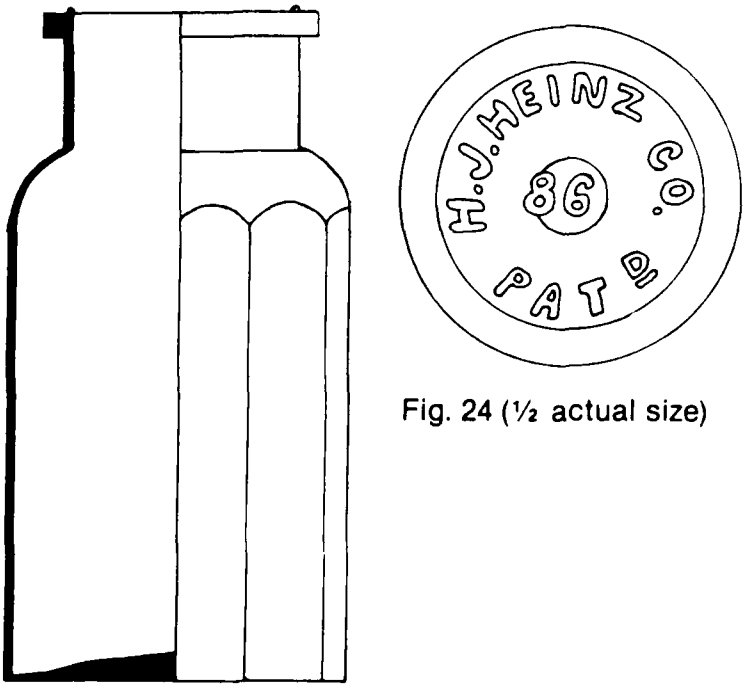


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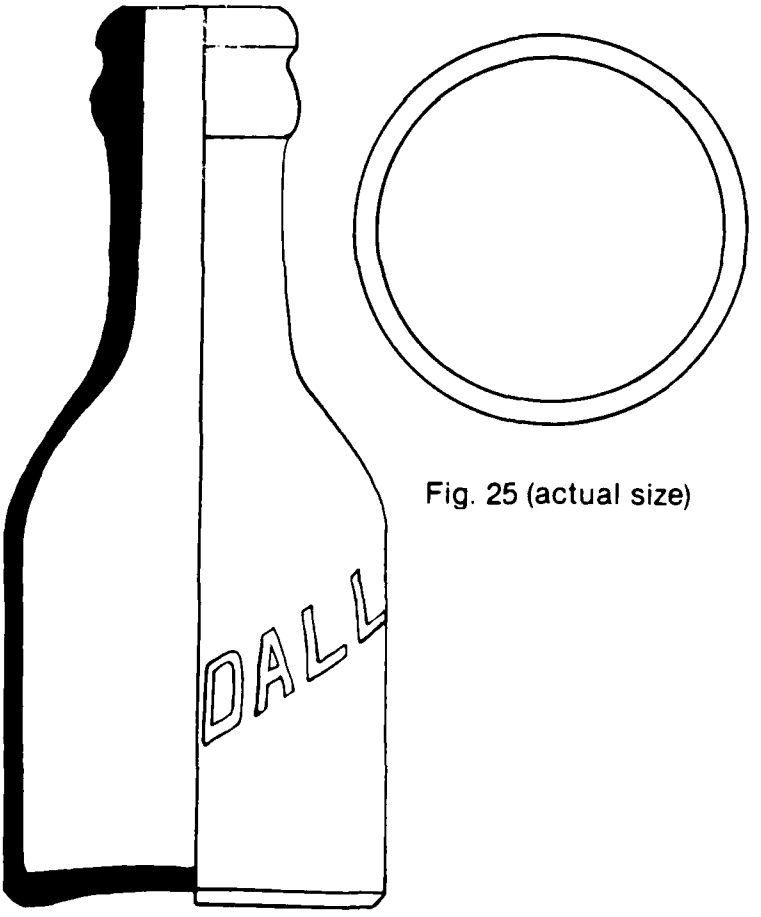


Fig. 25 (actual size)

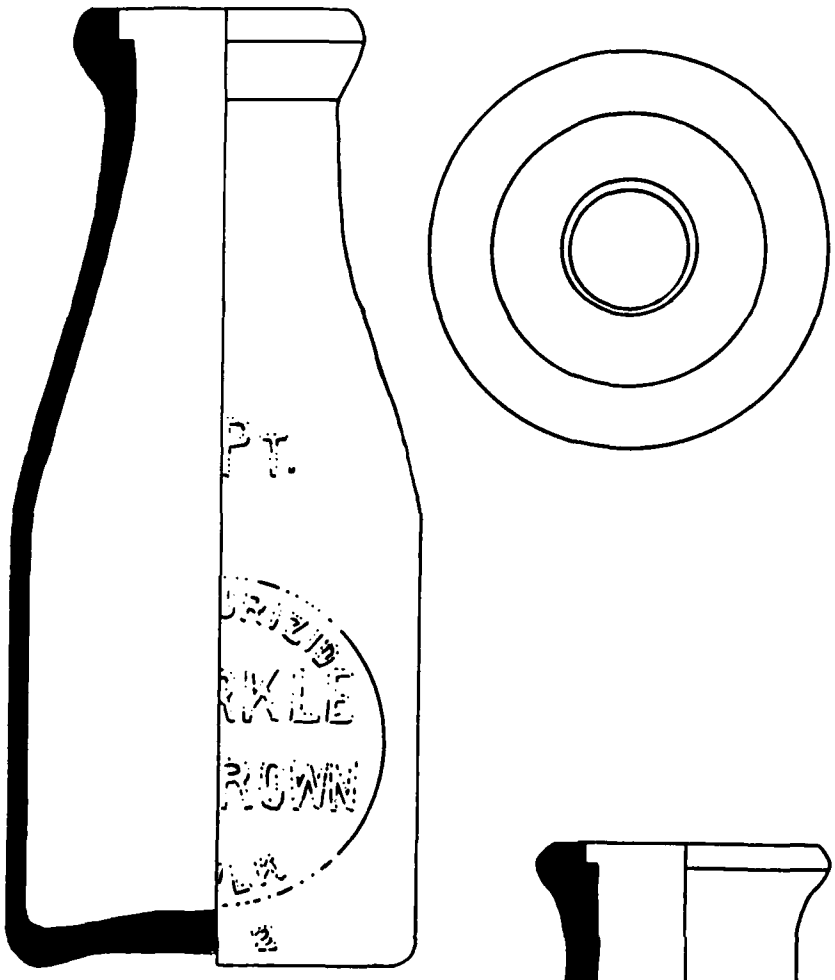


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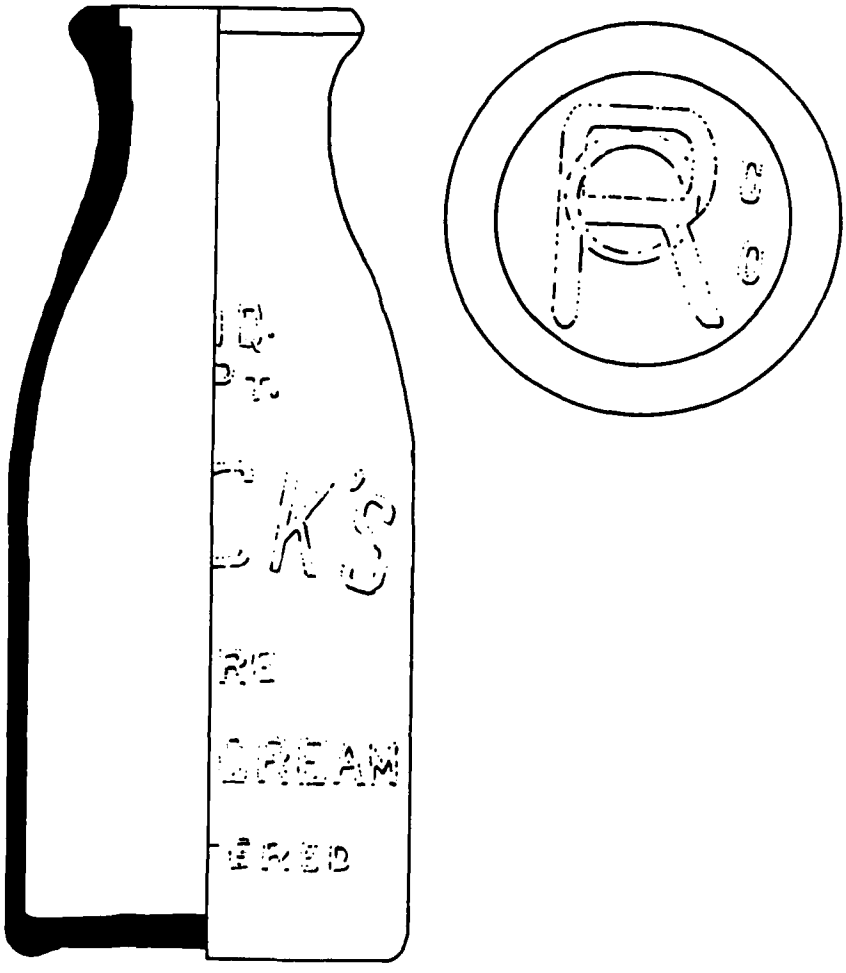


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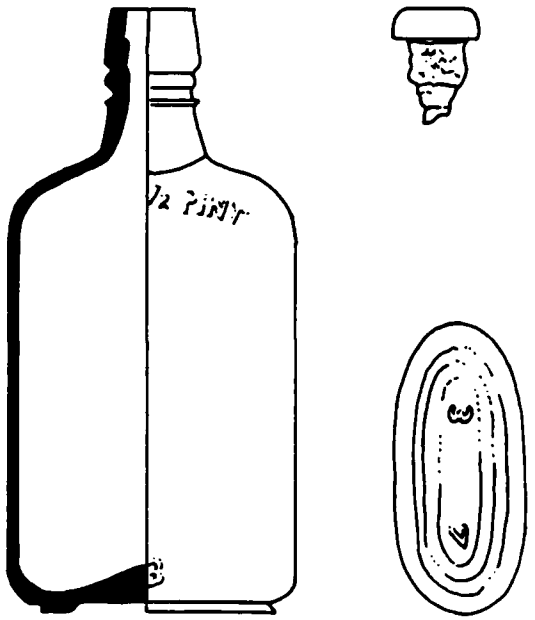


Fig. 18 (½ actual size)



Fig. 19 (actual size)

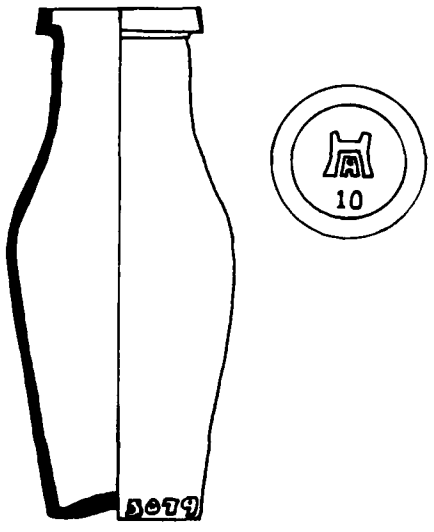


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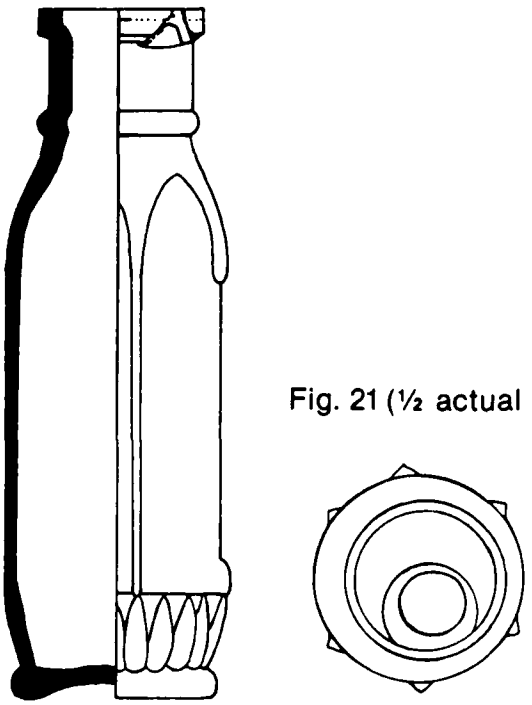


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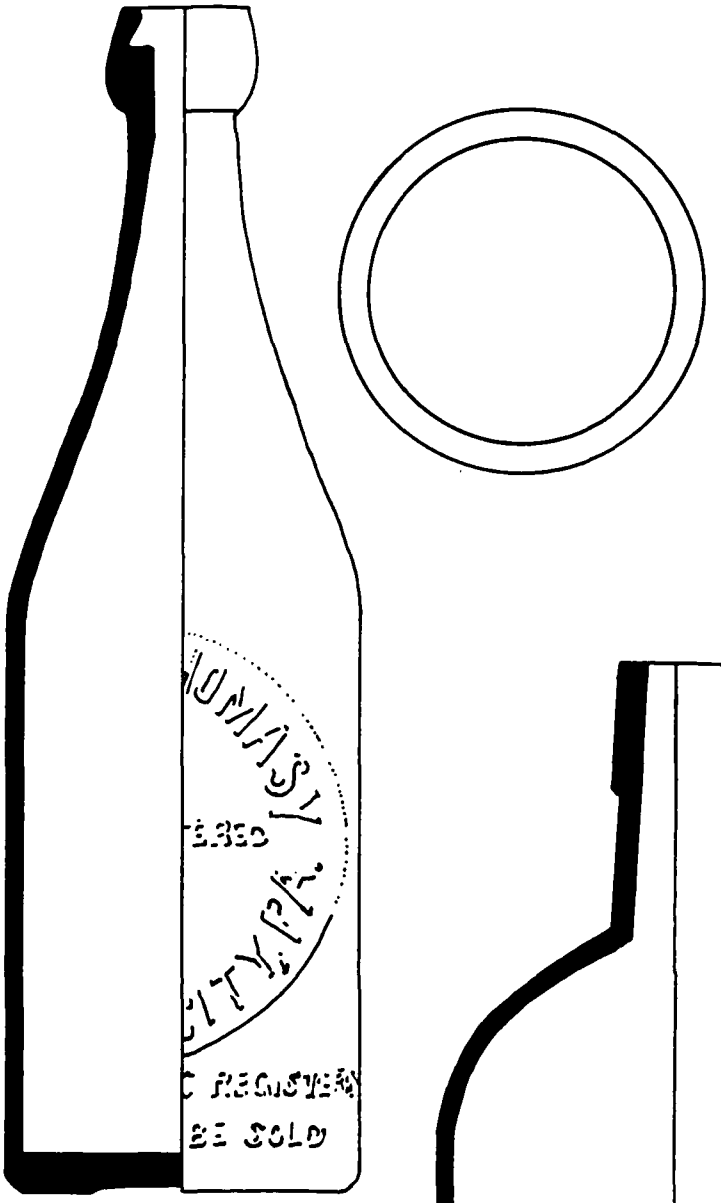


Fig. 15 (¾ actual size)



Fig. 16 (½ actual size)

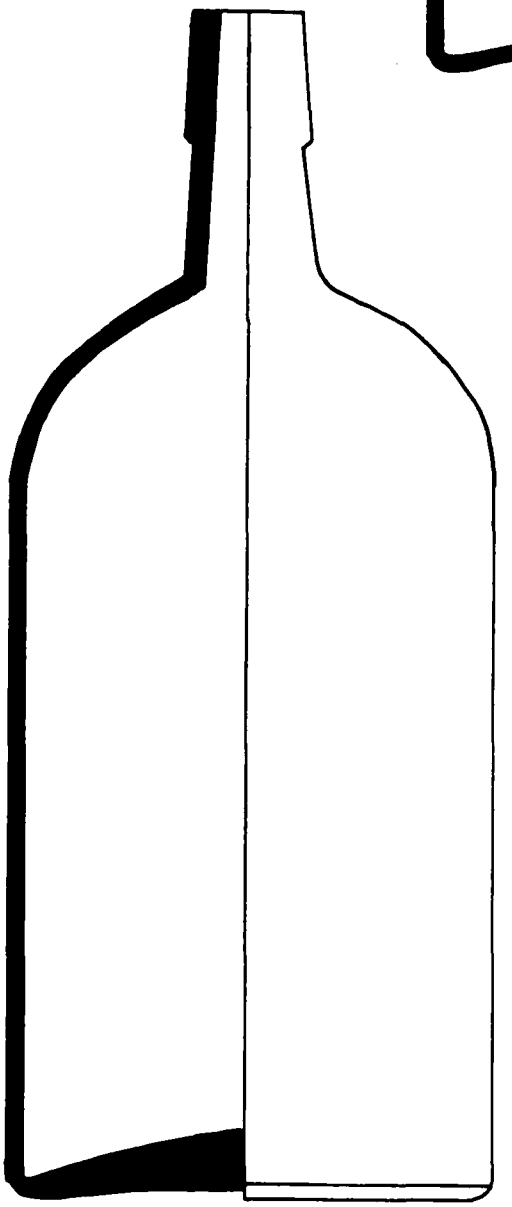
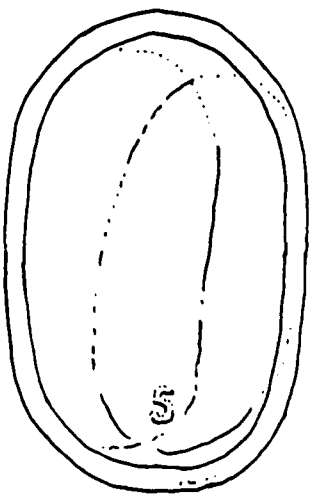


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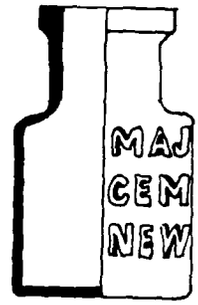


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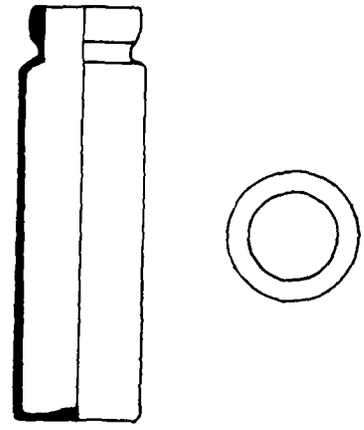


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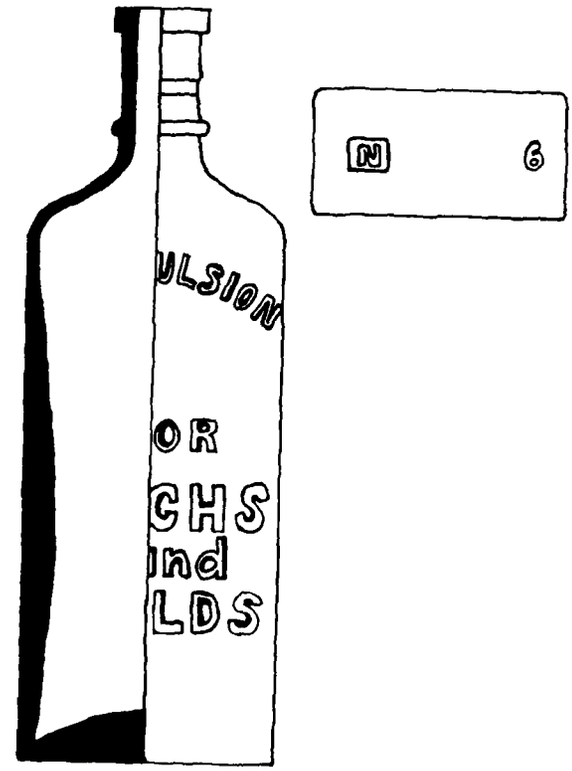


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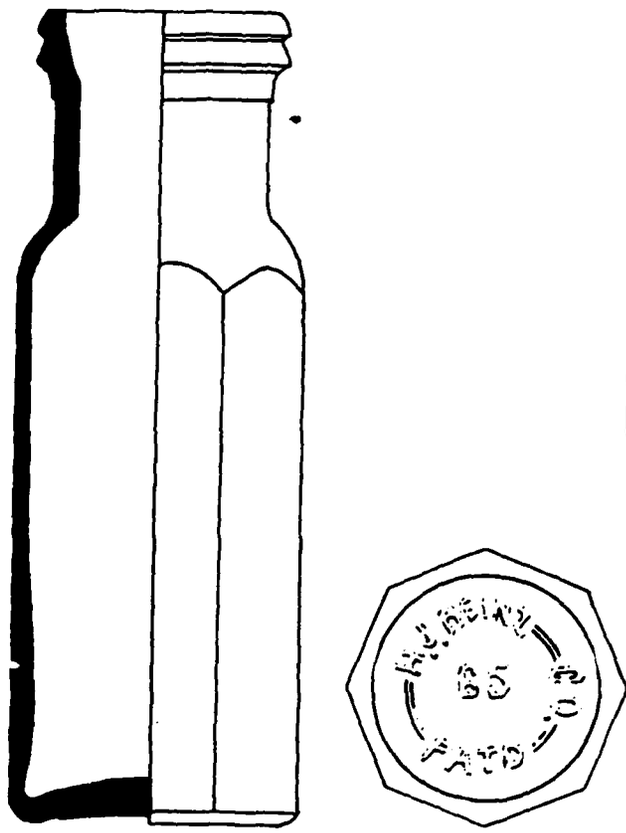


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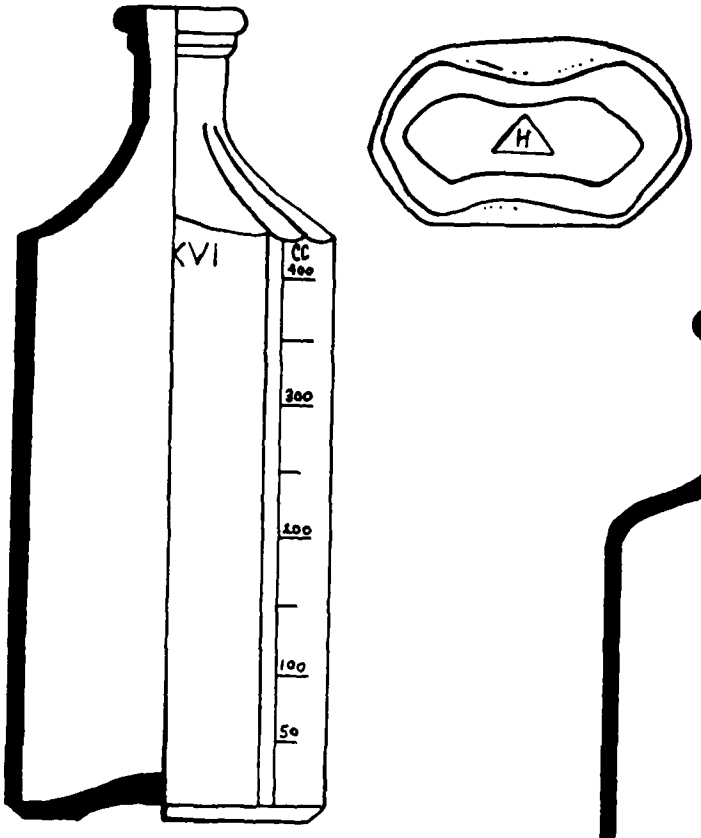


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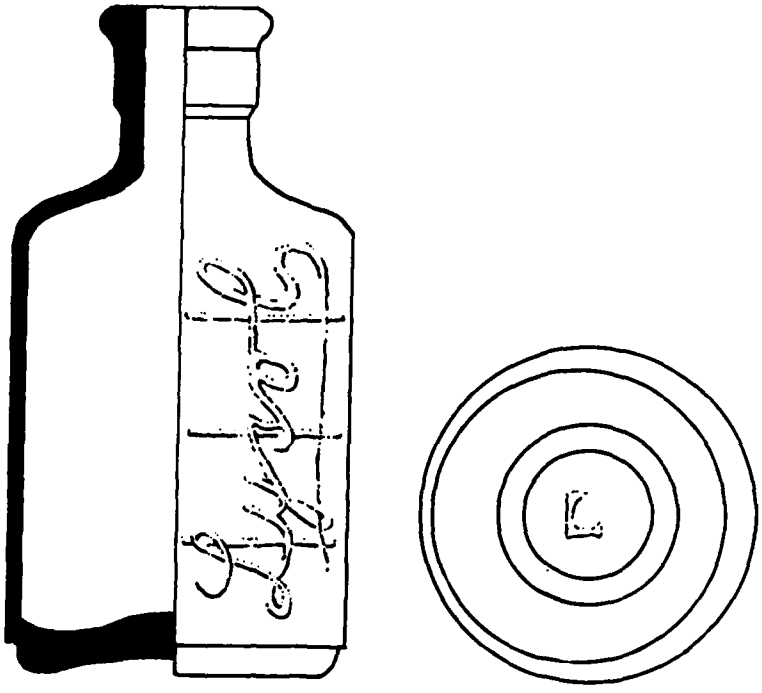


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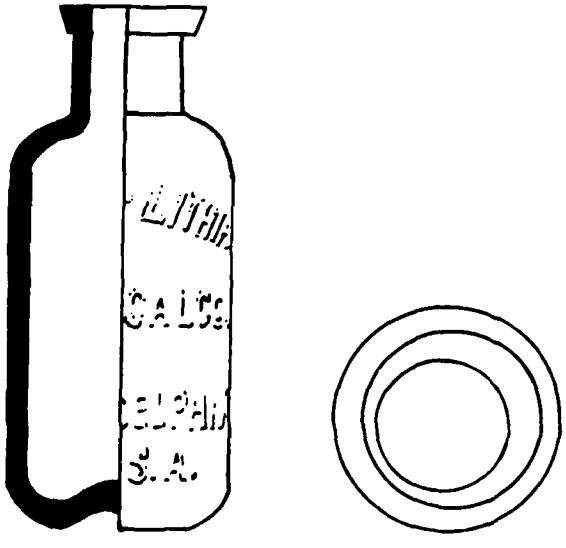


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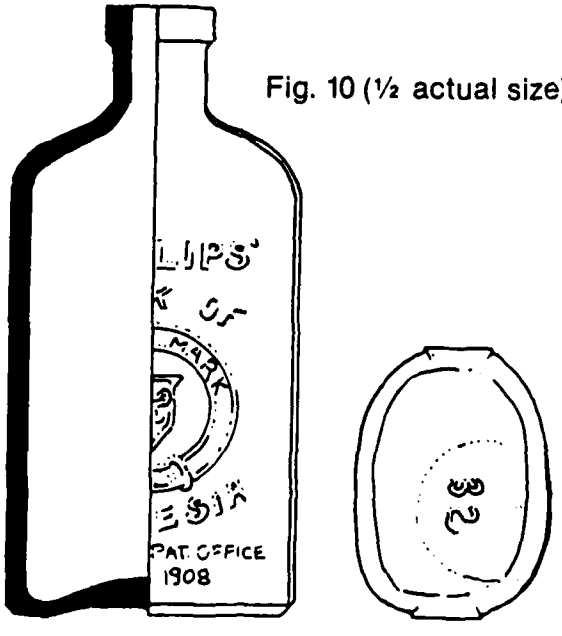
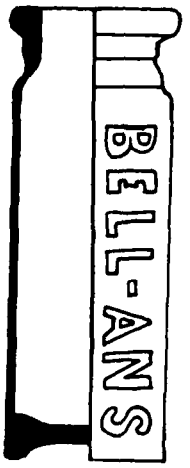


Fig. 10 (½ actual size)



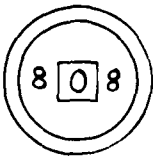
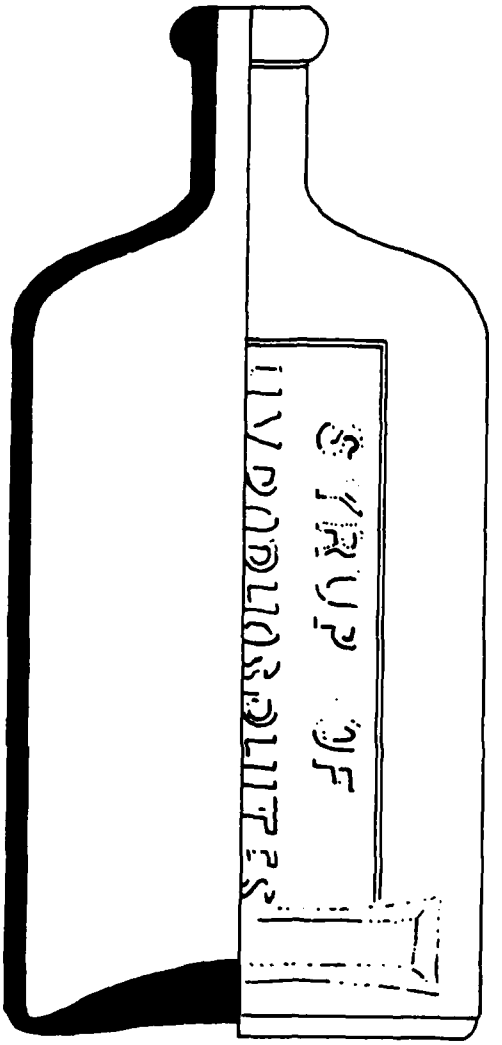


Fig. 4 (actual size)



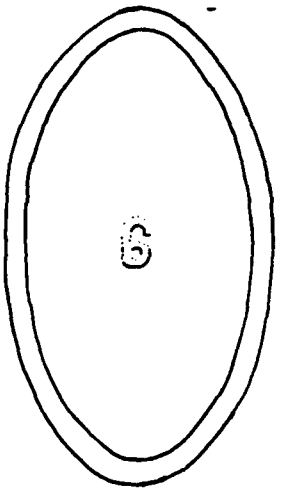
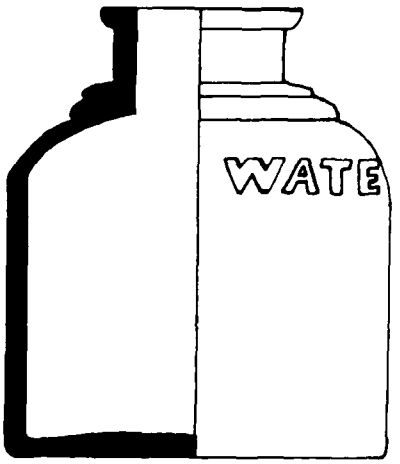


Fig. 5 (¾ actual size)



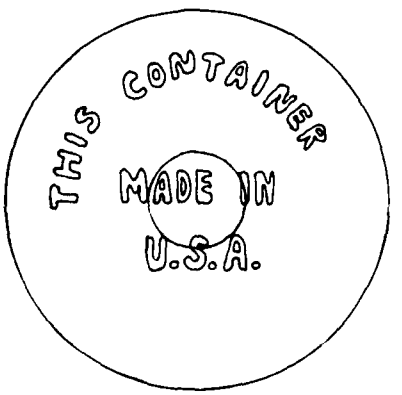


Fig. 6 (actual size)

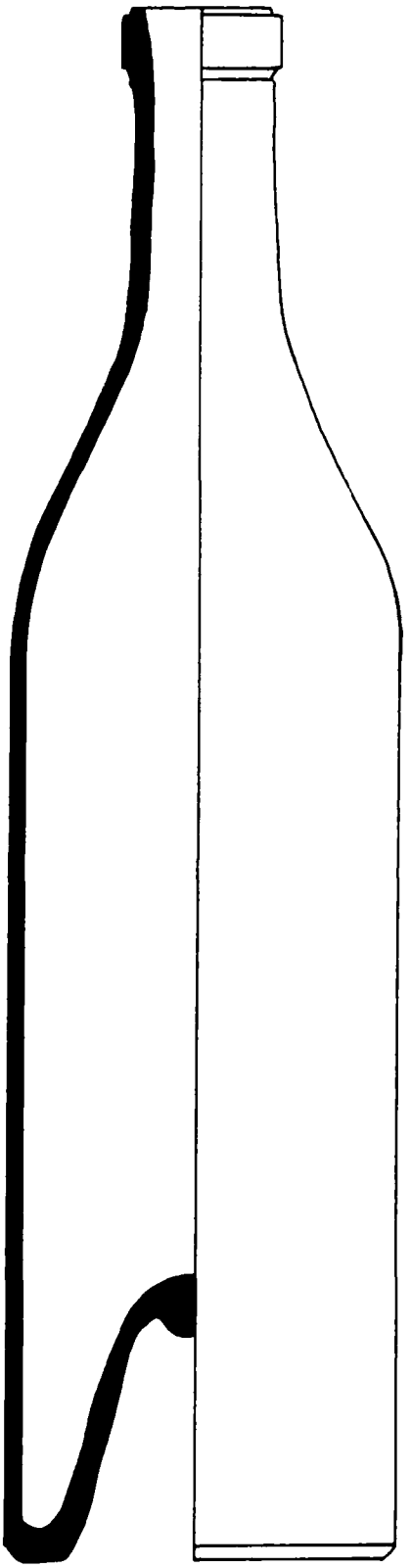
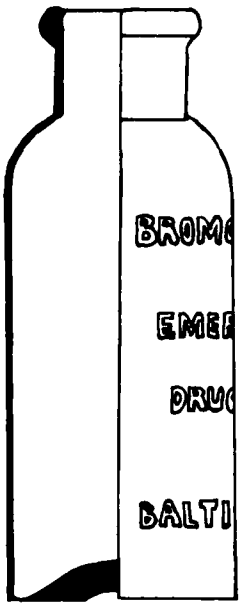


Fig. 1 (¾ actual size)



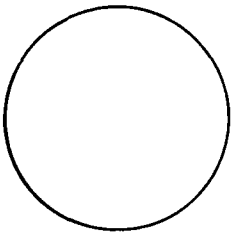
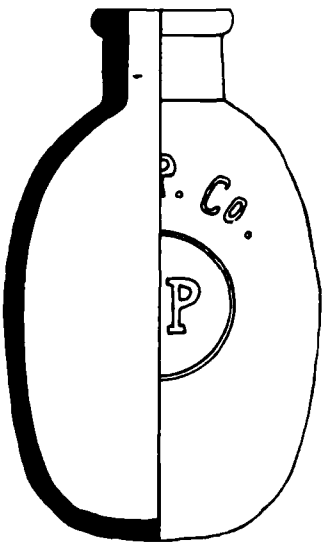


Fig. 2 (½ actual size)



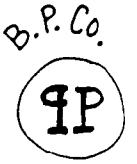
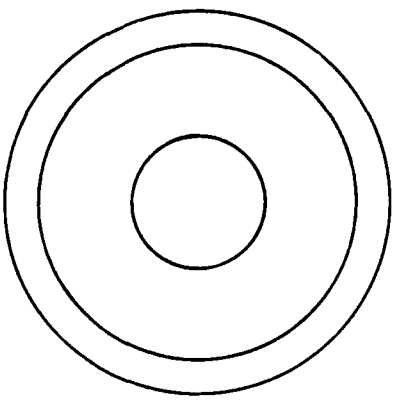


Fig. 3 (actual size)



fragment of a prima oval (Putnam 1965:25) bottle. The colorless specimen is too fragmentary to determine bottle dimensions or the method of manufacture.
Comments: N/A.

Group Name: Unidentified Single Letter, Manufacturers Marks.
Group Number: 250.
No. of Specimens: 57 fragments.
Color of Specimens: 57 not recorded.
No. of Individual(s) Represented: 57.
No. of Individual Shapes Represented: 57 not recorded.
Base Diameter: N/A.
Height: N/A.
Associated Marks/Labels: 8 of the specimens are embossed across the bases with "A". Two specimens are embossed across the bases with "B". Two specimens are embossed across the bases with "C". One specimen is embossed across the base with "D". One specimen is embossed across the base with "E". Six specimens are embossed across the bases with "G". Twenty specimens are embossed across the bases with "H". One specimen is embossed across the base with "J". Five specimens are embossed across the bases with "K". One specimen is embossed across the base with "L". One specimen is embossed across the base with "P". Two specimens are embossed across the bases with "S". One specimen is embossed across the base with "T". Three specimens are embossed across the bases with "W". Three specimens are embossed across the bases with "X".
Product Name: 57 unknown.
Location of Product Manufacturer: 57 unknown.
Date of Product Manufacturer: 57 unknown.
Container Manufacturer Name: 57 unknown.
Location of Container Manufacturer: 57 unknown.
Date of Container Manufacturer: 57 unknown.
Description: The specimens in this group consist of those fragments which exhibit single letter manufacturer's marks which have not been identified via the resources available.
Comments: N/A.

Group Name: Unidentified Specimens.
Group Number: 252.
No. of Specimens: 743 fragments.
Color of Specimens: 743 not recorded.
No. of Individual(s) Represented: unknown.
No. of Individual Shapes Represented: unknown.
Base Diameter: no measurements taken.
Height: no measurements taken.
Associated Marks/Labels: not recorded.
Product Name: unknown.
Location of Product Manufacturer: unknown.
Date of Product Manufacturer: unknown.
Container Manufacturer Name: unknown.
Location of Container Manufacturer: unknown.
Date of Container Manufacturer: unknown.
Description: not recorded.
Comments: N/A.

Location of Container Manufacturer: 1 unknown.
Date of Container Manufacturer: 1, 1880-1910.
Description: The Zemmer Company bottle fragments include a body fragment of a square bottle. The colorless specimen is too fragmentary to determine bottle dimensions. The bottle was, however, probably hand finished with a lip which accommodated a cork stopper closure.
Comments: The Zemmer Company began to manufacture chemicals in 1905 (Pittsburgh and Allegheny Directory 1905:1679). The company is listed in the City Directories in 1954 (Polk's Pittsburgh Directory 1954:1562).

Group Name: ZHONGIVA.
Group Number: 244.
No. of Specimens: 10 fragments.
Color of Specimens: 10 colorless.
No. of Individual(s) Represented: 3.
No. of Individual Shapes Represented: 3 round.
Base Diameter: (3) 6.3 cm.
Height: 3 unknown.
Associated Marks/Labels: Embossed across the body of this cylindrical bottle is "Zhongiva (diagonally)", in script style lettering.
Product Name: 3 ZHONGIVA.
Location of Product Manufacturer: 3 unknown.
Date of Product Manufacturer: 3 unknown.
Container Manufacturer Name: 3 unknown.
Location of Container Manufacturer: 3 unknown.
Date of Container Manufacturer: 3, 1903-1920.
Description: The ZHONGIVA bottle fragments include base/body fragments of at least 3 round bottles which increase in diameter from the base to the shoulder. The colorless bottles have basal diameters of 6.3 cm. They were manufactured by machine exhibiting cut-off scars and seam lines extending up their bodies from basal edge lines. ZHONGIVA bottles are represented among the whole bottles by specimen 8704-1.
Comments: N/A.

Group Name: ..., 506 MARKET STREET.
Group Number: 184.
No. of Specimens: 1 fragment.
Color of Specimens: 1 colorless.
No. of Individual(s) Represented: 1.
No. of Individual Shapes Represented: 1 prima oval.
Base Diameter: 1 unknown.
Height: 1 unknown.
Associated Marks/Labels: Embossed down the front of the prima oval is "...506 MARKET ST./PITTSBURG, PA.". Embossed across the base is a triangle containing a "J" (group 090).
Product Name: 1 unknown.
Location of Product Manufacturer: 1 Pittsburgh, Pennsylvania.
Date of Product Manufacturer: 1 unknown.
Container Manufacturer Name: 1 The J. T. and A. Hamilton Glass Company.
Location of Container Manufacturer: 1 Pittsburgh, Pennsylvania.
Date of Container Manufacturer: 1, 1900-1943.
Description: The ...506 MARKET STREET bottle fragments include a body

3. As a beverage, the number of liquor bottles is surpassed in the assemblage only by fresh beverage bottles. This relatively large number of bottles and short lag times can be interpreted as reflecting a behavior pattern in which the residents of Neville House enjoyed liquor and drank it frequently. Another interpretation may reflect national consumption patterns. The mean manufacturing date for the liquor bottles is 1921. Residents during this period of temperance movements may have found it necessary to use and discard liquor containers much more quickly than in post-prohibition years; this, in order to comply with social pressures.

Except for the liquor category, the fresh beverages have the shortest lag time. This confirms Hypotheses 1, 2, and 3. Milk and juice would be expected to have short lag times because of the fear of contamination and spoilage. Absence of refrigeration would shorten the lag even further. Carbonated beverages such as sodas and mineral waters would have had to have been consumed soon after bottling because of loss of carbonation (Ibid: 296).

The beer bottles also confirm Hypotheses 1, 2, and 3, if we discount their longer lag over the liquor bottles on the reasons explained above.

Wine bottles have the longest lag at 36AL29 and, therefore, confirm all three hypotheses. There are only two wine bottles of the same type represented in the GMM assemblage. It would be erroneous to suggest such a small sample is indicative of patterns reflected by all of the wine bottles over the entire site. However, Hill explains the lengthy lags of wine bottles on sites primarily due to the process of aging in wine production (Ibid: 297).

The Personal Care and Domestic Care categories have combined lags which confirm all three hypotheses. The shorter lag of personal care products can be explained by a higher frequency and popularity of these products than with domestic care products.

Food containers have lags which confirm Hypotheses 1 and 2. The only divergence is from Hypothesis 3 in which food should have a shorter lag than liquor. The short lag of the liquor category has been explained above.

The medicinal category represents the most frequent artifact category with a minimum of 383 bottles represented. A lag time of 66 years confirms Hypotheses 1 and 2 for this category. Medicines generally had no requirement for freshness and, therefore, should have had a longer lag than for food containers but shorter than for wine bottles (Ibid: 297). In relation to frequency of use, the GMM medicinal containers reflect a more frequent use and greater popularity of products used to treat digestive disorders. Products such as BELL-ANS (group 016), BROMO-SELTZER (group 024), BROMOLITHIA (group 023), CITRATE OF MAGNESIA (group 043), CRISWELL'S BROMOPEPSIN (group 052), and MILK OF MAGNESIA (group 152), account for at least 89 bottles dating to the early twentieth century. This high frequency of medicinal products does not support the third hypothesis, but again can be explained by behavioral patterns.

The importance and use of trade networks can also be studied via the GMM assemblage. For this purpose, the research strategy designed by William H. Adams for Silcott, Washington, was used. Neville House, however, was in almost an exact opposite situation as Silcott. By being located only ten miles from a major urban center, the community of Bridgeville had access to many businesses which were available to Silcott residents only on a long distance basis (Adams 1976:99). On a larger scale, Bridgeville was closer to other major commercial centers in the eastern United States.

Again, the functional aspect of each container is an important factor in relation to the distance products were transported. It is outside the scope of this report to discuss the influence of various modes of transportation on the economy of Bridgeville. However, it must be assumed that during the early years of the twentieth century the railroad was the most effective form of long-distance transportation with automobiles becoming increasingly more important. Lack of quick transportation would place a reliance on local manufacturers to supply Neville House residents with perishable items. The relationship between distance and freshness is clearly illustrated by Figures 35 to 39.

Eleven categories of distance were defined (1-100 mile radius, 101-300 mile radius, 301-500 mile radius, etc.). All of the distances were linear and, therefore, not exact in terms of actual road or track mileage. However, "It is axiomatic that the shortest route is generally the most economic one" (Ibid: 100).

Fresh beverages have the strongest associations to local manufacturers with 56% of the products originating 100 miles or less from Bridgeville. Food products which were also affected by freshness, had the largest percentage of their manufacturers operating from within a 100-mile radius. The number of manufacturers decreases as linear distance increases.

Another factor influencing the interplay of distance and product consumption would be advertising. Whether by word of mouth or newspaper, biases would have tended to favor local manufacturers. The introduction of media such as radio and television would have greatly expanded the market to include national products.

Domestic care and personal care products were not affected by freshness. Just as this factor was related to rather long Manufacture-deposition lags, it is also related in terms of linear distance. The majority of the products were manufactured at distances between 101 and 500 miles away. A few products were manufactured as far away as Europe. These products were mostly cosmetic items whose points of distribution in the United States were port cities such as New York and Philadelphia (within radii of 300 miles).

Medicinal products, likewise, have the majority of their manufacturers outside of the 100-mile radius. There was, however, a relatively large percentage of local manufacturers. Again, local advertisements of various "cure-alls" and "pain-killers" would create a

large market for local druggists and pharmacies such as D. M. Bennett (group 017) or The May Drug Company (group 146). Chronic medical problems of certain residents of Neville House may also have been responsible for reliance on local druggists. Common sense in these cases would dictate the use of medicinal products which could have been gotten regularly, readily, and without travelling long distances. Conversely, products used to treat minor illnesses such as headaches or upset stomaches could be chosen with less regard to distance.

SUMMARY

Via the application of various research strategies, the analysis of the GMM category clearly reflects particular behavioral patterns among certain residents of Neville House during a, mainly, twenty-year time span. The calculation of median dates for each functional category suggests that the largest percentage of 36AL29 was deposited between 1911 and 1930. During these years, a notable high frequency of liquor and medicinal containers were deposited. This can be explained in at least two ways. First, certain residents of Neville House may have suffered from chronic medical disorders which required treatment via various "cure-alls" and "pain-killers". In this capacity, alcohol might have been considered for medicinal purposes. Secondly, residents might have been very fond of alcoholic beverages. In order to avoid prohibition laws and social enforcement of temperance, residents might have exploited the high alcoholic content of the various "cure-alls" and "pain-killers". Possibly, one gets the feeling that certain residents of Neville House found welcome relief in products such as BROMO-SELTZER or MILK OF MAGNESIA on those "mornings after"!

The GMM assemblage also demonstrates the interplay of freshness, product popularity, and behavioral patterns with the period of time a container occupied the various stages of its life (Manufacture-deposition lag). Freshness, product popularity, and behavioral patterns were also factors involved in the transport of goods to the community of Bridgeville as well as the distance travelled by Neville House residents to purchase goods outside of Bridgeville.

Finally, a major and somewhat presumptive assumption has to be made in order to accept these interpretations. The assumption is that the deposits composing 36AL29 (primarily) represent dumping episodes of Neville House residents and not those of neighbors or transients. It must also be kept in mind that the GMM assemblage does not compose the entire glass assemblage of this site. However, because it represents the largest number of glass containers, this analytical category is most representative of the glass containers throughout 36AL29. Also, as with most archeological sites, the Neville House midden was subjected to disturbance and looting by bottle collectors.

TABLE I

Products' Name/Container Manufacturer	# of Spec	# of Indiv Forms	Functional Category	Location of Product/ Container Manufacturer	Median Date
ABSORBINE JR.	14	8	Medicinal	Springfield, MA	1912
ACME SHOE DRESSING	8	3	Domestic Care	Philadelphia, PA	1890
American Bottling Company	7	7	Container Manufacturer	Chicago, IL	1911
Unidentified Ammonia Bottles	2	1	Domestic Care	Unknown	--
Anchor Hocking Glass Corporation	6	6	Container Manufacturer	Lancaster, OH	1959
Armour and Company	9	7	Consumables	Chicago, IL	1917
Armstrong Cork Company	4	4	Container Manufacturer	Lancaster, PA	1954
Atlas Glass Company	88	10	Consumables	Washington, PA Wheeling, WV	1930
Ayer/Harriet Hubbard Ayer	11	6	Personal Care	New York	1895
Ball Brothers/Ball Corporation	25	7	Consumables	Muncie, IN	1936
BARTON'S DYANSHINE	3	2	Domestic Care	Unknown	1912
Bayer Aspitin	5	1	Medicinal	Hudson, NY	1947
J. W. Beardsley's Sons	31	5	Consumables	New York	1909
Beech Nut Packing Company	14	10	Consumables	Canajoharie, NY	1930
BELL ANS/PA-PAY-ANS	47	19	Medicinal	Orangeburg, NY	1936
D. M. Bennett	6	2	Medicinal	Bridgeville, PA	1919
BILLY BAXTER	67	17	Beverage	Pittsburgh, PA	1928
Henry C. Blair	7	3	Unidentified	Philadelphia, PA	1895
BOURJOIS	1	1	Personal Care	Unknown	1912
B. P. Company	2	2	Medicinal	Unknown	1900
Bridgeville Dairy	21	7	Beverage	Bridgeville, PA	1912
Brockway Glass Company	4	4	Container Manufacturer	Brockway, PA	1956
BROMOLITHIA	190	17	Medicinal	Philadelphia, PA	1902
BROMO-SELTZER	803	35	Medicinal	Baltimore, MD	1943
BRUCE'S	4	2	Unidentified	Unknown	1922
BUCINE	17	5	Medicinal	Unknown	1895
Buck Glass Company	5	5	Container Manufacturer	Baltimore, MD	1935
J. C. Buffum Company	45	8	Beverage	Pittsburgh, PA	1884
BURNETT'S STANDARD FLAVORING EXTRACTS	23	5	Consumables	Boston, MA	1895
J. E. Burns and Company	4	3	Unidentified	Philadelphia, PA	1895
Busch Glass Manufacturers	2	1	Beverage	St. Louis, MO	1906
CALIFORNIA FIG SYRUP	81	17	Medicinal	San Francisco, CA	1903
California Perfume Company	1	1	Consumable	California	1895
CANADA DRY GINGER ALE	3	2	Beverage	New York	1954
CARBOLINE FOR THE HAIR	1	1	Personal Care	San Francisco, CA	1896
CARBONA	10	5	Personal Care	Unknown	1912
Carr-Lowry Glass Company	8	8	Container Manufacturer	Baltimore, MD	1926
CARTER'S	22	13	Domestic Care	Cambridge, MA	1915
CHAMBERLAIN'S COLIC, CHOLERA, AND DIARRHOEA REMEDY	16	2	Medicinal	Des Moines, IA	1903
CHAMBERLAIN'S COUGH REMEDY	2	1	Medicinal	Des Moines, IA	1903
CHAMBERLAIN'S PAIN BALM	2	1	Medicinal	Des Moines, IA	1903
CHESEBROUGH VASELINE	30	8	Personal Care	Chesebrough, NY	1932
CITRATE OF MAGNESIA	21	8	Medicinal	Unknown	1895

Products' Name/Container Manufacturer	# of Spec	# of Indiv Forms	Functional Category	Location of Product/ Container Manufacturer	Median Date
CLIQUOT CLUB	4	1	Beverage	Unknown	1913
Coca Llewellyn	5	2	Beverage	Philadelphia, PA	1898
COCA MARIANI	10	1	Beverage	Paris, France	1870
COKE DANDRUFF CURE	2	2	Personal Care	Unknown	1895
Colgate and Company	10	5	Personal Care	New York	1885
Perfumers					
Consolidated Fruit Jar Company°	9	3	Consumables	New Brunswick, NJ	1877
Coty	5	2	Personal Care	France	1941
CREOMULSION	3	2	Medicinal	Unknown	1912
Crescent Bottle Works	3	2	Container Manufacturer	McDonald, PA	1930
CRISWELL'S BROMOPEPSIN	3	3	Medicinal	Unknown	1890
CROFT'S MILK COCOA	3	1	Consumables	Philadelphia, PA	1917
Crown Perfumery	4	2	Personal Care	London, England	1892
Cunninghams and Company	1	1	Container Manufacturer	Pittsburgh, PA	1893
D. O. Cunningham Glass Company	4	4	Container Manufacturer	Pittsburgh, PA	1910
Cupples Company	2	1	Consumables	Illinois	1936
THE CUTICURE SYSTEM OF CURING CONSTITUTIONAL HUMORS	6	2	Medicinal	Boston, MA	1895
CU-VEL	1	1	Unidentified	Unknown	1912
PAGGETT AND RAMSDELL'S COLD CREAM	39	15	Personal Care	Unknown	1917
"DEAD STUCK" FOR BUGS	2	1	Domestic Care	Philadelphia, PA	1900
G. M. Hays Deeme	5	3	Unidentified	Atlantic City, NJ	1895
Dennisons Adhesives	1	1	Domestic Care	Unknown	1895
Diamond Glass Company	12	11	Container Manufacturer	Royersford, PA	1952
DIAMOND MONOGRAM PURE WHISKEY	1	1	Beverage	Maryland	1870
DILLS FAMILY EXTRACTS	12	3	Medicinal	Norristown, PA	1895
DIOXOGEN	10	4	Medicinal	Unknown	1912
Dominion Glass Company	1	1	Container Manufacturer	Montreal, Canada	1946
DRAKE'S PLANTATION BITTERS	13	1	Medicinal	Unknown	1870
Dram Bottles	15	13	Medicinal	Unknown	1930
EAGLEBRAND NOVA	6	1	Personal Care	Unknown	1941
Eastman Chemicals	5	3	Domestic Care	Rochester, NY	1900
ECLIPSE FRENCH SATIN GLOSS	1	1	Domestic Care	Unknown	1895
EDLIS	1	1	Unidentified	Unkonwn	1912
EL CAYA	46	11	Personal Care	New York	1917
ELY'S CREAM BALM	1	1	Medicinal	Owego, NY	1885
EVERETT & BARRON SHOE POLISHES	10	4	Domestic Care	Providence, RI	1917
Fairmont Glass Works	13	13	Container Manufacturer	Indianapolis, IN Fairmont, IN	1933
FELLOW'S COMPOUND SYRUP OF HYPOPHOSPHITES	14	4	Medicinal	St. John, New Brunswick	1895
FLEISCHMANN'S GIN	10	3	Beverage	Unknown	1954
Joseph Fleming and Sons	34	8	Medicinal	Pittsburgh, PA	1911

Products' Name/Container Manufacturer	# of Spec	# of Indiv Forms	Functional Category	Location of Product/ Container Manufacturer	Median Date
Fort Pitt Brewing Company	2	1	Beverage	Sharpsburg, PA	1947
Henry Fruecht	14	4	Beverage	Carnegie, PA	1918
W. J. Gilmore and Company	1	1	Domestic Care	Pittsburgh, PA	1895
Glenshaw Glass Company	1	1	Container Manufacturer	Glenshaw, PA	1956
GLOVER'S IMPERIAL MANGE MEDICINE	20	3	Domestic Care	New York	1898
GLYCEROLE	2	1	Medicinal	Unknown	1890
GLYCO-THYMOLINE	44	16	Medicinal	Unknown	1900
Golden Wedding Whiskey	27	1	Beverage	Schenley, PA	1930
GORDON'S DRY GIN	35	3	Beverage	London, England	1925
GRANER'S	1	1	Unidentified	Unknown	1890
Great A & P Tea Company	11	4	Consumables	Jersey City, NJ New York, NY	1895
Gregg and Company	3	3	Container Manufacturer	England	1953
HAGEE'S CORDIAL OF THE EXTRACT OF COD-LIVER OIL COMPOUND	2	1	Medicinal	St. Louis, MO	1895
HALES HONEY OF HOREHOUND AND TAR	2	1	Medicinal	New York	1895
J. T. and A. Hamilton Company	38	38	Container Manufacturer	Pittsburgh, PA	1914
Henry Hamma	3	1	Beverage	Carnegie, PA	1880
Hardy Prescription Druggist	4	2	Medicinal	Carnegie, PA	1895
HARRIS BLUING	6	2	Domestic Care	Unknown	1890
HARRIS PURE FLAVORS	31	10	Consumables	Binghampton, NY	1900
HATHORN SPRINGS	4	1	Beverage	Saratoga, NY	1878
Hazard, Hazard and Company	2	1	Unidentified	New York	1895
Hazel-Atlas Glass Company	50	44	Container Manufacturer	Wheeling, WV	1942
Heck's Pharmacy	11	4	Medicinal	Pittsburgh, PA	1901
hHeidenreich Drugs	2	2	Medicinal	Pittsburgh, PA	1935
H. J. Heinz Company	93	65	Consumables	Pittsburgh, PA	1936
A. H. Heisey Glass Company	3	3	Container Manufacturer	Newark, OH	1929
HELLMANN'S	10	6	Consumables	Unknown	1945
HERBO-PHOSATE	3	1	Domestic Care	Providence, RI	1912
HIND'S HONEY AND ALMOND CREAM	8	4	Personal Care	Bloomfield, NJ Portland, ME	1909
HIRES ROOT BEER/EXTRACT	57	8	Beverage	Philadelphia, PA	1917
JOHANN HOFFS MALT EXTRACT	3	1	Medicinal	Berlin, Germany	1885
HOOD'S SASPARILLA	2	1	Medicinal	Binghampton, NY	1895
HORLICK'S MALTED MILK	30	8	Consumables	Racine, WI	1906
Joseph Horne Company	2	2	Unidentified	Pittsburgh, PA	1895
Richard Hudnut	17	9	Personal Care	New York	1912
Humphreys	3	3	Personal Care	New York	1912
C. Ihmsen and Sons	3	1	Container Manufacturer	Pittsburgh, PA	1873
Illinois Glass Company	50	50	Container Manufacturer	Several	1901
IMPERIAL AMMONIA	9	2	Domestic Care	Unknown	1870
Independent Brewing Company	3	2	Beverage	Pittsburgh, PA	1912
Iron City Chemical Company	18	7	Domestic Care	Pittsburgh, PA	1901

Products' Name/Container Manufacturer	# of Spec	# of Indiv Forms	Functional Category	Location of Product/ Container Manufacturer	Median Date
DR. JAYNE'S EXPECTORANT	1	1	Medicinal	Philadelphia, PA	1886
KEMP'S BALSAM FOR THROAT AND LUNGS	39	9	Medicinal	Leroy, NY	1905
DR. KILMERS SWAMP ROOT REMEDY	20	5	Medicinal	Binghampton, NY	1905
Kilmer Brothers Limited	1	1	Container Manufacturer	England	1905
Kirkpatrick and Company	1	1	Consumables	Pittsburgh, PA	1895
Knox Glass Bottle Company	1	1	Container Manufacturer	Knox, PA	1946
The Larkin Company	5	5	Personal Care	Buffalo, NY	1890
LARVEX	2	2	Medicinal	Unknown	1935
LAVORIS	43	15	Personal Care	Minneapolis, MN	1912
LASH'S BITTERS	4	4	Medicinal	New York	1912
LAUREN'S GLASS WORKS	1	1	Container Manufacturer	Laurens, SC	1946
Lederle	2	2	Medicinal	Unknown	1917
LINDSAY'S BLOOD SEARCHER	2	1	Medicinal	Hollidaysburg, PA	1885
LIQUID VENEER	3	2	Domestic Care	Unknown	1895
LISTERINE	66	12	Personal Care	Unknown	1918
Llewellyn	8	3	Unidentified	Philadelphia, PA	1898
LYSOL	1	1	Domestic Care	Bloomfield, NJ	1937
MACLAREN'S IMPERIAL CHEESE	17	9	Consumables	Unknown	1915
MAJOR'S HORSE RADISH	2	1	Consumables	Unknown	1895
Marinello Company	2	1	Personal Care	Unknown	1950
Marion Fruit Jar and Bottle Company	3	1	Consumables	Indiana	1896
MARTINI VERMOUTH	45	5	Beverage	Italy	1941
Maryland Glass Company	3	3	Container Manufacturer	Baltimore, MD	1948
MASON	520	25	Consumables	Unknown	1889
MAX FACTOR	1	1	Personal Care	Hollywood, CA	1917
The May Drug Company	80	22	Medicinal	Pittsburgh, PA	1920
MAY'S DY-IT	3	1	Domestic Care	Pittsburgh, PA	1920
McC & Co. IRON GLUE	1	1	Domestic Care	Baltimore, MD	1912
McCulloch Drug Company	10	5	Medicinal	Pittsburgh, PA	1922
McCully and Company	7	7	Container Manufacturer	Pittsburgh, PA	1859
McKennan Pharmacy	45	22	Medicinal	Pittsburgh, PA	1915
MENTHOLATUM	43	11	Medicinal	Unknown	1917
MILK OF MAGNESIA	124	7	Medicinal	Glenbrook, CT	1912
FRANK MILLER'S CROWN	8	5	Domestic Care	New York	1885
Millville Bottle Works	1	1	Container Manufacturer	Millville, NJ	1917
MISSION DRY SPARKLING/ MISSION ORANGE DRY	14	8	Beverage	Unknown	1924
MISTOL	9	8	Personal Care	Unknown	1901
Moone Chemical Company	16	5	Medicinal	Rochester, NY	1912
MOONES EMERALD OIL	1	1	Medicinal	Rochester, NY	1912
Moore and McCormick Chemists	1	1	Medicinal	Baltimore, MD	1880
H. K. Mulford Co. Chemists	1	1	Medicinal	Philadelphia, PA	1890
MUM	5	4	Personal Care	Philadelphia, PA	1941
Mutual Union Brewing Company	2	1	Beverage	Aliquippa, PA	1930
A. NICHOLSON MINERAL WATER	16	1	Beverage	Pittsburgh, PA	1850

Products' Name/Container Manufacturer	# of Spec	# of Indiv Forms	Functional Category	Location of Product/ Container Manufacturer	Median Date
North British Bottle Manufacturing Company	1	1	Container Manufacturer	Scotland	1920
NOXZEMA	1	1	Personal Care	Unknown	1955
Unidentified Nursing Bottles	1	1	Consumables	Unknown	1898
Obear-Nester Glass Company	7	7	Container Manufacturer	East St. Louis, MO	1947
O-Cedar	9	6	Domestic Care	Unknown	1912
OLD WITCH	4	1	Beverage	Unknown	1912
J. M. OLINS STOMACH BITTERS	4	1	Medicinal	Pittsburgh, PA	1870
OLYMPIA PINT	2	1	Unidentified	Unknown	1912
OMEGA OIL	2	1	Medicinal	New York	1912
OVOFERRIN	2	2	Unidentified	Unknown	1895
Owens Bottle Company	65	45	Container Manufacturer	Toledo, OH Fairmont, WV	1920
Owens Illinois Glass Company	79	64	Container Manufacturer	Several	1954
Pacific Coast Glass Company	1	11	Container Manufacturer	San Francisco, CA	1928
PADDEN	2	1	Beverage	Pittsburgh, PA	1887
PAINES CELERY COMPOUND	13	5	Medicinal	Burlington, VT	1872
PARAGON	2	2	Unidentified	Unknown	1895
Parke, Davis, and Company	2	2	Medicinal	Unknown	1927
...J. Parker Pray	1	1	Personal Care	New York	1912
Patent Numbers, Mold Numbers, Graduations, Etc.	589	585	Unidentified	Unknown	--
PEE CHEE	1	1	Unidentified	Cleveland, OH	1912
Pennsylvania Glass Products Company	2	2	Medicinal	Pittsburgh, PA	1954
PEPSI COLA	4	2	Beverage	New York, NY	1965
PEPTO MANGAN (GUDE)	19	5	Medicinal	Unknown	1912
PEPTONOIDS	5	1	Medicinal	Yonkers, NY	1912
Unidentified Perfume Bottles	3	3	Personal Care	Unknown	--
Pierce Glass Company	2	2	Container Manufacturer	St. Marys, PA	1911
E. D. Pinaud	14	3	Personal Care	Paris, France	1907
PINKHAMS VEGETABLE COMPOUND	2	1	Medicinal	Lynn, MA	1892
PITCHER'S CASTORIA	14	8	Medicinal	Unknown	1892
PLATTS CHLORIDES	1	1	Domestic Care	Unknown	1890
PLUTO-WATER	3	1	Beverage	French Lick, IN	1917
Polar Water Company	25	8	Beverage	Pittsburgh, PA	1942
POND'S COLD CREAM	12	6	Personal Care	Unknown	1941
POND'S EXTRACT	34	7	Medicinal	Utica, NY	1886
PRETZINGER'S CATARRH BALM	2	1	Medicinal	Dayton, OH	1898
PYREX	1	1	Domestic Care	Corning, NY	1947
RAWLEIGH'S extract	4	3	Medicinal	Freeport, IL	1908
Reed Glass Company	1	1	Container Manufacturer	Rochester, NY	1942
Reizenhauser Distillery	1	1	Beverage	Pittsburgh, PA	1900
Resinol Chemical Company	2	2	Personal Care	Baltimore, MD	1941
RIDGWAYS ACME LINIMENT	3	1	Medicinal	Hydetown, PA	1895
Rieck's Dairy	16	5	Beverage	Pittsburgh, PA	1931
L. ROSE & CO.	5	1	Unidentified	England	1895

Products' Name/Container Manufacturer	# of Spec	# of Indiv Forms	Functional Category	Location of Product/ Container Manufacturer	Median Date
ROYAL LUNCHEON CHEESE	8	4	Consumables	Unknown	1915
Abner Royce Company	16	5	Consumables	Cleveland, OH	1912
RUBIFOAM	1	1	Personal Care	Lowell, MA	1895
S.A.C.I.V. S.p.A.	2	2	Container Manufacturer	Italy	1979
Saegertown Bottling Works	3	1	Beverage	Saegertown, PA	1940
DR. SAGES CATARRH REMEDY	1	1	Consumables	Buffalo, NY	1892
SANFORD ink	2	2	Domestic Care	Chicago, IL	1890
SANITOL	25	7	Personal Care	Unknown	1890
SAUER'S EXTRACTS	3	2	Consumables	Unknown	1912
SAXLEHNER'S HUNYADI JANOS	7	3	Beverage	Budapest, Hungary	1882
Wm. Schmider	5	2	Beverage	Carnegie, PA	1917
SCOTT'S EMULSION	6	1	Medicinal	New York	1885
Seville Packing Company	11	4	Consumables	New York	1895
Sharpe and Dohme	1	1	Medicinal	Baltimore, MD	1912
DR. DIEGERT & SONS ANGOSTURE BITTERS	2	1	Medicinal	Unknown	1917
SLOAN'S LINIMENT	1	1	Medicinal	Boston, MA	1895
Southern Glass Company	12	6	Container Manufacturer	Vernon, CA	1924
Squibb	3	2	Medicinal	Brooklyn, NY	1919
B. F. STINSON & CO. EASY BRIGHT	14	7	Domestic Care	Buffalo, NY	1916
STRONTIUM PARAF-LAVAL	10	2	Medicinal	Unknown	1912
TALCOLETTE	4	3	Personal Care	Baltimore, MD	1941
THOMAS ECLECTIC OIL	2	1	Medicinal	Unknown	1898
THREE IN ONE OIL	9	4	Domestic Care	New York, NY	1912
Turner Brothers Company	6	6	Container	Terre Haute, IN	1922
UNION MADE	3	2	Beverage	Unknown	1895
United Drug Company	8	8	Medicinal	Unknown	1920
United Glass Glass Containers Limited	2	1	Container Manufacturer	United Kingdom	1946
VALAZE	1	1	Personal Care	Unknown	1941
VAT 69 SCOTCH WHISKEY	2	1	Beverage	Leith, Scotland	1946
VICI LEATHER DRESSING	4	2	Domestic Care	Philadelphia, PA	1890
VICKS VAPORUB	19	17	Medicinal	Unknown	1941
VINOL	2	2	Beverage	Unknown	1904
WALKER'S GRAPE JUICE	9	5	Beverage	North East, PA	1922
Henry K. Wampole & Company	3	1	Medicinal	Philadelphia, PA	1912
William R. Warner & Co.	1	1	Medicinal	Philadelphia, PA	1930
WARNER'S SAFE KIDNEY AND LIVER CURE	29	2	Medicinal	Rochester, NY	1879
Wellcome Chemical Works	1	1	Domestic Care	Unknown	1941
T. C. Wheaton Glass Company	3	3	Container Manufacturer	Millville, NJ	1934
Whitall Tatum	69	55	Container Manufacturer	Millville, NJ	1938
WHITE CROSS CREAM	2	1	Personal Care	Cleveland, OH	1941
WHITE HOUSE VINEGAR	1	1	Consumables	Unknown	1912
Whitney Glass Works	1	1	Container Manufacturer	Glassboro, NJ	1919
WHITEMORE FRENCH GLOSS	3	2	Domestic Care	Boston, MA	1920
WISHART'S PINT TREE TAR CORDIAL	13	1	Medicinal	Philadelphia, PA	1870

Products' Name/Container Manufacturer	# of Spec	# of Indiv Forms	Functional Category	Location of Product/ Container Manufacturer	Median Date
WRIGHT'S SILVER CREAM	3	2	Domestic Care	Keene, NH	1950
Wyeth and Bro.	28	15	Medicinal	Philadelphia, PA.	1910
Zemmer Company	1	1	Medicinal	Pittsburgh, PA	1908
ZHONGIVA	10	3	Unidentified	Unknown	1912
...506 MARKET STREET	1	1	Medicinal	Pittsburgh, PA	1922
Unidentified Single Letter Manufacturers' Marks	57	57	Unidentified	Unknown	--
Unidentified Specimens	743	unk	Unidentified	Unknown	--

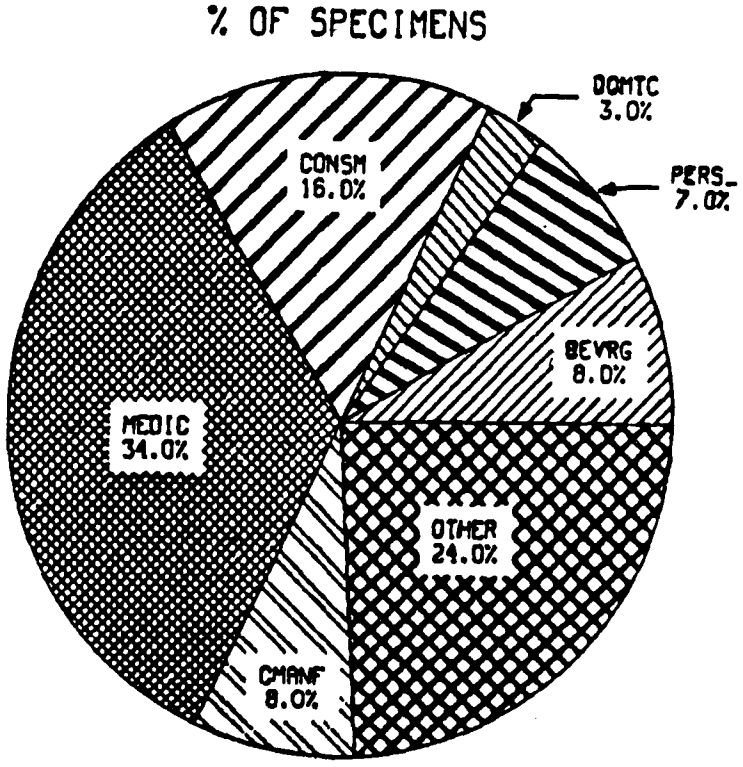


Figure 29. Percentage of specimens by functional categories

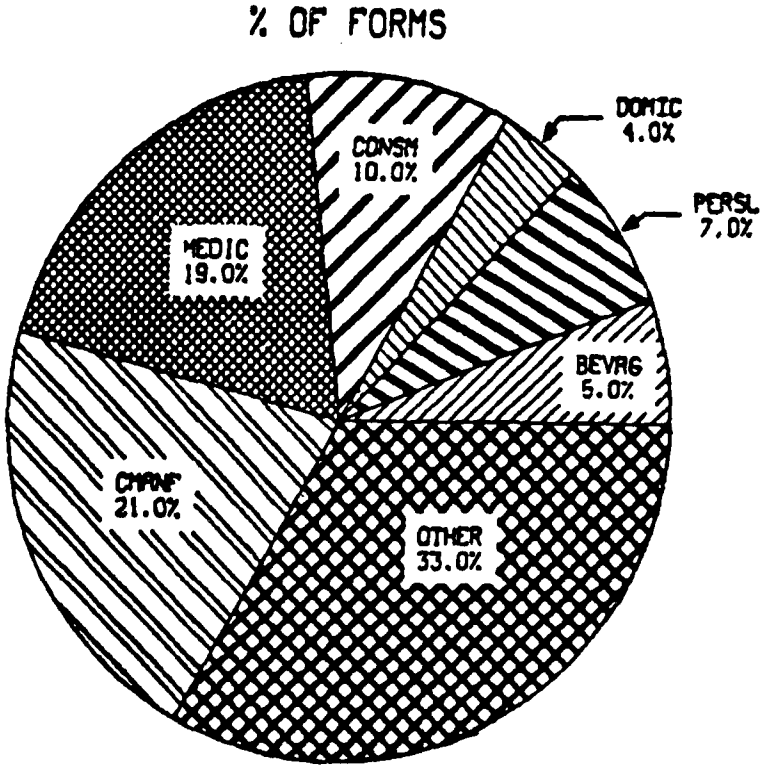


Figure 30. Percentage of Form counts by functional categories

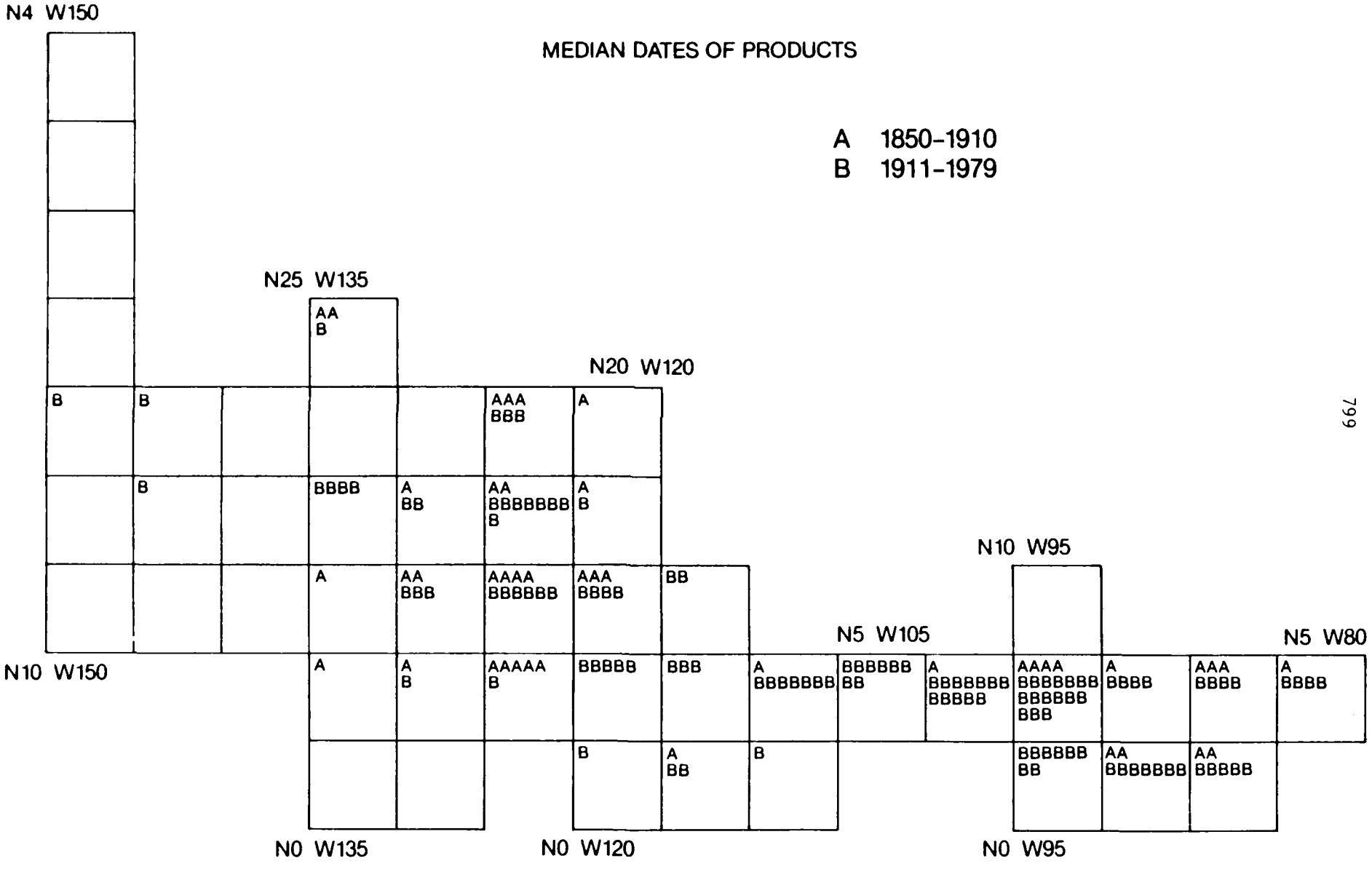

MEDIAN DATES OF PRODUCTS
A 1850-1910
B 1911-1979
N4 W150
N25 W135
N20 W120
N10 W95
N5 W105
N5 W80
N10 W150
N0 W135
N0 W120
N0 W95
AA
B
B
B
AAA
BBB
A
B
B
BBBB
A
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Figure 31

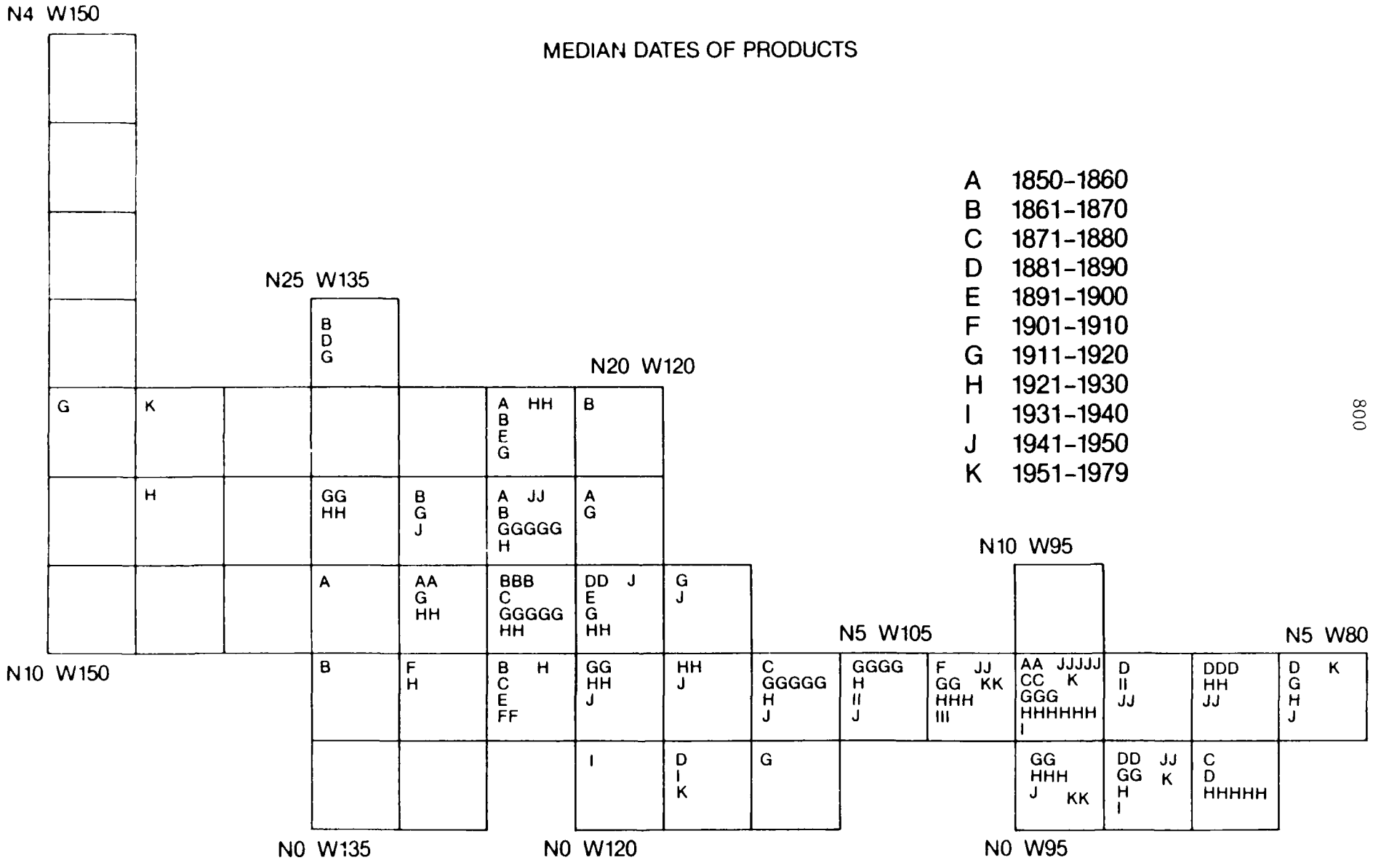

MEDIAN DATES OF PRODUCTS
A 1850-1860
B 1861-1870
C 1871-1880
D 1881-1890
E 1891-1900
F 1901-1910
G 1911-1920
H 1921-1930
I 1931-1940
J 1941-1950
K 1951-1979
N4 W150
N25 W135
N20 W120
N10 W95
N5 W105
N5 W80
N10 W150
N0 W135
N0 W120
N0 W95

Figure 32

MISCELLANEOUS ARTIFACTS

by

Robert Winter, Deborah Casselberry and James B. Richardson III

The primary focus of the in-depth analysis of the artifact categories was upon the ceramic and the glass container assemblages, since these are the most prevalent and datable of the categories. The following is a simple description or listing of the remaining artifact categories except for window glass. The miscellaneous category was divided into 8 subcategories as follows:

Subcategory 1: Lighting devices
- Group 1. Lamps
- Group 2. Lamp globes and shades
- Group 3. Lamp chimneys

Subcategory 2: Glass closures
- Group 1. Fruit jar cap liners, cap inserts and caps
- Group 2. Glass Canning Jar Lids and Liners
- Group 3. Stoppers

Subcategory 3: Glass Personal and household items
- Group 1. Personal items
- Group 2. Vases
- Group 3. Medical items
- Group 4. Electrical items
- Group 5. Miscellaneous items

Subcategory 4: Glass Kitchen items
- Group 1. Bowls and custards
- Group 2. Ordinary water glasses
- Group 3. Miscellaneous utensils

Subcategory 5: Glass dining table and place settings items
- Group 1. Glass stemwares
- Group 2. Cups and tumblers
- Group 3. Pitchers, creamers and sugar bowls
- Group 4. Dishes
- Group 5. Castor and cruet bottles
- Group 6. Auxiliary items

Subcategory 6: Doll Fragments

Subcategory 7: Miscellaneous metal items listed by FC number

Subcategory 8: Engraved window glass

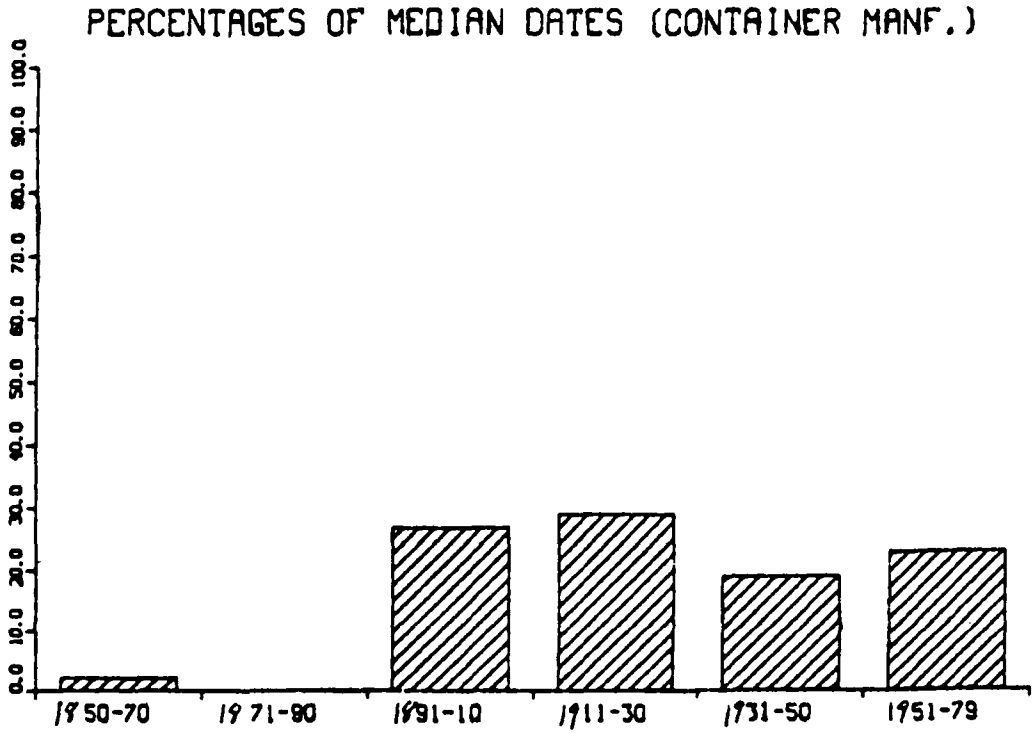


Figure 45. Percentage of median dates: Container manufacture

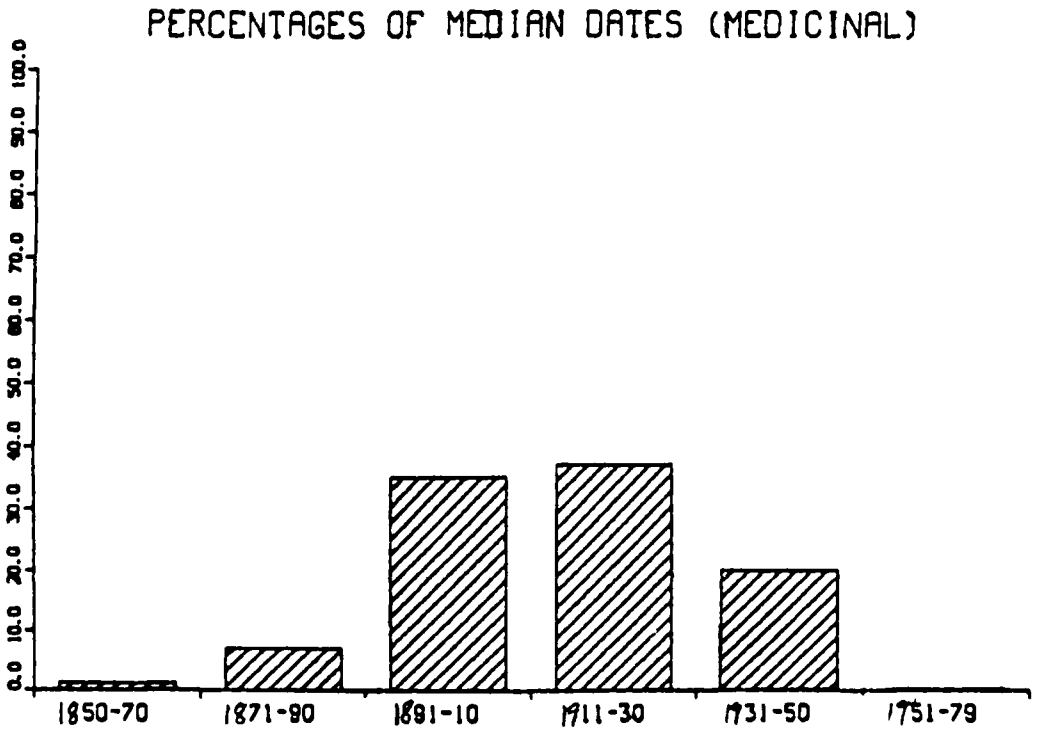


Figure 44. Percentage of median dates: Medicinal

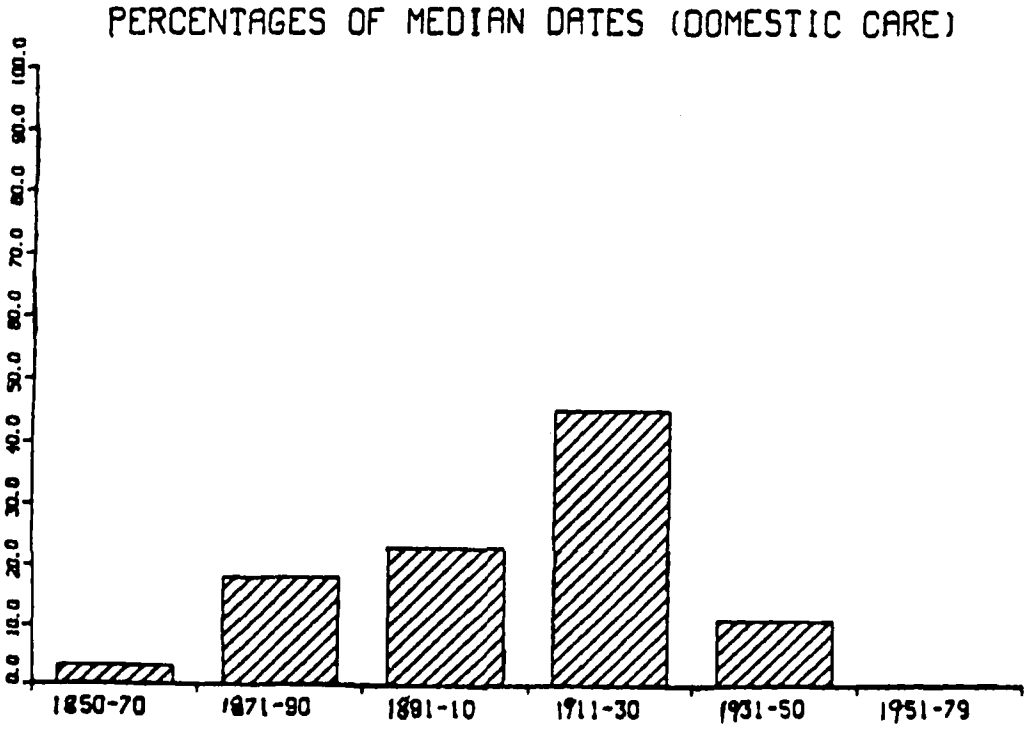


Figure 43. Percentage of median dates: Domestic Care

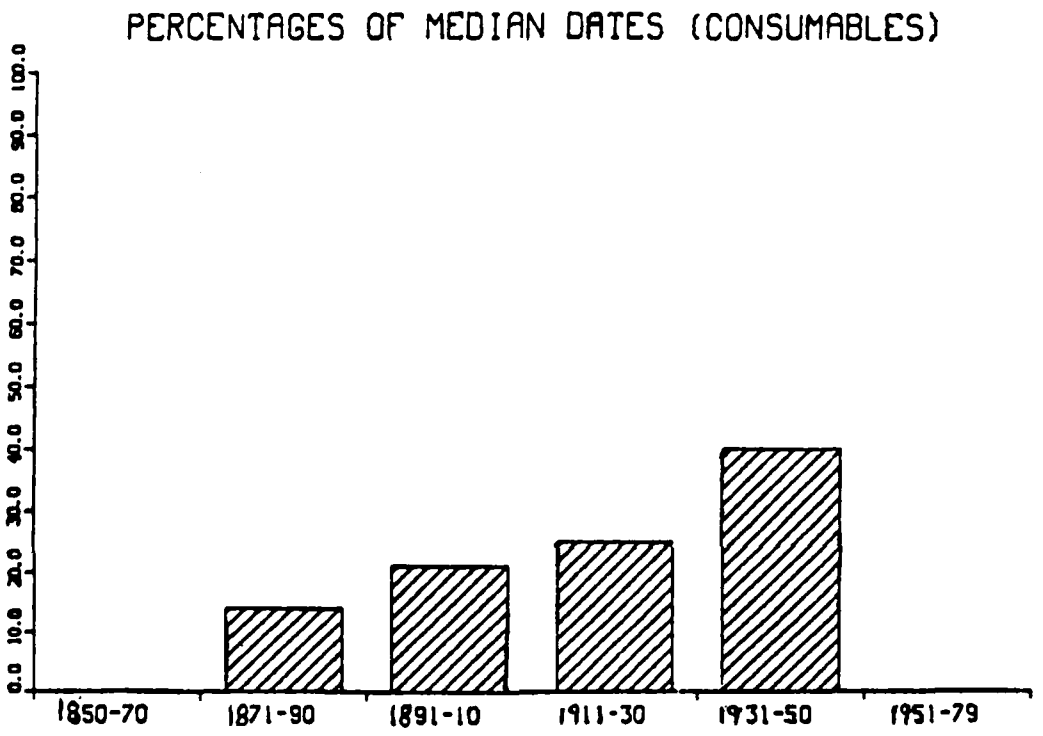


Figure 42. Percentage of median dates: Consumables

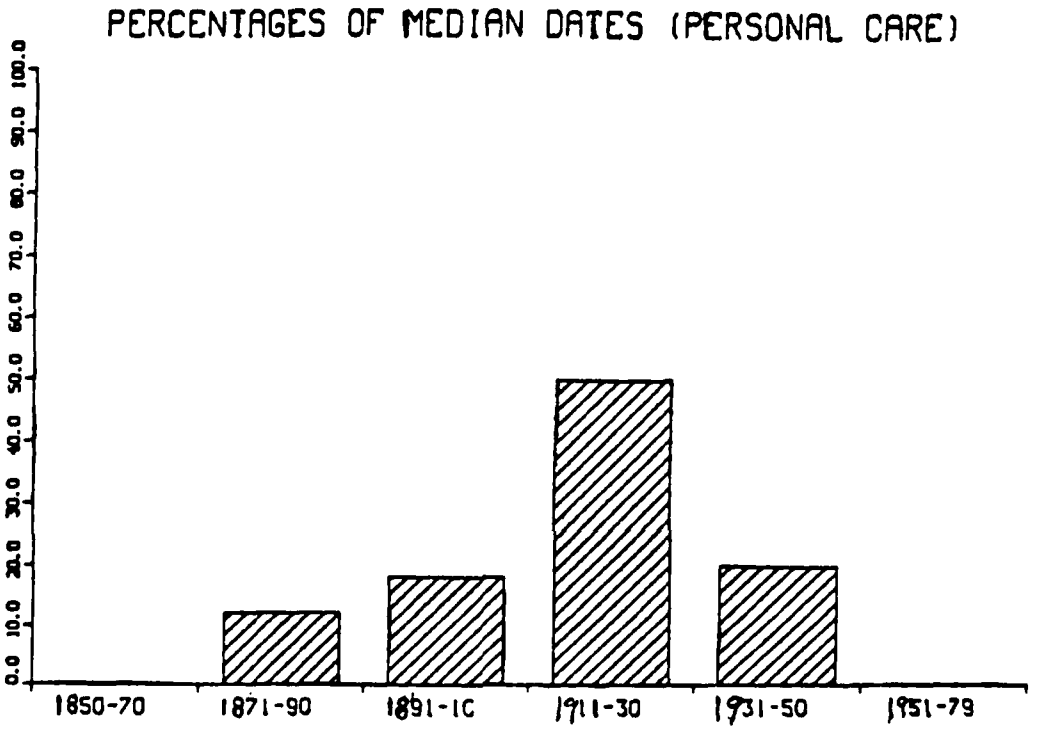


Figure 41. Percentage of median dates: Personal Care

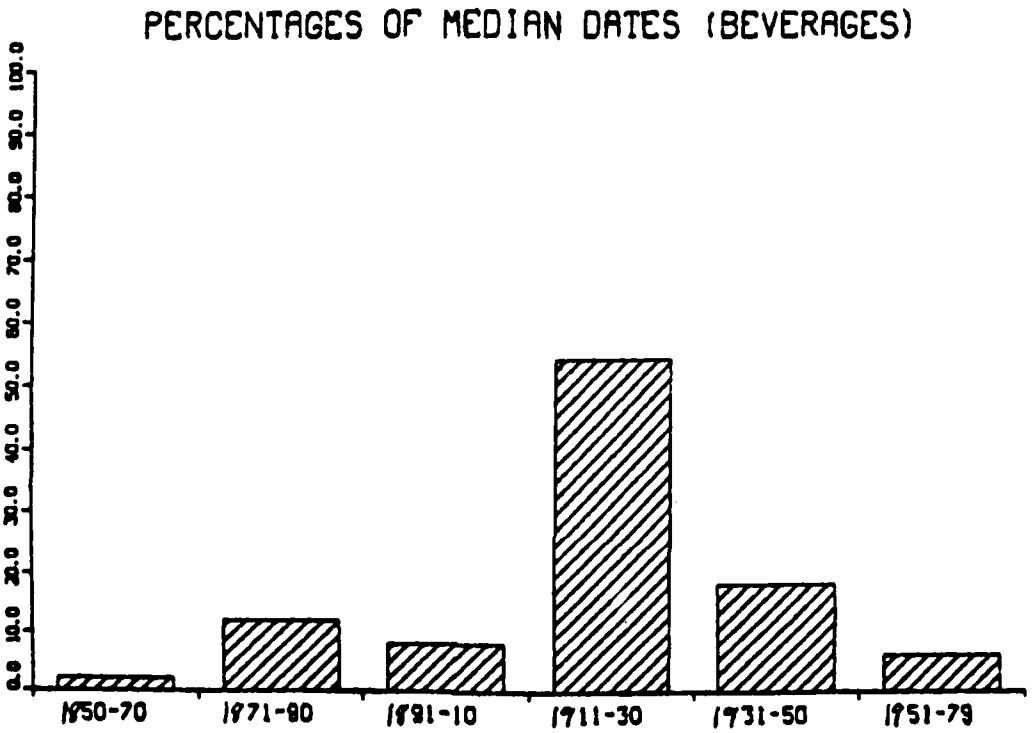


Figure 40. Percentage of median dates: Beverages

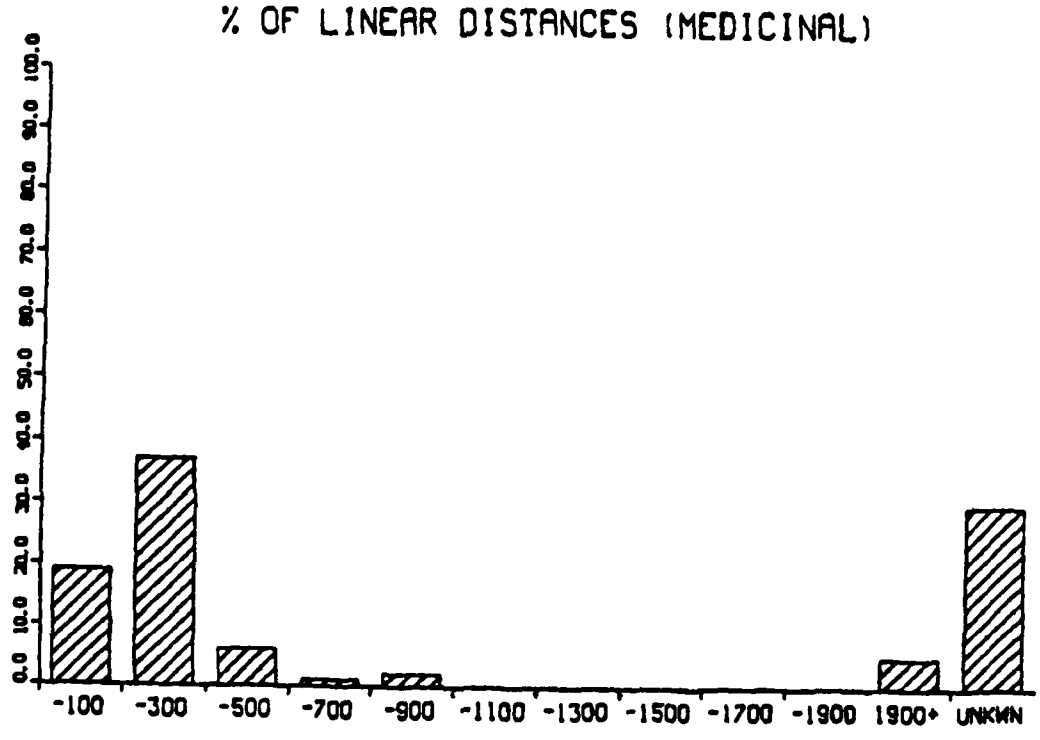


Figure 39. Relationship between distance and freshness

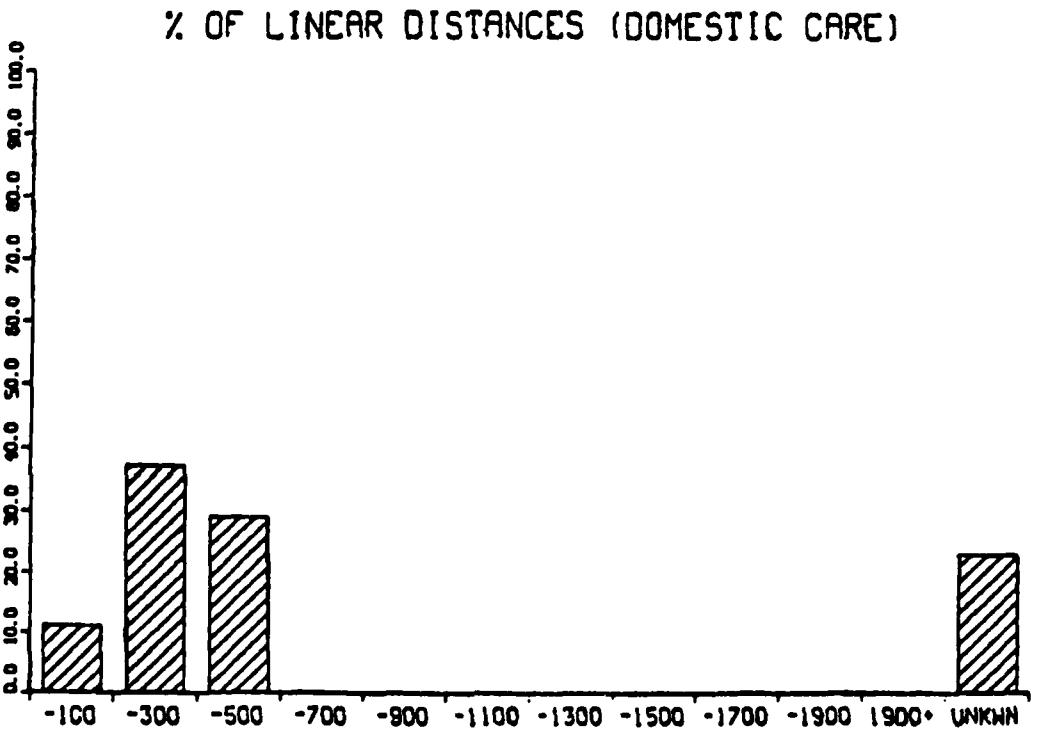


Figure 38. Relationship between distance and freshness

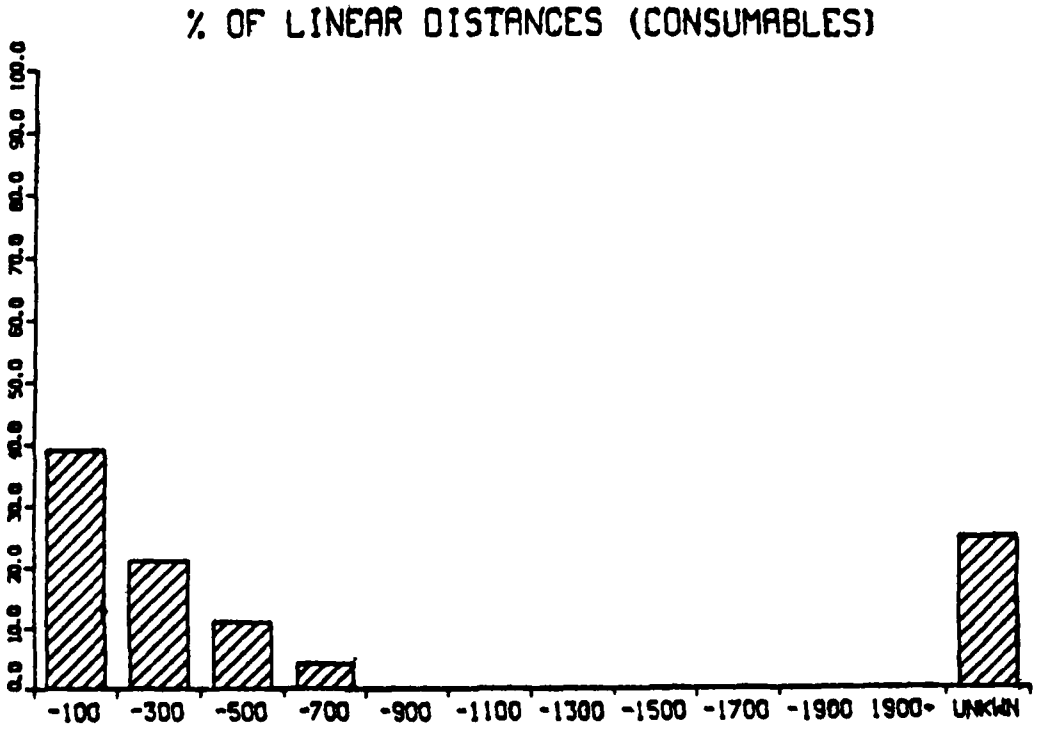


Figure 37. Relationship between distance and freshness

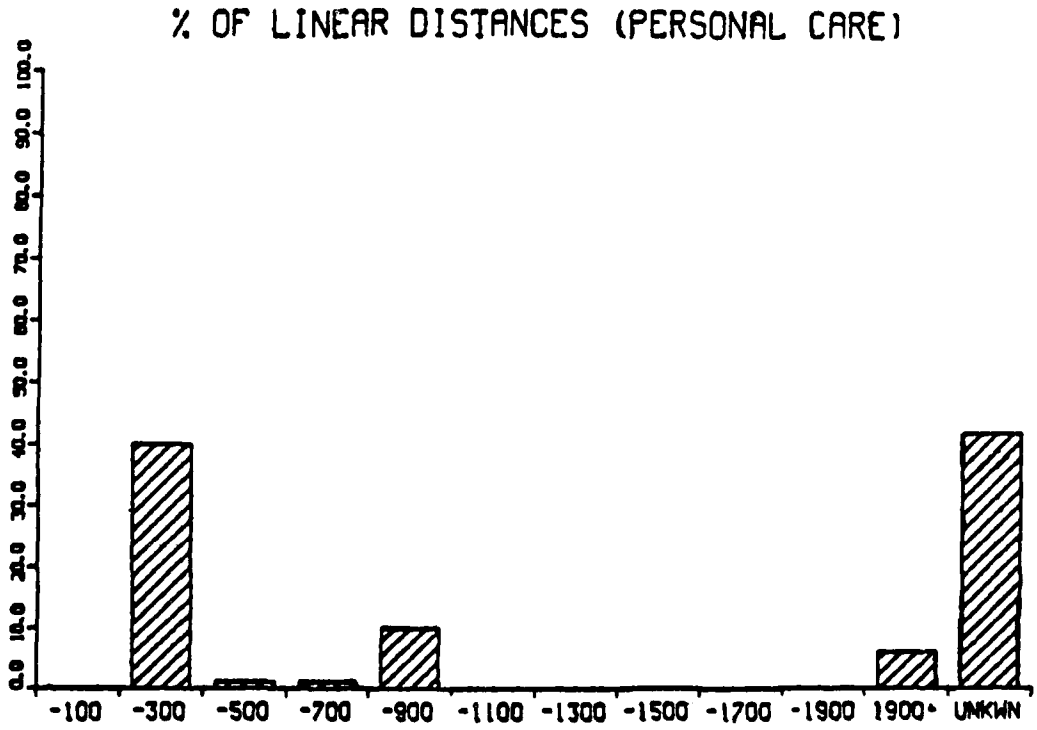


Figure 36. Relationship between distance and freshness

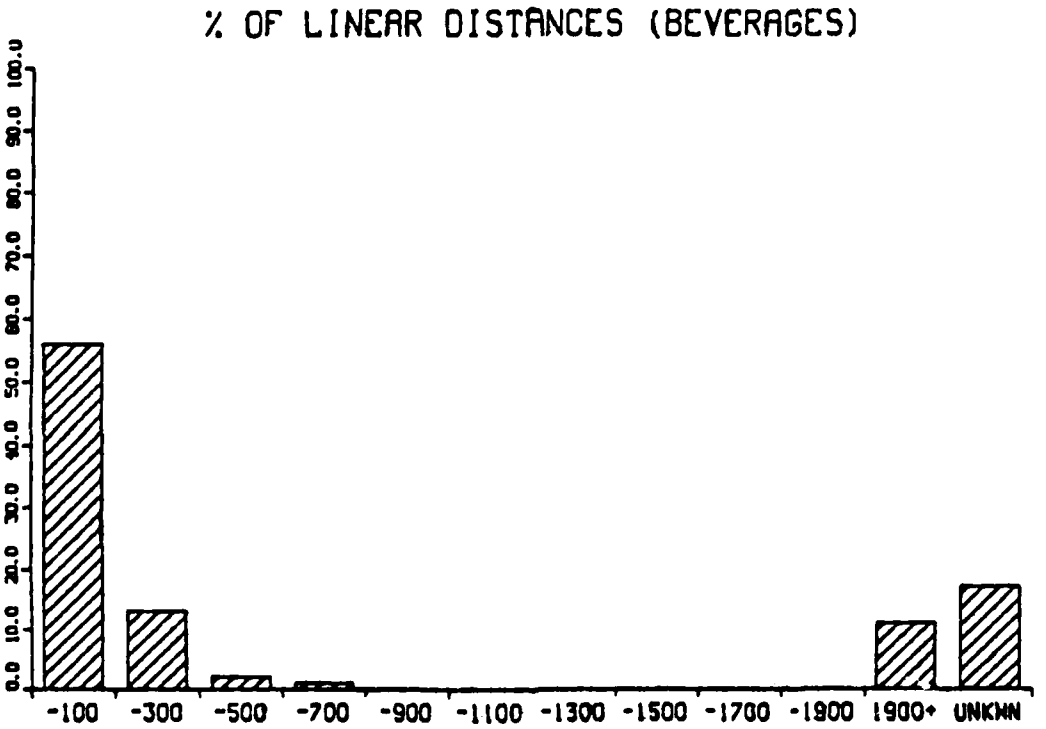


Figure 35. Relationship between distance and freshness

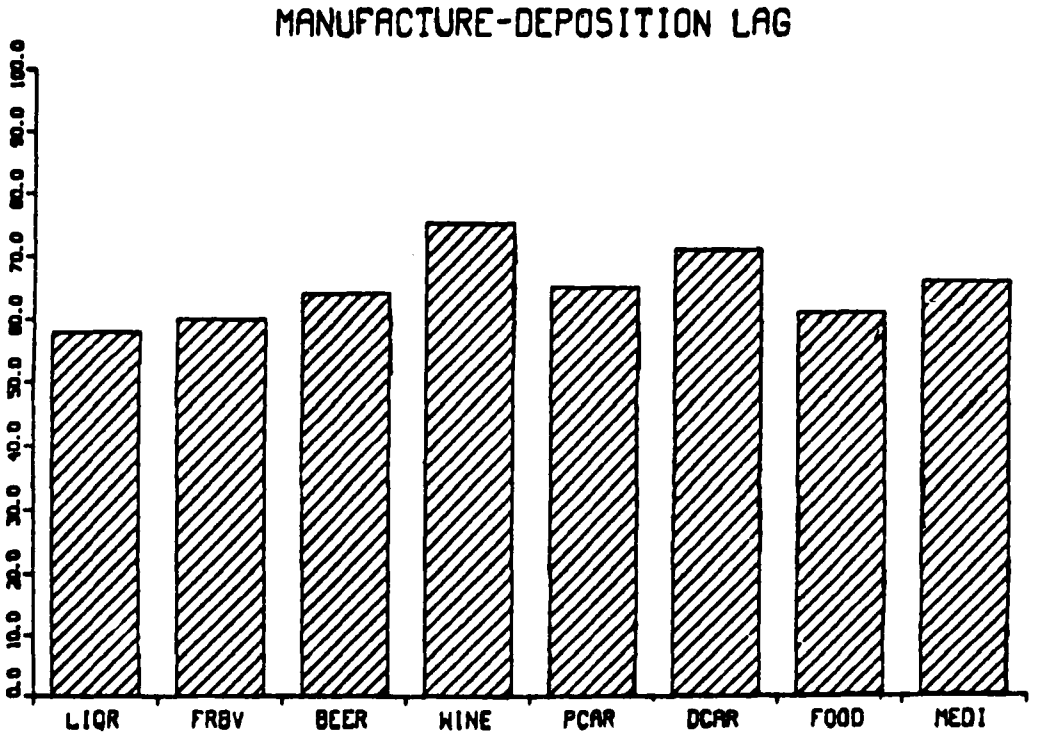


Figure 34. Differential lag between functional categories

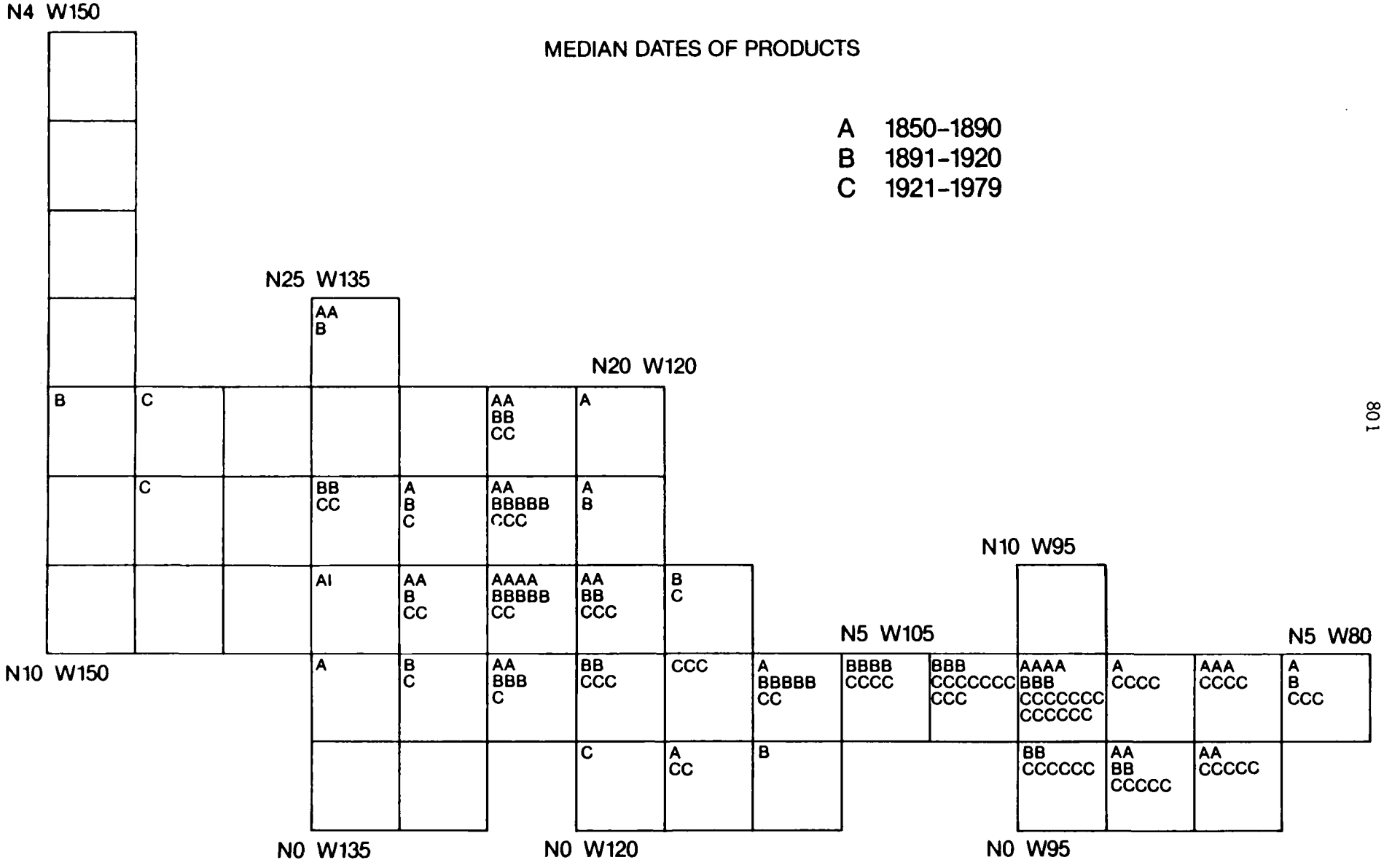

MEDIAN DATES OF PRODUCTS
A 1850-1890
B 1891-1920
C 1921-1979
N4 W150
N25 W135
N20 W120
N10 W95
N5 W105
N5 W80
N10 W150
N0 W135
N0 W120
N0 W95

Figure 33

SUBCATEGORY 1 LIGHTING DEVICES

GROUPS 1 through 3

Lighting for illumination began with the use of candles, to followed by whale oil, various burning fluids, kerosene, gas, and electricity. All of the lighting devices from Neville House are either kerosene or electric light fixtures.

Kerosene was patented in the U.S.A. in 1854 by Abraham Gesner. Pittsburgh soon became a major center of the production of glass lamps and glass chimneys. The chimney was developed by the Fort Pitt Glass Company in 1861. They were made with a mold seam until after 1875, when Atterbury patented a process to produce them without seams. Also in 1875, Paul Zimmerman patented a machine for the fluting or crimping of chimney tops. Pittsburgh produced 16,200,000 chimneys in 1878, with a value of $600,000 (Innes 1976:317).

There are three manufacturers marks on 18 of the glass chimneys. Fourteen were manufactured by the MacBeth Company of Pittsburgh. There are two types of MacBeth marks represented: MacBeth, Pearl Top, Pittsburgh, Pa., U.S.A. in a circle, and MacBeth Pearl Glass in two parallel rows. Each of the MacBeth chimneys has the size number on it (12, 32, or 49). There is a single piece with (Tho)s Evans & Co. (P)uritan, Best Glass in a shield. Thomas Evans was the owner of Evans, Sell and Company, afterwards called the Evans and Company and finally the Crescent Works. The company was established in 1869 and moved to Chicago in 1878, returning to Pittsburgh a year later (ibid:76). The third mark is Moon, for which we have no information.

The remaining glass lamp parts are shades, fonts, and bases of kerosene lighting devices. None of these pieces have any manufacturers marks on them. There is one example of a font with a peg base which could be placed in a candlestick or on a stand and this type was transitional to the development of fonts with their own bases. This specimen may date to the 1860's.

It is clear that the lighting devices further substantiate the late 19th and early 20th century date for the midden contents. There are 204 chimney tops (21 frosted smooth tops, 70 frosted ground tops, 45 clear smooth tops, 24 clear ground tops, 19 leaded tops, and 15 crimped tops) representing a minimum number of 37 chimneys. Four hundred thirty-three fragments of frosted (260), clear glass (57), and frosted and clear (116) chimney bodies were recovered. Seventy-two pieces were decorated with fleur-de-lis (19), diaper and floral motifs (15), bands (3), dogs (2), ribs and flutes (3), leaves (4), pineapple and floral (3), face (1), bee (1), and miscellaneous floral.

Eighteen chimney bodies had applied manufacturers marks, 14 from MacBeth, 1 Evans and Company, 1 Moon, and 2 with the letter B (see previous page).

There are 1716 lampshade fragments of which all but 59 (clear glass) are decorated (etched, cut, and pressed) with floral, geometric,

circles, Greek Key motifs, or dots. The color of the shade fragments include milkglass (137), pink (17), or green (121), with the rest a combination of frosted and clear glass. There are 27 font openings and it is estimated that there are fragments of a minimum of 86 shades based on design and color.

There are only 2 lamp bases and 51 globe fragments represented. The one blue peg lamp (11 fragments) is hand blown and is the only lighting device that may date prior to the 1870's. There are no candlesticks in the assemblage; again pointing up the late 19th and early 20th century date for the midden.

SUBCATEGORY 2 GLASS CLOSURES

GROUP 1: Fruit Jar Cap Liners, Cap Inserts, and Caps

There are 377 whole or fragments of fruit jar glass cap liners, cap inserts and glass caps. These were subdivided into subgroups and varieties. All are examples of the pressed glass process of manufacture. (See also chapter on Glass Jars and Rims.).

Subgroup 1 Boyd glass lid liners associated with John Mason and Consolidated Fruit Jar Company.

1.1 "Genuine Body Cap for Mason Jars." Opaline glass, probably manufactured at John Mason's Manufacturing Company, Spring Street, New York City from 1869 to 1871. Boyd patented the glass lid liner for screw cap fruit jars on March 30, 1869. John Mason, whose fruit jars up until then sealed with an unlined zinc screw cap, sought and was granted a license to produce these Boyd liners for his lids. In effect this saved the Mason jar, for prior to glass lid liners Mason had been losing business due to food contamination from unlined metal lids. 3 whole, 17 fragments.

1.2 "Consolidated Fruit Jar Company New York". Opaline glass manufactured at the Consolidated Factory in New Brunswick, New Jersey, 1871-1882. In 1871 John Mason, Lewis Boyd, B.W. Payne, and the Jersey City Glass Works combined to form the Consolidated Fruit Jar Company, using Mason's Manufacturing Company in New York as the front office. Consolidated never made fruit jars, these being provided by the Clyde Glass Works, Clyde, New York. The only glass items manufactured by Consolidated were the opaline lid liners of Boyd. 1 whole, 6 fragments.

1.3 "Porcelain Lined Cap for Mason Jars". Opaline glass probably manufactued at Consolidated Fruit Jar Company's New Brunswick, New Jersey works, 1876-1882. Lewis Boyd never referred to his liners as "porcelain". This word was the advertising gimmick used by Salmon Rowley, head of the Hero Fruit Jar Company, a serious competitor of Consolidated. Boyd had also licensed Hero to produce glass liners before he became a partner in Consolidated. The Hero jars had previously been closed with an all glass lid.

They were much more popular than Mason jars with unlined lids. Rowley's subsequent word change in his advertising pushed Hero Sales ahead of Consolidated. In order to recoup, Consolidated began their own porcelain lined advertising. It was to no avail, and in 1882 Hero Fruit Jar Company took over Consolidated. 1 whole, 1 fragment.

Subgroup 2 Boyd glass lid liners associated with Hero Fruit Jar Co.

2.1 "----T Jar Company ----PA" Opaline glass, manufactured at the Hero Fruit Jar Company's Philadelphia works or the Hitchen's Glass Works, Lockport, New York (from 1869 to 1882 for the Philadelphia works and from 1869 to 1872 for the Hitchen's works). The Hero Fruit Jar Company of Philadelphia, Pennsylvania started out as the Hero Glass Works. After taking over Consolidated Fruit Jar Co. in 1882, Hero reorganized into the Hero Fruit Jar Co. At this time they began marking all their wares with a new company logo, that of a cross shaped similiar to a Maltese Cross. In 1884 the letters H, F, J and CO were added, one to each arm of the cross. 1 fragment.

2.2 "--UIT JAR CO.---CELAIN LINING" Opaline glass, a variation of variety 2.1 same manufacturing data. 1 fragment.

2.3 "Genuine Porcelain Lined" with Hero cross and HFJ Co in arms of cross. Opaline and milk glass, manufactured at the Hero Fruit Jar Company's Works, Philadelphia, Pa., from 1884 to 1909. The earliest glass lid liners were made of an opaline glass that was whitish light green and swirled. Later the liners were produced in milk glass, either opaque or with a slight bluish tinge. These run the gamet from opaline to opaque white. It seems that Salmon Rowley never agreed to have Boyd's name placed on the glass lid liners produced by Hero. It is possible that he wanted the buying public to disassociate the glass liners from Boyd and the Consolidated Fruit Jar Company. 13 fragments.

2.4 "The Hero Fruit Jar Company Phila., Pa" with Hero cross and HFJ Co. in arms of cross. Milk glass, a variation of variety 2.1, same manufacturing data. This particular item is an example of a lid liner produced for the midget pints. It is only 5 cm in diameter, as opposed to the standard 6.5 cm diameter of most regular fruit jar mouths. 1 whole.

Subgroup 3 Boyd glass lid liners, manufacturer unknown. All made of opaque milk glass, none of opaline glass. In 1874 John Mason's original patent for screw thread fruit jars expired and became public domain. During the 1880's there was a stampede of large and small independent glass makers to produce "Mason Jars". Most if not all, had nothing to do with Mason and Boyd's Consolidated Fruit Jar Company. Consolidated never made jars, but still produced the zinc lids and glass liners until the takeover in 1882 by Hero. These lids and liners were sold to anyone. After 1882 Hero also produced lids and liners to be sold independantly. By the 1890's many other fruit jar companies were producing Boyd

glass lid liners. The following are examples of these liners, probably manufactured from 1880 to 1940 by various companies.

By 1940 the glass lined zinc lid closure had seen its heyday. In 1915 Alexander Kerr patented the screw band and enameled metal lid with attached rubber sealing ring. This two pieced metal closure would fit any standard size screw top fruit jar of the "Mason" class. Being cheaper and easier to use, it gradually replaced the glass lined zinc lid. At the beginning of World War II zinc was a stategic metal and then in short supply. Manufacturers and consumers both turned to the two piece self-sealing lids of Kerr.

3.1 "Boyds Genuine Porcelain Lined Cap" 5 whole, 21 fragments.

3.2 "Boyds Genuine Porcelain Lined" F whole, 99 fragments.

3.3 "Boyds Genuine Porcelain Lined" Examples of midget pint lid liners, 1 whole, 4 fragments.

3.4 139 fragments of the unembossed portions of milk glass lid liners. Probably most, if not all, of these are Boyd liners.

Subgroup 4 "Genuine-----for Ball Mason Jar". A partial fragment that would have read "Genuine Porcelain Lined". Milk glass, manufactured at the Ball Brothers Company in Muncie, Indiana from 1888 to 1940 for Ball Mason and Ball Perfect Mason Jars. 1 fragment.

Subgroup 5 "Genuine Boyds' Cap for a Mason Jar" with the Hover A Hazel-Atlas trademark. Milk glass, manufactured by the Hazel-Atlas Glass Company, Wheeling, West Virginia, from 1900 to 1940. The Hazel-Atlas Company first made opaline liners from 1886 to approximately 1900. 2 whole, 2 fragments.

Subgroup 6 A milk glass lid liner with a stylized floral design. Manufacturer unknown. 5 fragments.

Subgroup 7 "Mason's Improved Pat. May 10, 1870" Clear glass cap manufactured by Consolidated Fruit Jar Company, New Brunswick, New Jersey. This item was the glass insert portion of a two part lid. This insert covered the mouth of the jar and a metal screw band held the insert in place. This sealing system was John Mason's most reliable invention and eventually supplied the impetus for Alexander Kerr's 1915 invention that is still in use today. 1 whole, 2 fragments.

Subgroup 8 "Presto to open insert knife at notch". Clear glass insert to be held in place by a metal screw band. Manufactured by the Owens Illinois Glass Co., Toledo, Ohio from 1929 to 1946. Used in conjunction with Presto and Presto Supreme Jars. 2 whole.

Subgroup 9 Clear glass inserts to be held in place by a metal screw band of various sizes. Maker unknown, probably manufactured

between 1900-1940. A variation on the Mason improved type (Subgroup 7) but not associated with any known manufacturer.

9.1 6 centimeters in diameter 1 whole.

9.2 5.4 centimeters in diameter 1 whole.

9.3 4.2 centimeters in diameter 2 whole.

Subgroup 10 Glass lids held in place by a yoke and toggle method associated with Keifer Jars and John Biesenback, the patenter.

10.1 "Kiefer Patent Pending" A clear glass lid with 4 recessions, 2 to each side, to accommodate the yoke. John Biesenbeck patented the yoke device by which this lid was held to the jar, on Dec. 20, 1870. However, there are no records to indicate who made the jars. 5 whole, 13 fragments.

10.2 "Patented Karl Kiefer" with embossed R. Variation of subtype 10.1 in clear glass. Manufacturer unknown, 1 whole, 1 fragment.

Subgroup 11 "2 pats. Dec.---89". Two fragments of a clear glass jar lid that secured to the jar with a spring wire bail. This was the Barker patent of Dec. 31, 1889. Manufactured by the Canton Glass Co., Canton, Ohio from 1890 to 1894 for use on the Canton Domestic Jar.

Subgroup 12 Glass lids associated with the Atlas E-Z Seal jar. These lids were fastened to the jar by a wire bail of the lightning variety. Manufactured by Hazel-Atlas Glass Co., Wheeling, West Virginia. 1 whole, 2 fragments.

Subgroup 13 Three fragments of a clear glass jar held in place by a wire bail or toggle with a patent date of Nov. 25, 1919. This date is not listed in Toulouse 1969. Manufacturer unknown.

Subgroup 14 Clear glass jar lids held in place by a spring clip. These indented lids are associated with the June 23, 1903 patent of Julius Landsberger. Landsberger sold his patent to Alexander Kerr who used it on his "Economy" line of jars. 4 whole, 3 fragments.

Subgroup 15 Two clear glass fragments of a lid bearing the name Bunt World Famous Candies. This lid is very similar to type 14 and was probably held in place by a Landsberger spring clip. 1903-1920.

Summary

From all indications it would seem that the Neville House occupants perferred to use the screw top Mason type jars with their glass lined zinc lids over any other type of fruit jar. There is an overwhelming majority of glass lid liners verses glass lid inserts or glass lids of any other type (331 items vs. 46 items or 90%). Just

plain glass lids held by a wire bail or metal spring clip account for 37 items only 9% of the total. The remainding 9 items that are glass lid inserts account for 1% of the total. (See also Summary & Conclusions Glass Jars & Rims). This reflects a regional preference. The consumers of New England were much more inclined to use all glass lidded jars than their counterparts in the Mid-Atlantic States.

SUBCATEGORY 2 GLASS CLOSURES

GROUP 2: Glass Canning Jar Lids and Liners

Subgroup 1. Kiefer. Clear glass bail sealer, 1 whole; 1 fragment. Embossed "Patented R Karl Kiefer". Patented Dec. 20, 1870 by Peter John Biesenback. An ornamental three pronged lid holder for the Kiefer Jar. Ca. 1870-1890. (Toulouse 1977:44, 122).

Subgroup 2. Presto. Clear glass canning lid; 1 whole. Embossed "TO OPEN INSERT KNIFE AT KNOTCH (with a directional arrow embossed) PAT.RE. 17562 17". Lid for screw band type Presto canning jar. Ca. 1925-1946. (Ibid:46).

Subgroup 3. Boyd. Milk glass sealing liner; 1 fragment. Embossed "...CELAIN LINING ...UIT JAR. CO.". Boyd type made by Consolidated. (Ibid:139).

Subgroup 4. Boyd. Milk glass sealing liner, 1 whole; 1 fragment. Embossed "PORCELAIN LINED CAP + FOR MASON FRUIT JARS +". Boyd type for Mason. (Ibid:92-3).

Subgroup 5. Unknown. Clear glass bail sealer, 3 fragments. Embossed "PAT NOV 25, 1919.

Subgroup 6. Kiefer. Clear glass bail sealer, 5 whole; 13 fragments. Embossed "KIEFER PATENT PENDING". Pat. Dec. 20, 1870. (See Subgroup 1).

Subgroup 7. Boyd. Milk glass sealing liner, 1 fragment. Embossed "...NUINE PORCELAIN LINE"(all the N's are printed in reverse). Boyd type for Hero. Ca. 1869-1884. (See Subgroup 3).

Subgroup 8. Consolidated. Milk glass sealing liner, 1 whole; 6 fragments. Embossed "CONSOLIDATED FRUIT JAR COMPANY NEW YORK". Boyd type made by Cosolidated. 1871-1882. (Ibid:139).

Subgroup 9. Boyd. Milk glass sealing liner, 5 whole; 21 fragments. Embossed "BOYD'S GENUINE PORCELAIN LINED CAP". (Ibid: 92-3).

Subgroup 10. Mason. Clear glass sealing liner, 1 whole; 2 fragments.

Embossed "MASON'S IMPROVED PATENTED MAY 10, 1870". Mason Improved Jars combined with sealing zinc band. 1870-1880. (Ibid: 50-4).

Subgroup 11. Mason. Milk glass sealing liner, 5 fragments. Embossed "Genuine... FOR BALL MASION JAR". Ball Brothers Buffalo, New York. 1885-1856. (Ibid:6-8, 92-3).

Subgroup 12. Boyd. Milk glass sealing liner, 3 whole; 17 fragments. Embossed "GENUINE BOYD CAP FOR MASON JARS". Boyd Type. 1869-1871. (Ibid:92-3).

Subgroup 13. Hazel Atlas. Milk glass sealing liner, 2 whole; 2 fragments. Embossed "BOYD'S CAP FOR MASON JAR 30 GENUINE", also a H over an A in the center of the cap. Hazel Atlas presses cap inserts for Mason Jars. 1
886-1964. (Ibid:92-3).

Subgroup 14. Boyd. Milk glass sealing liner, 4 whole; 12 fragments. Embossed "BOYD'S GENUINE PORCELAIN LINED". Boyd Type. 1869-present. (Ibid:92-3).

Subgroup 15. Boyd. Milk glass sealing liner, 1 whole; 4 fragments. Embossed "BOYD'S GENUINE PORCELAIN LINED". A Boyd Type for midget pints. 1869-1900. (Ibid:92-3).

Subgroup 16. Hero. Milk glass sealing liner, 13 fragments. Embossed "GENUI... ...LAIN LINED", also the Hero cross with "H", "F", "J", and "Co", embossed in the 4 appendages. Hero's purchase of Boyd's patent. 1884-1909. (Ibid:91).

Subgroup 17. Hero. Milk glass sealing liner, 1 whole. Embossed "THE HERO FRUIT JAR COMPANY PHILA. PA.", the Hero cross is in the center of the cap with the same embossing as Subgroup 16. Hero midget pint. 1884-1909. (Ibid:91).

Subgroup 18. Hero ?. Milk glass sealing liner, 1 fragment. Embossed "...T JAR COMPANY ...A". Probably a Hero liner, Philadelphia, Pa.

Subgroup 19. Unknown. Milk glass sealing liner, 5 fragments. Embossed in the center of the cap is a 8-petaled flower desing with dots between each petal.

Subgroup 20. Unknown. Clear glass bail sealer, 1 whole; 1 fragment.

Subgroup 21. Unknown. Light blue bail sealer, 1 whole.

Subgroup 22. Unknown. Clear glass sealing liner, 1 fragment. Embossed "...(2 PATS) DEC.".

Subgroup 23. Unknown. Clear glass sealing liner, 1 fragment. Embossed "89.M ...".

Subgroup 24. Unknown. Clear glass sealing liner, 1 whole. Unembossed. 6.0 cm in diameter.

Subgroup 25. Unknown. Clear glass sealing liner, 1 whole. Unembossed. 5.3 cm in diameter.

Subgroup 26. Unknown. Clear glass sealing liner, 2 whole. Unembossed. 4.5 cm in diameter.

Subgroup 27. Unknown. Milk glass sealing liner, 10 whole; 221 fragments. Unembossed. (The whole specimens vary in size.)

SUBCATEGORY 2 GLASS CLOSURES

Group 3: Glass Stoppers

There are 131 glass stoppers divided into 14 subgroups within a number of varities. They are all produced using the pressed glass method of manufacture.

Subgroup 1: Clear glass stoppers with tapered shanks that are ground. They have a large disk shaped, or "buffon" head and are associated with apothocary bottles. These bottles have the interior of their mouths ground also. The ground shank of the stopper, when slipped into the mouth of the bottle and turned, forms a tight seal. 62 whole, 5 fragments.

Subgroup 2: Glass stoppers associated with whiskey flasks.

2.1 Clear glass stoppers with unground tapered shanks that fit into a cork collar. They have a small buffon head that was capped over with metal or heavy paper when inserted into the neck of a whiskey flask, 2 whole, 5 fragments.

2.2 Amber glass stoppers same as variety 2.1, 1 whole, 1 fragment.

2.3 Anythist glass stopper same as variety 2.1, 1 whole.

2.4 Light green glass stopper same as variety 2.1, 1 whole.

Subgroup 3: Ornate clear glass stoppers with ground tapered shanks and round or pear drop shaped heads. The design on these stoppers gives the head a faceted appearance and they were used as closures for whiskey or liquor decantures, 2 whole, 5 fragments.

Subgroup 4: A hollow clear glass stopper with a hole in the top of a tapered protrusion. The body of the stopper is tapered

and ground. This type of stopper would have been combined with a glass dropper and rubber bulb. Used in conjunction with a bottle containing a liquid to be measured in drops, 1 whole.

Subgroup 5: Light green glass stoppers with button heads and short, fat unground, tapered shanks. These stoppers were fitted with a cork collar and use to plug a variety of medical or food bottles, 12 whole, 3 fragments.

Subgroup 6: A clear glass stopper with a square faceted buffon head and ground tapered shank. Associated with perfume bottles. 2 whole.

6.1 A smaller example of subtype 6.1 with a rippled design. 1 whole.

Subgroup 7: Clear glass stoppers with upright geometrical forms that serve as tab heads rather than buffon heads. These all have ground tapered shanks and are associated with perfume bottles.

7.1 Glass stoppers with round tabs. 2 whole.

7.2 Glass stoppers with oval tabs. 2 whole.

7.3 Glass stoppers with round rectangular tabs. 2 whole.

Subgroup 8. Glass stoppers with heads in the shape of a crown or coronet and associated with perfume bottles.

8.1 Milk glass stoppers with a button collar and unground straight shanks. An applicator type of stopper, 8 whole, 1 fragment.

8.2 Clear glass stoppers with identical patterns as variety 8.1, 2 whole, 1 fragment.

8.3 Clear glass stopper with a flat crown, no collar and a ground vapered shank. 1 whole.

Subgroup 9: "Beckers Perfumes New York" A clear glass tab type stopper with the shank broken off. 2 fragments.

Subgroup 10: A clear glass stopper with a ground tapered shank. The stopper has a button head in the shape of a flat pumpkin. Associated with a perfume bottle, 1 whole.

Subgroup 11: A dark green glass stopper with a ground tapered shank and a button head with a raised central protrusion. Associated with a perfume bottle, 1 whole.

Subgroup 12: A clear glass stopper with an unground tapered shank that

exhibits a screw thread. The stoppers has a hexagonal button head with a flare collar underneath. The screw threads probably anchored the stopper into a cork gasket placed in the neck of a perfume bottle, 1 whole.

Subgroup 13: A clear glass stopper with a threaded straight shank. The stopper has a large button head (4 cm) and screwed into a bottle mouth. 1 whole.

Subgroup 14: Clear glass stoppers with a hollow short shank and faceted button head. 2 whole.

SUBCATEGORY 3 GLASS PERSONAL AND HOUSEHOLD ITEMS

GROUP 1: Personal Items

There are 137 items divided into 14 subgroups and a number of varieties.

Subgroup 1 Eye glass lens.

1.1 Oval lens that fit into wire frames. 12 whole, 4 fragments total - 16 items.

1.2 Circular lens that fit into wire frames - 3 whole items.

1.3 Octagonal "Granny" style lens that attached to a wire frame item.

Subgroup 2 Circular biconvexed magnifying glass lens - 2 whole items.

Subgroup 3 Circular glass inserts for boxes.

3.1 Glass inserts to be included in a metal or cardboard lid for round pill boxes as to be able to view contents. 7 whole items, 10 fragments.

3.2 Glass lid inserts that are beveled to be included in a lid of metal or wood and be raised above that lid. This style of lid insert is commonly associated with ladies band boxes that contained personal items, 1 whole, 2 fragments.

Subgroup 4 Rectangular glass pocket or purse mirrors with a ground beveled edge. 2 whole, 21 fragments.

Subgroup 5 A clear saxophone or clarinet mouthpiece with ground reed slot.

Subgroup 6 Round glass beads.

6.1 Frosted clear glass beads - 8.

6.2 Milk glass beads - 3.

6.3 Milk glass beads coated with lacquer to resemble pearls - 4. 6.4 Light blue glass beads - 4.

6.5 Sky blue glass beads - 2.

6.6 Deep blue glass beads - 2.

6.7 Black glass beads - 3.

6.8 Light green bead - 1.

6.9 Light yellow bead - 1.

Subgroup 7 Faceted glass beads.

7.1 Round citrine beads with many facets on surface - 3.

7.2 Round amythyst bead with many facets on surface -1.

7.3 A red hexagonal bead with corresponding facets - 1.

Subgroup 8 Glass pendant beads.

8.1 Sky blue pendant bead - 1.

8.2 Mottled light green and dark green pendant bead - 1.

Subgroup 9 Light green glass marble - 1.

Subgroup 10 A rosary of round faceted amythyst beads held together by metal hooks.

Subgroup 11 Milk glass buttons.

11.1 Plain buttons with 4 holes in a shallow depression on the face - 7 items.

11.2 A button with a striated border and 4 holes in a shallow depression on the face.

11.3 A plain button with 3 holes in a shallow depression on the face.

11.4 Plain buttons with 2 holes, through body - 3.

11.5 A button with a rose bud pattern on face and wire loop on back.

11.6 Dome shaped buttons with a wire loop on back - 2.

11.7 A cloth or metal backed button with a floral design.

Subgroup 12 Glass buttons of various colors.

12.1 A bowl shaped clear button with 2 holes in body.

12.2 A clear glass button with a beveled and faceted edge and two holes in the body.

12.3 A domed clear glass button with a wire loop on back.

12.4 Ivory glass buttons with 2 holes in body - 2.

12.5 Ivory glass buttons with a sun burst design on face. Button has a nub on back that is pierced parallel to face - 4.

12.6 A domed dark blue button with a wire loop on back.

12.7 Bowl shaped black amythist buttons with an attached metal disc that is pierced - 3.

12.8 A jadite glass square button with faceted on the surface, the back has a raised edge that is pieced on two sides.

12.9 Black glass disc shaped buttons with faceted surfaces. These had a cloth or metal backing - 2.

Subgroup 13 Collar tack buttons of milk glass - 15.

Subgroup 14 A milk glass earing lacquered to resemble a pearl.

SUBCATEGORY 3 GLASS PERSONAL AND HOUSEHOLD ITEMS

GROUP 2: Vases

There are 53 items divided into 8 subgroups and a number of varieties. All are examples of pressed glass, decorated in various ways.

Subgroup 1 Clear glass vases with 4 ribs.

1.1 Fragments of a clear vase with ribs on the body and a ruffled mouth. Manufacturer unknown, probably produced between 1880 and 1940. 1 rim, 2 body fragments; total 3 items.

1.2 Rim fragment of a vase with four serrated ribs and a scalloped and ruffled mouth. Manufacturer unknown, probably produced between 1880 and 1920.

1.3 Body fragment of a vase with four corded ribs. Manufacturer unknown, probably produced between 1880 and 1940.

Subgroup 2 Fragments of clear glass vases with ribs extending the length of the body. Manufacturer unknown, probably produced between 1880 and 1920, 3 rims, 4 body fragments; total 7 items.

Subgroup 3 Fragments of clear glass vases with diamonds and ribs in the body and a ribbed stem. Probably produced between

1880 and 1920, 2 rims, 1 body fragment; total 3 items.

Subgroup 4 Fragments of one green opalescent vase with a pattern of ribs arranged in draping festoons. Manufacturer unknown, probably produced 1890-1930, 12 fragments.

Subgroup 5 Fragments of one milk glass vase patterned and hand painted to resemble an ear of corn. Manufacturer unknown, probably produced 1880-1920, 13 fragments.

Subgroup 6 Fragments of a milk glass vase with a blue glass overlay on a ruffled rim. Manufacturer unknown, probably produced between 1880 and 1920, 3 rims.

Subgroup 7 Fragments of a "Peachblow" glass vase. The color is a deep pink at ruffled rim grading off to a very light rose at the base. Probably an example of the Wheeling Peach Blow glass in Coral color manufactured by the Hobbs and Brockumier Glass Co., Wheeling, West Virginia 1885 to 1900, 5 rims, 4 body fragments; total 9 items.

Subgroup 8 Base of a vase in deep amythyst. Base is scalloped. Manufacturer unknown, probably produced between 1880 and 1920.

SUBCATEGORY 3 GLASS PERSONAL AND HOUSEHOLD ITEMS

GROUP 3: Medical Items

There are 168 items divided into 11 subgroups with a number of varieties.

Subgroup 1 Droppers that utilized a rubber suction cup or nipple. These were formed by drawing a hot glass tube by hand, 36 whole, 10 fragments.

Subgroup 2 Medical vials with a shoulder.

2.1 Clear glass vials with a short neck above the shoulder and a bead lip that sealed with a cork. The lip is hand applied, produced from 1880 to 1910, 35 whole, 23 fragments.

2.2 Amber glass vial identical to subtype 2.1 except for color.

2.3 Clear glass vials with a threaded finish to accommodate a metal or "baklite" screw cap. Machine made 1905-1979. 1 whole, 2 fragments.

Subgroup 3 Clear glass medial vials without a shoulder, the lip is a straight shear and sealed with a cork. This type has been produced since the 1880's, 8 whole, 7 fragments.

Subgroup 4 Oval clear glass tube that contained a tooth brush, 3 fragments.

Subgroup 5 Glass drug ampules, to be used with hypodermic syringes.

5.1 Clear glass ampules with a narrow tapered neck. 5 fragments.

5.2 Amber glass ampules identical to subtype 5.1 except for color, 2 fragments.

Subgroup 6 Fragments of clear glass hypodermic syringes, these include 14 thumb plunger ends, 2 pluging rods, 2 syringe rims and 2 tapered syringe noses.

Subgroup 7 Clear glass round bottom test tubes. 1 whole, 6 fragments.

Subgroup 8 Cobalt blue glass medical powder measuring cups. Embossed with "This cup holds a heaping desert spoon ful", 1 whole, 2 fragments.

Subgroup 9 Clear fragment of a graduated medical measuring device.

Subgroup 10 Two fragments of a thermometer. Graduations are painted on. Probably a modern thermometer. 1950-1979.

Subgroup 11 Two clear glass applicator rods that could have been associated with bottled iodine or merthyolate.

SUBCATEGORY 3 GLASS PERSONAL AND HOUSEHOLD ITEMS

GROUP 4: Electrical Items

There are 64 items divided into 5 subgroups with a number of varieties.

Subgroup 1 Electric Light Bulbs.

1.1 Examples of modern General Electric Corporation 50 watt light bulbs with an etched or painted lables. Probably produced between 1950 and 1979, 1 whole, 4 body fragments with General Electric maker's mark.

1.2 Two body fragments of Westinghouse Electric Corporation, 40 watt light bulbs with painted lables. 1950 to 1979.

1.3 Examples of light bulbs with bodies molded to resemble flames and painted orangish tan. Manufacturer unknown, probably produced between 1920 and 1950. 2 whole, 5 body fragments.

1.4 Filaments of electric light bulbs manufacturer unknown, probably produced between 1920 and 1979, 16 items.

FC#8825
1 machine part
1 door fastener
1 key
1 lock(trunk-type)
1 pail/bucket handle
2 lamp parts
1 brace/bracket
1 sugar tong with name Price Bros
1 plaining tool
1 garter
2 spring fragments
4 lids/caps
1 funiture foot
1 clock part
1 metal piece for pencil eraser
12 miscellaneous

FC#8938
7 light bulb fragments
4 crown top caps
2 lids/caps
1 can opener
1 garter
9 container/can fragments
2 wire hooks
3 wire fragments
1 buckle fragment
3 suspender parts
1 foil fragment
1 pin (jewelry)
1 spoon
3 sugar tong fragments
with name Price Bros
1 eyed hasp
1 furniture handle
1 clothing fastern
9 miscellaneous

FC#8766
1 door hinge
1 whole can
8 container/can fragments
1 canning jar cap
3 light bulb fragments
2 purse frames
1 keychain-type chain fragment
3 spoons (2 whole; 1 partial)
1 coin (1870 5 cent piece)
1 miscellaneous

FC#8694
1 pot/pan

FC#8926
1 laddle handle
2 light bulb fragments
1 pail/bucket handle
1 compass-type tool
1 crown top cap
1 door knob
1 rifle shell
21 container/can fragments
6 canning jar lids.

FC#8756
2 whole cans
1 tin spool(adhesive tape type)
2 door hinges
1 purse frame
2 light bulb fragments
2 lids/caps
2 crown top caps
1 key
1 pocket knife fragment
1 safety pin
4 miscellaneous

FC#8771
10 container/can fragments
3 spoons(1 whole; 2 partial)
1 safety pin fragment
1 scissor handle
1 cap/lid
2 lamp parts
1 shot gun shell
1 spring
15 miscellaneous

FC#8859
1 spoon
1 salt/peppr shaker cap
1 switch plate
2 gas stove hose-connections
1 doorknob plate with ceramic knob
1 brace/bracket
1 door hinge
1 foil fragment
2 caps/lids
59 container/can fragments
5 miscellaneous

FC#8787
1 brace/bracket
4 caps/lids
2 door hinges
4 sugar tong with name Price Bros,

8928-1	-IT- 4527	8947-2	1894
8928-2	18 2/0	8781-1	Ma ger
8774-1	4 ODEP	8778-1	D
8806-2	10	8983-1	ICI
8825-3	1894 AM ge	8934	I AM
8744-1	P	8771-2	641
8810-6	C	8707-1 (right arm)	10 3/10
8788-2	210 ny	8651-3	Ge
8653-1	M	8652-2	1894 5/0 DF
8678-1	94		

SUBCATEGORY 7

Miscellaneous Metal Objects by FC Number

FC#8769
2 pot or pan fragments
1 canning jar cap
2 lids or caps
2 garters
1 suspender part
2 shot gun shells
2 light bulb fragments
1 door hinge
1 brace/bracket
1 door latch
2 furniture handles
1 spring
1 sugar tong with name Price Bros
1 curtain/drape ring
1 wire fragment
1 chain fragment
1 toy horse
2 lamp parts

FC#8963
1 pot, pan, etc. lid
1 powder compact
13 container/can fragments
1 crown top cap
1 sugar tong with name Price Bros
1 utensil handle
1 light bulb fragment
1 canning jar lid
1 spoon fragment
1 miscellaneous

FC#8991
1 gallon paint can
1 knife with paint from can on blade
1 cap/lid
1 sugar tong with name Price Bros
16 container/can fragments

SUBCATEGORY 5 DINING TABLE AND PLACE SETTING ITEMS

GROUP 6: Auxilary Items

There are 13 items divided into 3 subgroups. All are examples of pressed glass.

Subgroup 1 Clear glass salt dips with a ribbed sunburst on the base. Manufacturer unknown, probably produced 1880-1920. 2 whole, 7 fragments; total 9 items.

Subgroup 2 Fragments of a clear glass salt shaker with a pattern of ribs, thumbprints, and diamonds. Manufcturer unknown, probably produced between 1880 to 1920. 1 rim, 2 body fragments; total 3 items.

Subgroup 3 A clear glass caddy ladle for condiments. The rim and strip on the handle are gilded. Manufacturer unknown, probably produd between 1880 to 1920.

SUBCATEGORY 6 DOLL FRAGMENTS

One hundred and forty-five fragments of bisque doll heads, bodies, arms, and legs were recovered from the midden. There is a minimum of 17 bisque dolls represented. This number of dolls was derived by counting the eye sockets and dividing by two. Two small bisque doll bodies, 4 separate legs, 11 arms (2 pair), 1 pincushion, and a miniature porcelain doll are included in this assemblage.

Nine doll heads (8928-2, 8825-3, 8934-1, 8744-1, 8652-2, 8678-1, 8947-2, 8781-1, and 8983-1) were manufactured by Armand Marseille at his porcelain factory in Koppelsdorf, Germany. He manufactured bisque dolls from 1865 to 1925, and his were the most popular dolls for the early twentieth century (Coleman 1968:428 and 432). There are 4 doll heads with the number 1894, which date after ca. 1895 (ibid: 428). The remainder of the Marseille fragments have partial letters and numbers.

All of the teeth in the surviving mouths of the dolls are separate pieces, placed in prior to firing. This technique follows that of including the teeth as an integral part of the mouth. This change occurred in the 1870's and thus all the dolls date to the late 19th and early 20th century.

The dolls, as do all the other artifact categories, substantiate the late date for the midden assemblage. The following is a list of the fragmentary maker's marks:

8702-5	7508 D	8787-1 (left hand)	10 3/0

thumbprints above diamonds. The glass is tinted violet from manganese doxide. Manufacturer unknown, produced from 1900-1915.

Subgroup 5 Fragments of a clear glass serving dish with a wheel cut floral pattern. The rim is waved and some traces of gold paint are still evident on the rim and in the designs. Manufacturer unknown, probably produced from 1880 to 1900. 4 rims, 2 body fragments; total 6.

Subgroup 6 Fragments of a serving dish in yellow "Vaseline" glass with a pattern of raised ribs simulating palm fronds. Rim is scalloped, and base consists of raised diamonds. Manufacturer unknown probably produced from 1880 to 1920. 5 rims, 2 bases, 5 body fragments; total 12 items.

Subgroup 7 A large serving dish of milk glass very lightly tinted green. The exterior has a hand painted floral design and a gilted border. The rim consists of alternating "S" curves and points. These are several circular recessions in the base as if to suggest receptical areas for other containers. This may be an example of a castor dish or tray. Manufacturer unknown, probably produced from 1870 to 1900. 7 rims, 5 bases, 11 body fragments; total 23 items.

SUBCATEGORY 5 DINING TABLE AND PLACE SETTING ITEMS

GROUP 5: Castor and Cruet Bottles

There are 131 pieces of castor and cruet bottles, consisting of 10 bases, 7 rims, and 114 body fragments. Castor bottles are recognized by their distinctive tapered bases that enable them to sit in a recession or hole in the metal castor tray. They came in a set and were used to serve condiments at the dining table. The bottles usually had a stopper and were accompanied by wider mouthed jars that would have contained the mustard, mayonnaise, and other type spreads. These were generally covered with a metal lid. The castor bottles served the same purpose as cruets, storing vinager and oil for use on salads. Cruets did not have the tapered bases of the castor bottles and were set independently on the dining table.

Of the ten recovered bases, nine are castor bottles and one is a cruet. The seven rims are all examples of the wide mouth spread servers. All 131 pieces are decorated with flowers, grapes, leaves, and vines that were cut into the surface with a grind wheel. All ten bases exhibit no evidence of mold seams but have small ripples and dimples present. These bases were manufactured by the pressed glass process, probably in cup molds. (See definitions Glass Jars and Rims.) None of the other 120 sherds exhibit any evidence of mold seams. All 131 items are made of clear glass, and were probably manufactured sometime between 1880 and 1920.

raised diamonds and 4 point crosses in a band above the base. This is the "Ruby Stained Florida Pattern" of Greensburgh Glass Co., Greensburg, Pa., produced from 1893 to 1900. 2 rims, 1 base, 13 body fragments; total 16 items.

Subgroup 4 Clear glass creamers with raised designs.

4.1 Fragments bearing a series of large and small diamonds and ribs simulting palm leaves on the body. The base is a ribbed sunburst. This is the "Peerless Pattern" of Richards and Hartley Glass Co., Pittsuburgh, Pa., first advertised August of 1875. 2 rims, 1 base, 5 body fragments; total 8 items.

4.2 Fragments bearing a pattern of small hexagonal facets grouped in various geometric patterns on the body. The rim is scalloped and ruffled, the base is a series of diamonds. Manufacturer unknown, probably produced from 1900 to 1940. 2 rims, 2 bases, 1 body fragment; total 5 items.

Subgroup 5 Fragments of a clear glass sugar bowl with a pattern of raised ribs embossed with diamonds on the body. The base is a ribbed sunburst. Manufacturer unknown, produced from 1880 to 1900. 2 bases, 1 body fragment; total 3 items.

SUBCATEGORY 5 GLASS TABLE AND PLACE SETTING ITEMS

GROUP 4: Dishes

There are 209 items divided into 7 subgroups. These dishes are very ornate with a raised pattern or wheel cut pattern or a special colored glass and painted. They would not have been used for every day dining, probably used only on special occasions. They are all examples of pressed glass.

Subgroup 1 Examples of clear glass candy, relish or other serving dishes. These items all exhibit a raised pattern of diamonds, sunbursts and dimpled ribs. The rims are scalloped and ruffled and the bases are decorated with a large sun burst. Manufacturer unknown, probably produced from 1880 to 1900. 21 rims, 11 bases, 113 body fragments; total 145 items.

Subgroup 2 Fragments of a large serving dish in clear glass with an impressed floral design. The rim consists of large scallops. Manufacturer unknown, probably produced from 1880-1920. 4 rims, 1 base, 8 body fragments; total 13 items.

Subgroup 3 Fragments of a large clear glass serving dish with raised hexagonal facets and triangles. Rim is scalloped and ruffeled. Manufacturer unknown, probably produced from 1880-1900. 2 rims, 1 base, 7 body fragments; total 10 items.

Subgroup 4 One rim fragment of a clear glass serving dish with raised

SUBCATEGORY 5 GLASS DINING TABLE AND PLACE SETTING ITEMS

GROUP 2: Cups and Tumblers

There are 126 items divided into 2 subgroups with a number of varieties. These are all examples of pressed glass.

Subgroup 1 Fragments of clear glass cups bearing pattern of large and small diamonds with ribs simulating palm leaves on the body. The base is a ribbed sunburst. This pattern is the "Peerless Pattern" of the Richards and Hartley Glass Co., Pittsburgh, Pa., first advertised in August of 1875. Probably produced until 1900. 17 rims, 16 bases, 18 body fragments; total 51 items.

Subgroup 2 Clear tumblers.

2.1 Fragments bearing a pattern of diamonds and ribs simulating palm leaves on the body. Base is a ribbed sun burst. Manufacturer unknown, probably manufactured from 1900-1940. 16 rims, 24 bases, 30 body fragments; toal 20 items.

2.2 Fragments bearing a pattern of gilted diamonds on the interior. Base exhibits pattern of small sun bursts interspaced with raised hexagonal facets. Manufacturer unknown, probably produced from 1880-1900. 2 rims, 1 base; total 3 items.

2.3 Fragments bearing a pattern of cross-hatched interlocking diamonds and ribs in a band above the base. Base is plain. Manufactuer unknown, probably produced from 1880 to 1900, 2 bases.

SUBCATEGORY 5 GLASS DINING TABLE AND PLACE SETTING ITEMS

GROUP 3: Pitchers, Creamers and Sugar Bowls

There are 47 items divided into 5 subgroups with a number of varieties. These are all examples of pressed glass.

Subgroup 1 Clear pitcher fragments with a ribbed sunburst on the base and a flaring pattern of ribs on the body. Manufacturer unknown, probably produced 1880-1900. 1 rim, 9 bases, 1 body fragment, total 11 items.

Subgroup 2 Clear pitcher fragments with a wheel cut floral design on the body. Manufacturer unknown, probably produced from 1880 to 1920. 2 rims, 1 base, 1 body fragments; total 4 items.

Subgroup 3 Fragments of a clear glass pitcher or creamer with a red glass flash over portions of the body. There is a pattern of

body. Stem is composed of thru hexagonal "knuckles". Glass exhibits a violet tint. Manufacturer unknown, probably produced 1880 to 1915.

Subgroup 12 Fragments of stemware dessert with an etched floral and berry design. Manufacturer unknown, probably produced 1880 to 1920. 8 rims, 1 base, 21 body fragments; total 30 items.

Subgroup 13 Fragments of stemware goblets with a flaring octagonal stem and a ring in the middle. Manufacturer unknown, probably produced 1880 to 1920. 3 bases, 3 body fragments; total 6 items.

Subgroup 14 Fragments of stemware goblets with a hobnail and leaf pattern on the body and a ribbed stem. The base has a daisy pattern. Glass is tinted violet. Manufcturer unknown, probably produced from 1880 to 1915. 2 rims, 1 base, 1 body fragment; total 4 items.

Subgroup 15 Fragments of clear stemware champagnes with a series of shallow flutes on the body and etched floral band around the rim. Manufacturer unknown, probably produced from 1880 to 1920. 1 rim, 1 base, 3 body fragments; total 5 items.

Subgroup 16 Basal fragments of clear stemwares with a design consisting of eight ribbed petals. Manufacturer unknown, probably produced from 1880 to 1920. 7 bases.

Subgroup 17 Fragments of clear stemware goblets with a wheel cut grape cluster and leaf design. Manufacturer unknown, probably produced from 1880 to 1900. 8 rims, 1 base, 10 body fragments; total 19 items.

Subgroup 18 One body fragment of a clear and frosted glass stemware goblet with a series of flutes half way up the body. Manufacturer unknown, probably produced between 1880-1920.

Subgroup 19 One base fragment of a clear stemware desert with a cupped instead of solid base. Manufacturer unknown, probably produced from 1880 to 1920.

Subgroup 20 Basal fragments of clear stemwares. These fragments are all undecorated in any fashion and cannot be associated with any other type. Manufacturer unknown, probably produced from 1880 to 1920. 37 items.

Subgroup 21 Fragments of citrine yellow stemware deserts with an etched floral border that is gilded. The body is faintly ribbed. Manufacturer unknown, probably produced 1880 to 1920. 4 rims, 3 bases, 2 body fragments; total 9 items.

Subgroup 22 Fragments of two tone green and clear stemware goblets, the base and stem being green and the body clear. Manufacturer unknown, probably produced from 1880 to 1920. 2 bases, 6 body sherds; total 8 items.

SUBCATEGORY 5 DINING TABLE AND PLACE SETTING ITEMS

GROUP 1: Glass Stemwares

There are 534 items divided into 22 subgroups. All are examples of pressed glass with various patterns decorating their surfaces.

Subgroup 1 Fragments of various clear stemwares with an etched design on their surfaces consisting of loops, scrolls and lines. This design is the Needle Etch #1 pattern of the Federal Glass Co., Columbus, Ohio listed in the 1926 company catalog. Probably produced 1926-1935. 243 body and rim fragments.

Subgroup 2 Clear stemware desserts or custards with six flutes on body. Stem is hexagonal and bulbous in the middle, base is plain. Maker unknown, probably produced from 1880-1920. 16 rims, 3 bases; 1 body fragment.

Subgroup 3 Base fragments of clear undecorated stemware goblets. Manufacturer unknown, probably produced 1880-1940. 6 bases.

Subgroup 4 Fragments of clear stemware goblets with a wheelcut floral and band design. Manufacturer unknown, probably produced from 1880 to 1900. 9 rims, 3 bases, 27 body fragments; total 39 items.

Subgroup 5 Rim fragments of clear stemware goblets with a gilded edge. Manufacturer unknown, probably produced from 1880-1920. 14 rims.

Subgroup 6 Fragments of clear stemware goblets with a wheel cut design consisting of 9 horizontal lines arranged in a band and a pattern of wheel cut circles. Manufacturer unknown, probably produced from 1880 to 1920. 21 rim fragments, 21 body fragments; toal 42 items.

Subgroup 7 Rim fragments of a clear stemware cake dish with an etched floral design in a band below the lip. Manufacturer unknown, probably produced from 1880 to 1900. 4 rim fragments.

Subgroup 8 Fragments of clear stemware champagnes with embossed fern design on the body. Manufacturer unknown, probably produced 1880 to 1920. 16 body fragments.

Subgroup 9 Fragments of clear stemware desserts with a etched border consisting of "horse teeth" rectangles and bands above and below. Body decorated with a pattern of etched eight point star bursts. Manufacturer unknown, probably produced from 1880 to 1900; 2 rims, 2 bases, 6 body fragments; total 10 items.

Subgroup 10 Fragments of clear stemware goblets with applied ribs of light blue glass. There is a hand painted white leaf design on the body between the ribs. Manufacturer unknown, probably produced before 1880. 1 rim, 11 body fragments, total 12 items.

Subgroup 11 One base of a stemware goblet with eight "thumbprints" on

less machining. Gradually the fluted and full ribbed water glasses gave way to either the "jelly glasses" (Subgroup 6) or unembossed but painted items. Manufacturer unknown, pressed glass produced from 1930 to 1979. 6 rims.

SUBCATEGORY 4 GLASS KITCHEN ITEMS

GROUP 3: Miscellaneous Utensils

There are 34 items, divided into 5 subgroups and a number of varieties.

Subgroup 1 Salt and pepper shakers of clear glass.

1.1 Large shakers approximately 5 ounce capacity with raised rectangles on body. Manufacturer unknown, pressed glass produced from 1900-1979. 1 rim, 2 bases, 5 body fragments; total 8 items.

1.2 Small shaker approx. 2 oz. capacity bell shaped with ground lip. Manufacturer unknown, pressed glass produced from 1880-1900. 1 whole item.

1.3 Small shakers to 2 oz. machine made not pressed. Manufacturer unknown, produced from 1903-1979. 2 rims, 2 bases; total 4 items.

1.4 Large shakers the bodies of which are composed of successive bulbous rings. Machine made, manufacturer unknown, produced from 1903-1979. 4 body fragments.

Subgroup 2 A clear glass pitcher undecorated. Manufacturer unknown, pressed glass produced from 1900-1979. 1 rim, 1 body fragment with partial handle.

Subgroup 3 One end of a clear glass rolling pin without insert handle. Glass is tinted violet. Manufacturer unknown, produced from 1880-1915.

Subgroup 4 A rectangular butter dish of lime green "Depression glass" with fluted sides and a plain bottom. Manufacturer unknown, pressed glass produced from 1930 to 1940's. 3 rims, 4 bases; total 7 items.

Subgroup 5 Milk glass covered dishes with raised ribs on their sides. These oval dishes are the bottom halves of the populr animal figure covered dishes. The most prevelant animal depicted was a hen. Manufacturer unknown, pressed glass, produced from 1900 to 1950's. Reproductions are being reissued at present to 4 rims, 3 bases, total 7 items.

5.3 Clear water glasses with a raised horizontal ridge near their base. There is a band of short ribs above the ridge. Produced in a pressed glass method of manufacture, manufcturer unknown produced 1880-1930, 5 body fragments.

5.4 Clear water glasses with raised ribs extending half way up the body, with a violet tint to the glass. Manufacturer unknown, pressed glass produced from 1880 to 1915. 2 rims, 4 body fragments; total 6 items.

5.5 Clear water glasses with raised ribs alternating with flutes extending half way up the body. Glass tinted violet. Bases plain. Manufacturer unknown, pressed glass produced from 1880 to 1915. 1 rim, 1 base, 6 body fragments; total 8 items.

5.6 Clear water glass with large raised ribs alternating with flutes extending most of the length of the body. Base plain. Manufacturer unknown, pressed glass produced from 1880 to 1930, 1 base, 2 body fragment; total 3.

Subgroup 6 One clear water glass of the "jelly glass" variety. This glass has a bulbous base that is broken. A cross hatched pattern of raised ribs is located above the bulbulous base. This glass was blown in an automated machine process. There are two mold seam lines running the length of the body stopping at the finish parting line. These attributes indicate the method of manufacture. Maker unknown produced from 1905 to 1979. 1 item.

Subgroup 7 Water glasses of colored "depression glass". Popular during the 1930's and 40's these inexpensive items were produced in pastel shades of lime, rose and others.

7.1 Lime green glasses with faint ribs running the length of the body. Two horizontal ridges near base, bases plain. Manufacturer unknown pressed glass produced from 1925-1950. 3 rims, 3 bases, 11 body fragments; total 17 items.

7.2 Glasses exactly the same as subtype 7.1 except for color which is rose or pink, 5 rims, 3 bases, 16 body fragments; total 24 items.

Subgroup 8 Clear water glasses with interior raised designs.

8.1 Glass with rounded interior ribs extending from base to just below lip. Base plain. Manufacturer unknown, pressed glass produced from 1880-1930. 2 rims, 1 base; total 3 items.

8.2 Glass with rounded interior ribs arranged in a swirl or sprial 1880-1930, 2 body fragments.

Subgroup 9 A clear water glass with painted rings of green and with near lip. During the late 1920's and early 30's painted lables and decorations began to replace embossed lables and decorations on most ordinary glasswares. These painted items were also cheaper to produce for the molds in which they were made requred

accurately, manufacturer unknown. 69 rims, 17 bases, 68 body fragments and 1 whole example; total 155 items.

Subgroup 2 Clear water glasses with plain bodies and plain bases. Undecorated, unembossed water glasses for every day use. Produced in a pressed glass method of manufacture probably from 1880 to 1930.

2.1 Clear untinted examples manufactured from 1915-1930, manufacturer unknown. 32 rims, 5 bases, 9 body fragments; total 46 items.

2.2 Clear glass examples tinted a light violet indicating the presence of maganese dioxide, a glass batch bleaching reagent. Manganese dioxide was used from 1880 to 1915 to bleach raw glass clear, manufacturer unknown. 5 rims, 4 body fragments, total 9 items.

Subgroup 3 Clear water glasses with plain bodies and rounded decorated bases. The decoration is pressed in during manufacture and resembles a flower or sunburst. Manufactured 1880-1930, manufacturer unknown, 2 rims, 6 bases; total 8 items.

Subgroup 4 Clear water glasses with fluted sides and decorated bases.

4.1 Water glasses similar to type 1 with wide side flutes and a flower or sunburst pattern on the base. Produced in a pressed glass method of manufacture, manufacturer unknown, produced anytime from 1880 to 1930. 2 rims, 9 bases; total 11 items.

4.2 Exactly the same as subtype 4.1 except for a makers' mark on the base consistign of an H inside a diamond. 3 bases.

4.3 Water glasses with 12 small flutes on the body. The flutes are interrupted near the rim by 5 horizontal ribs. The base is decorated with a flower or sun burst and has a makers mark consisting of an H in a diamond. Produced in a pressed glass method of manufacture. 9 rims, 9 bases, 11 body fragments; total 29 items.

4.4 Water glass base with a star pattern pressed in the bottom. Manufacturer unknown. 1 item.

Subgroup 5 Water glasses with external ribs.

5.1 Clear water glasses with a band of short ribs around their plain bases. These ribs do not extend very far up the body of the glasses. These were produced in a pressed glass method of manufacture. Manufacturer unknown produced anytime from 1880 to 1930. 1 rim, 14 bases, 37 body fragents; total 52 items.

5.2 Dark green water glasses with a band of short ribs around plain bases. Pressed in a two part mold. Manufacturer unknown probably a more modern glass produced from 1900-1930. 1 base, 6 body fragments; total 7 pieces.

Subgroup 3 Bowls of various colored glasses all pressed glass.

3.1 Bowls made of lime green "Depression glass" with a rolled out flaring rim and sloping sides. One base bears the H over A mark of the Hazel-Atlas Glass Co., Wheeling, West Virginia. Hazel-Atlas began making items in lime green Depression glass around 1930 and continued some of their various items until the late 1940's. 9 rims, 1 base, 1 body fragment; total 11.

3.2 A bowl of frosted green milk glass commonly called "jadite". This color is most often associated with Jennette Glass Company, Jennette, Pa. and called "Jenny ware". Pressed glass produced from 1938 to the late 40's. 6 rims.

3.3 One fragment of a rose or pink glass bowl base. The body is ribbed and the base is embossed with raised rings. Another color of Depression glass generally produced from the late 1920's until the late 1940's. Maker unknown.

3.4 Two rim fragments of a milk glass bowl with a rolled out and flared lip. Maker unknown probably produced from 1900 to 1979.

Subgroup 4 Small clear glass bowls commonly called "custards".

4.1 Custards with a rolled out flaring rim. Manufacturer unknown produced from 1900-1979. 4 rims.

4.2 Custards with a straight rim and the H over A trademark of the Hazel-Atlas Glass Co., Wheeling, West Virginia used from 1920-1964. 1 whole, 1 rim; total 2.

4.3 Custard very similar to subtype 4.2 slightly larger with an unknown maker's mark that of a tower on the base. Probably manufactured from 1920-1979. 1 whole.

SUBCATEGORY 4 GLASS KITCHEN ITEMS

GROUP 2: Ordinary Water Glasses

There are 391 items designated ordinary water glasses. They are divided into 9 subgroups and a number of varieties.

Subgroup 1 Clear water glasses with fluted sides and plain bases. These are examples of basically undecorated water glasses for every day use, not for formal dining. The flutes make for easier gripping especially if the surface is wet. Produced in a pressed glass method of manufacture. This particular style of fluted bugle mouthed water glass was probably manufactured from 1880 to the 1930's. The pressed glass mode of manufacture leaves little in the way of seams of scars in order to date the piece more

edge. Probably produced between 1880 and 1940, after which these items were replaced with hard rubber ones.

Subgroup 4 Glass coasters.

4.1 Milk glass coasters all 6.4 cm in diameter of pressed glass. Probably produced between 1900 and 1979, 1 whole, 10 fragments.

4.2 A fragment of an amber pressed glass coaster with a sunburst design on the base. Probably produced between 1900 and 1979.

Subgroup 5 Fragments of clear ornamental glass canes of hollow twisted glass tubes with a spiral ribbed design. Manufacturer unknown, probably produced between 1880 and 1920, 5 fragments.

Subgroup 6 Fragment of a frosted clear glass tile or slab pierced for application to some surface by means of a screw or nail. Manufacturer unknown, pressed glass probably produced between 1880 and 1920.

Subgroup 7 A drawer pull of milk glass, manufacturer unknown, pressed glass probably produced between 1880 and 1920.

Subgroup 8 Various small milk glass containers to hold floral arrangements or live flowers. All pressed glass probably produced 1880-1950 - 5 items.

SUBCATEGORY 4 GLASS KITCHEN ITEMS

GROUP 1: Bowls and Custards

There are 55 items, divided into 4 subgroups and a number of varieties. All are examples of pressed glass.

Subgroup 1 Clear glass bowls with an outside diameter of 17.8 cm (largest) to 15.2 cm (smallest). These bowls have a rolled out flaring rim and sloping sides. No makers mark, manufacturer unknown, pressed glass produced from 1900-1979. 15 rims, 2 bases; total 17 items.

Subgroup 2 Clear glass bowls with straight sides with an interior inset rim combined with a rolled flaring outside rim.

2.1 Eight fragments combined to form one example. Outside rim diameter 14.5 cm. Base has maker's mark H over A of the Hazel-Atlas Glass Company. Wheeling, West Virginia used from 1920 to 1964. A pressed glass item. 8 Fragments total.

2.2 Three fragments combined to from one example. Exactly the same as variety 2.1 but without the H over A makers mark. Manufacturer probably Hazel-Atlas 1920-1964.

1.5 Fragments of electric light bulbs manufacturer unknown, probably produced between 1920 and 1979, 19 items.

Subgroup 2 Electric Light lens covers of pressed glass.

2.1 Two fragments of a clear automobile headlight lens marked--- RAN-Brown Lamp, Cincinnati, Ohio. Probably produced between 1940 and 1979.

2.2 Three fragments of a cobalt blue lens possibly for a caution or danger signal light. Item looks modern probably produced 1930-1979.

2.3 Red glass bullseye tail light lens cover for a truck. Since red glass is expensive to produce and these lens covers have been largely replaced by red plastic since 1960, this item was probably produced between 1920 and 1960.

Subgroup 3 Clear glass house fuse for circuit breaker marked "Royal Crystal" with a brass screw band. These are still in production today being produced since the early teens. 3 whole items.

Subgroup 4 A bullet shaped electric line type wire insulator in aqua glass. These have been produced since the 1870's until the 1940's in aqua glass. The same shape is prevalent today but in clear glass. 3 body fragments.

Subgroup 5 Fragments of milk glass lamp parts that are hollow to accommodate an electric wire. These were commonly produced in more or less standard sizes and assembled in various quantities to make table lamps of different sizes. Probably produced between 1900 and 1940. 5 body fragments.

SUBCATEGORY 3 GLASS PERSONAL AND HOUSEHOLD ITEMS

GROUP 5: Miscellaneous Items

There are 17 items divided into 4 subgroups and a number of varieties.

Subgroup 1 Fragments of a small clear pressed glass inkwell that is square. Manufacturer unknown, probably produced between 1880 and 1920, 2 body fragments.

Subgroup 2 One fragment of a clear glass disc, pierced to hold flowers or other plants in floral arrangements. Manufacturer unknown, pressed glass probably produced between 1880 and 19[illegible].

Subgroup 3 Two fragments of a clear pressed glass floor gaurd, to set furniture legs in. Floor gaurd is a round disc with a raised

1 pot/pan lid
1 miscellaneous

FC#8749
1 soap dish
2 whole cans
5 container/can fragments
2 door hinges
1 fireplace cooking hook
2 pot/pan handles
4 light bulb fragments
1 fuse
1 rifle shell
1 garter fragment
1 small jingle bell
2 tooth-paste type tubes
1 foil fragment
1 whole tin(personal care type)
3 safety pins(2 whole; 1 partial)
10 caps/lids
2 knives(1 whole; 1 partial)
2 pail/bucket handles
2 hooks
1 lipstick tube
8 crown top caps
2 keys
2 rolled sardine lids(one with key)
2 door handles
1 pocket knife fragment
1 fork
1 scissor handle
1 suspender part
1 compact
2 tags
28 miscellaneous

FC#8770
1 5 gallon tar-type can

FC#8881
2 lamp parts
1 garter
1 garment fastener
2 springs
1 cap/lid
1 shell case small caliber
1 safety pin
1 eyed hasp
2 hooks(picture hangers)
1 door handle
1 large bolt
1 fireplace poker fragment
8 container/can fragments
3 pot/pan fragments(blue enamled)
(1 whole; 3 fragments)
1 spring
1 oil can nozzle
2 pot/pan handles
2 container/can fragments
1 drain cap
1 crown top can
1 door handle
1 door knob plate
1 suspender part
1 tag
1 utensil handle
1 garter
1 door latch
1 large cooking fork fragment
1 large pot/kettle handle
1 jewelry pin
1 trunk lock
20 miscellaneous

FC#8848
1 jewelry pin
2 caps/lids
1 horseshoe fragment
1 pot/pan fragment
1 whole can
8 container/can fragments
8 chicken wire fragments
1 candle holder fragment
5 miscellaneous

FC#8853
1 pan
2 doorknob plates with ceramic knobs
3 whole cans
1 fuse
62 container/can fragments
11 caps/lids
1 caster wheel leg
1 door hinge
1 garter
1 tube "Burma Shave"
1 campagain-type button
1 door handle
1 purse frame
1 hook
1 spring
1 eyed hasp
5 crown top caps
1 salt/pepper shaker cap
7 light bulb fragments
1 nutcracker
2 corset staves
14 miscellaneous

1 pail/bucket handle
19 miscellaneous

FC#8850
1 pipe fragment
1 tool handle
1 hook
2 door latches
1 lamp part
2 suspender parts
1 sugar tong with name Price Bros
1 garter
2 garment fastner
2 light bulb fragments
10 container/can fragments
3 crown top caps
10 caps/lids
7 miscellaneous

FC#8768
148 container/can fragments
1 ash tray
1 lipstick tube
1 salt/pepper shaker cap
11 caps/lids
7 crown top caps
1 garter
1 eyed hasp
1 latch for jewel box
1 whole can
1 tube
1 spray gun fragment
1 machine part
1 canning jar lid
7 light bulb fragments
1 door hinge
2 pennies: 1929; 1920
1 jewelry pin
1 suspender part
1 tag
5 garment fasteners
1 bracelet
1 flip top tab
2 spoons
3 foil fragments
1 caster wheel leg
1 drain cover
12 miscellaneous

FC#8717
1 Iron City beer can, 1974
1 garment fastener
2 miscellaneous

FC#8967
1 lamp part
1 sewing hoop
1 caster wheel leg
1 hammer head
1 eyed hasp
1 spring
1 sugar tong with name Price Bros
1 cap/lid
1 container/can fragment
5 miscellaneous

FC#8932
1 can opener
1 eyed hasp
1 curtain/drape ring
2 garters
1 hook
2 wire fragments
1 lamp part
1 bell
5 caps/lids
2 crown top caps
2 light bulb fragments
29 container/can fragments
17 miscellaneous

FC#8907
1 stove grate fragment
1 drawer knob
1 sugar tong with name Price Bros

2 knive fragments
1 garter
1 miscellaneous

FC#8910
3 canning jar lids
1 hand beater fragment
1 file fragment
2 caps/lids
1 crown top cap
1 suspender part
1 lamp part
6 miscellaneous

FC#8696
1 enameled pan
1 thimble
2 pot/pan handles
1 brace/bracket
1 purse frame

FC#8934
2 lamp fragments
1 axe head
2 springs
1 pot/pan handle
1 buckle
1 door latch
11 musical instrument fragment
11 miscellaneous

FC#8966
1 towel rack
1 lipstick tube cap
1 drawer knob
2 light bulb fragments
2 whole tins/containers
5 caps/lids
3 sugar tongs,1 whole; 2 fragments with name Price Bros
1 garter
1 purse frame
1 scissor handle
1 frame fragment(picture, etc.)
1 miscellaneous

FC#8921
1 pail/bucket handle
1 key hole
1 caster wheel leg
1 clamp/fastener
1 sugar tong with name Price Bros
5 miscellaneous

FC#8833
1 forgein coin, 1894
1 miscellaneous

FC#8873
1 decorative bracket
1 file
1 pot/pan fragment
1 pot/pan handle
1 hook
1 musical instrument part
1 miscellaneous

FC#8772
1 container/can fragment
1 sugar tong with name Price Bros
1 pot/pan fragment
3 pot/pan handles
1 spring fragment
1 paint brush fragment
3 stove grate fragments with mica
1 umbrella fragment
1 suspender part
2 lamp fragments
2 spoon fragments
2 sugar tong fragments with name Price Bros
1 garter
2 garment fasteners

FC#8740
1 sugar tong fragment with name Price Bros
1 miscellaneous

FC#8864
1 pot/pan
1 container/can fragment
1 toy gun
1 eyed hasp
3 springs
2 crown top caps
5 caps/lids
1 untensil handle
1 garter
1 muscial instrument fragment
1 jewelry ring
2 lamp parts
1 sugar tong fragment with name Maillard
14 miscellaneous

FC#8735
1 garter fragment
1 sugar tong fragment
4 miscellaneous

FC#8726
1 pipe fragment
1 suspender part
2 garters
3 caps/lids
2 gun shells
1 pencil part with earaser
2 wire mesh fragments
1 frame fragment(picture, etc.)
2 sugar tongs with name Price Bros
1 spring fragment
1 eyed hasp
5 garment fasteners
1 wire fragment

6 miscellaneous

FC#8976
1 eyed hasp
5 miscellaneous

FC#8806
1 iceskate blade
1 door hinge
1 spring
1 spoon
1 key hole
2 sugar tongs with name Price Bros
3 container/can fragments
1 lamp part
6 caps/lids
1 shotgun shell
5 miscellaneous

FC#8828
1 railroad spike
2 light bulb fragments
1 tablespoon fragment
1 buckle
1 'C' battery
1 garter
2 springs
3 miscellaneous

FC#8809
1 pot/pan handle
2 containers/cans
1 shotgun shell
2 miscellaneous

FC#8858
1 pail/bucket handle
2 furniture handles
1 lock for jewelbox, chest, etc.
6 container/can fragments
7 miscellaneous

FC#8843
1 hook
1 drawer knob
2 stove burner fragments

FC#8704
1 buckle
2 container/can fragments
1 sugar tong with name Price Bros
1 curtain/drapery ring
1 garter
1 lamp part
1 tag
1 earring fragment
6 miscellaneous

FC#8775
3 furniture handles
1 spring
2 stove hose connection fragments
1 container/can
2 purse frames
1 stove grate fragment with mica
1 utensil handle
1 door hinge
1 cap/lid
20 miscellaneous

FC#8852
1 door latch
5 containers/cans
3 caps/lids
1 pot/pan handle
2 keys
1 safety pin fragment
1 brace/bracket
1 sugar tong
1 shoe eyelet
1 garter
9 miscellaneous

FC#8701
1 hook
1 button
1 suspender part
1 miscellaneous

FC#8681
1 caster wheel leg
2 pot/pan fragments
2 caps/lids
1 shotgun shell
3 clock gears
1 hair pin
1 miscellaneous

FC#8969
1 purse frame
1 spoon
1 unidentifiable jewelry fragment
1 thimble
4 container/can fragments
5 miscellaneous

FC#8703
1 garter

2 miscellaneous

FC#8692
1 pot/pan handle
1 lipstick tube
2 buttons
1 unidentifiable jewelry fragment
1 safety pin fragment
1 foil ketchup pack
1 fuse fragment
1 suspender part
1 shot gun shell
1 gartment fastener
5 shoe eyelets
1 eyed hasp
1 trunk lock

FC#8872
1 miscellaneous

FC#8849
1 perfume cap,"Coty Paris"
1 container/can
1 foil fragment
1 canning jar lid
1 eyed hasp
1 unidentifiable jewelry fragment
1 razor fragment
2 suspender parts
5 miscellaneous

FC#8817
1 unidentifiable jewelry fragment

FC#8973
1 lamp part
1 miscellaneous

FC#8778
1 battery
1 small hachet head
1 furniture handle
1 spoon
1 utensil handle
1 cap/lid
1 pencil top
1 safety pin
1 garment fastener
2 garters
1 suspender part
1 wire fragment
2 sugar tongs 1 with name Price Bros, 1 Reymen

1 foil fragment

FC#8683
2 caps/lids
1 light bulb fragment
2 wire fragments
1 garment fastener
1 key hole(jewelbox type)
1 frame fragment, picture, etc.

FC#8961
1 utensil handle
1 shoe buckle
2 miscellaneous

FC#8832
1 railroad spike
1 dental type tool
3 caps/lids
1 lamp part
1 garter
1 garment fastener
1 small caliber shell
1 hook
1 miscellaneous

FC#8845
1 sugar tong with name Price Bros
2 caps/lids
2 hinges: 1 door, 1 furniture
2 miscellaneous

FC#8961
2 miscellaneous

FC#8905
1 door handle
1 hook
2 caps/lids
1 shotgun shell
1 sugar tong fragment with name Reymen
1 light bulb fragment
6 miscellaneous

FC#8786
1 oil can nozzle
5 container/can fragments

FC#8761
1 cap/lid

FC#8970
1 door handle

FC#8922
1 pot/pan lid

FC#8930
1 pipe fragment

FC#8702
1 door lock
2 toothpaste type tubes
2 caps/lids
3 container/can fragments
1 hook
1 toy rifle fragment
1 utensil handle
1 safety pin
1 shank button
1 garment fastener
9 miscellaneous

FC#8819
1 shoe buckle

FC#8774
2 furniture handles
2 fuses
3 caps/lids
7 miscellaneous

FC#8956
1 pot/pan fragment
1 cap/lid
1 utensil handle
1 sugar tong with name Price Bros
1 garter fragment
1 shoe eyelet

FC#8971
1 cap/lid
2 container/can fragments
3 miscellaneous

FC#8922
1 crown top cap
1 sugar tong fragment with name Price Bros
1 container/can fragment
1 pail/bucket handle
1 compact fragment
4 miscellaneous

FC#8796
1 cap/lid
1 spring fragment
1 hook
1 sugar tong with name Price Bros
3 container/can fragments
1 pot/pan fragment
1 tag
6 miscellaneous

FC#8789
1 door handle
1 pot/pan handle
1 hook
1 garment fastner
1 shotgun shell
1 furniture leg
1 safety pin fragment
2 shoe eyelets
2 eyed haspes
4 miscellaneous

FC#8974
1 door lock
1 wrench
1 shovel, etc. handle
1 key
1 caster wheel leg
1 container/tin
2 lamp parts
1 suspender part
2 garters
1 sugar tong with name Price Bros
2 buttons
1 utensil handle
1 pot/pan fragment
5 canning jar lid fragments

FC#8805
1 pipe fragment
1 garter
1 buckle
3 caps/lids
1 suspender part
1 eyed screw with a chain
1 hook
1 machine gear
5 container/can fragments
13 miscellaneous

FC#8877
2 foil fragments
1 light bulb fragment
1 cap/lid
2 crown top caps
1 miscellaneous

1 pipe fragment
2 miscellaneous

FC#8893
1 light bulb fragment
1 door hinge
1 toy wagon wheel

FC#8834
1 medal
1 shoe eyelet
1 miscellaneous

FC#8929
1 large spoon fragment
1 container/can fragment
1 purse frame
1 harmonica part
4 miscellaneous

FC#8951
1 picture frame, etc. fragment
1 stover burner fragment
1 contain/can fragment
1 key
2 caps/lids
1 trunk lock
1 furniture handle
4 miscellaneous

FC#8758
1 suspender part
1 sugar tong fragment
1 spring fragment
5 miscellaneous

FC#8782
1 suspender part

FC#8983
2 caps/lids
1 crown top cap
2 foil fragments
1 butter knife handle
2 wire fragments
1 juicer fragment
11 container/can fragments
1 micellaneous

FC#8865
2 buckles
1 spoon fragment
1 pocket knife
1 door latch

FC#8706
1 toothpaste like tube
1 spark plug, AC LM49
2 'S' chain fragments
1 container/can fragment

FC#8753
2 caps/lids
1 suspender part

FC#8751
1 curtain/drapery ring
1 door hinge
2 cap/lid fragments
1 garter fragment
1 garment fastener
2 miscellaneous

FC#8918
1 canning jar lid
1 pot/pan lid, Spatter Blue

FC#8948
1 butcher knife fragment
1 nail
1 sugar tong fragment with name Price Bros
2 container/can fragments
1 chain fragment
1 miscellaneous

FC#8911
1 picture frame, etc. fragment
1 lamp part
4 miscellaneous

FC#8929
1 door hinge
1 sugar tong fragment with name Price Bros
1 caster wheel leg
1 cap/lid
1 lamp part
1 key
1 container/can fragment
1 nail
1 eyed hasp
4 miscellaneous

FC#8699
1 lipstick tube
1 salt/pepper shaker cap
5 container/can fragments

1 door handle
1 eyed hasp
1 drain stopper
1 railroad spike
1 pot/pan fragment
1 spring
1 sugar tong with name Reymen's
3 caps/lids
9 miscellaneous

FC#8842
1 hook
1 container/can
3 caps/lids
3 light bulb fragments
1 garment fastener
34 container/can fragments
2 miscellaneous

FC#8969
1 furniture handle
1 container/can fragment
2 eyed haspes
4 suspender parts
3 garters: 1 whole, 2 fragments
1 garment fastener
1 jewelry fragment
1 light bulb fragment
10 miscellaneous

FC#8815
1 shot gun shell
1 light bulb fragment
1 sugar tong with name Price Bros
1 garter
1 garment fastener
1 awl
2 container/can fragments
1 initialed tag
4 miscellaneous

FC#8719
1 lamp part
1 buckle
1 canning jar lid
1 sugar tong

FC#8727
1 garter
1 safety pin fragment
1 twisted rope chain
1 garment fastener
3 miscellaneous

1 eyed hasp
1 garment fastener
1 hair pin
4 miscellaneous

FC#8974
1 door lock
1 pipe
2 container/can fragments
1 miscellaneous

FC#8680
1 pot/pan fragment, enemalware

FC#8838
1 suspender part

FC#8780
1 compact

FC#8840
1 clock gear
2 spring fragments
1 sugar tong fragment with name Reymen's
2 garment fasteners
1 small caliber shell case
2 container/can fragments
2 curtain/drapery rings
7 caps/lids
1 furniture leg
1 lamp part
1 pot/pan handle
11 miscellaneous

FC#8678
1 fork fragment
1 sugar tong fragment
1 wire mesh fragment
1 miscellaneous

FC#8729
1 spoon
2 garters
1 curtain/drapery ring
1 cap/lid
1 spring fragment
2 shot gun shells
1 small caliber shell case
1 container/tin
1 shoe eyelet
6 miscellaneous

FC#8689

FC#8793
1 key fragment
1 brace/bracket
1 furniture handle
3 caps/lids
1 spring
1 suspender part
10 container/can fragments
4 miscellaneous

FC#8759
3 caps/lids
1 key
1 garter
2 garment fasteners
1 shoe eyelet
1 bracelet

FC#8711
8 container/can fragments
1 furniture door hinge
1 hook
1 sugar tong fragment with name Reymen
3 miscellaneous

FC#8959
2 door handles
1 furniture hinge
1 buckle
1 pot/pan handle
1 miscellaneous

FC#8702
1 pot/pan fragment, enamelled
1 door hinge
1 lamp part

FC#8913
1 pot/pan fragment
1 knife fragment
2 caps/lids
3 container/can fragments
1 'C' battery
1 hook
2 caster whell legs
1 toothpaste type tube
1 musical instrument part
1 drawer knob
1 safety pin fragment
1 sugar tong with name Price Bros
2 miscellaneous

FC#8714
1 cap/lid fragment
1 pot/pan fragment

FC#8836
1 brace/bracket
1 spring
1 foil fragment
1 button
1 knife blade
1 miscellaneous

FC#8829
1 furniture hinge
2 garters
1 garment fastener
1 sugar tong with name Price Bros
1 humming bird
3 miscellaneous

FC#8688
1 sugar tong with name Reymen
1 penny, 1953
3 container/can fragments

FC#8655
3 garment fasteners
1 key
1 suspender part
2 cap/lid fragments
2 shoe hooks

FC#8863
1 fireplace poker fragment
3 caps/lids
1 picture frame, etc., fragment
5 container/can fragments
3 miscellaneous

FC#8658
6 wire fragments

FC#8817
1 pot/pan handle
1 cap/lid
10 container/can fragments
4 miscellaneous

FC#8876
1 plier fragment
1 brace/bracket
1 tag
1 hook
2 light bulb fragments
1 button

1 pot/pan fragment, spatterware
1 garment fastener
1 nail
1 furniture handle
1 cap/lid
8 miscellaneous

FC#8878
2 caps/lids
1 foil fragment
1 crown top cap
3 miscellaneous

FC#8736
1 spring fragment

FC#8783
1 laddle fragment

FC#8816
1 buckle
1 large spoon handle
2 container/can fragments
1 crown top cap
4 spring fragments
1 brace/bracket
1 crank handle
1 pail/bucket fragment
1 key hole
2 drawer pulls/handles
1 badge fragment
4 miscellaneous

FC#8707
3 wire fragments
1 battery fragment
2 suspender parts
1 garment fastener
1 shoe eyelet
1 garter
29 container/can fragments
12 miscellaneous

FC#8697
2 spring fragments
1 toothpaste type tube
3 miscellaneous

FC#8695
1 chain fragment
1 brace/bracket
1 container/can fragment
1 miscellaneous

1 safety pin fragment
6 container/can fragments
2 miscellaneous

FC#8658
1 toothpaste type tube
1 pot/pan handle
1 light bulb fragment
3 miscellaneous

FC#8741
1 wire fragment
4 miscellanous

FC#8784
1 suspender part
1 garment fastener

FC#8737
1 horseshoe
1 lamp part
5 caps/lids
1 hook
1 wire fragment
1 container/can
1 pot/pan handle fragment
5 miscellaneous

FC#8748
4 fuses
1 light bulb fragment
1 tag
1 cup
1 bottle opener
1 caster wheel leg
2 musical instrument parts
1 suspender part
1 canning jar lid
1 garment fastener
1 spring
3 furniture pulls/handles
1 cap/lid
4 shoe hooks
6 miscellaneous

FC#8793
1 furniture hinge
1 hook
1 brace/bracket
1 hook
1 brace/bracket fragment
1 cap/lid fragment
2 container/can fragments
3 miscellaneous

FC#8767
1 container/can
8 cap/lid fragments
3 crown top caps
2 shoe hooks
1 garment fastener
1 suspender part
1 toothpaste type tube fragment
1 knife blade
1 tag
4 miscellaneous

FC#8776
1 light bulb fragment
3 crown top caps
4 miscellaneous

FC#8871
1 machinery part
1 eyed hasp
1 hook
3 container/can fragments
6 miscellaneous

FC#8909
2 wire fragments
1 caster wheel leg
1 water valve
1 miscellaneous

FC#8824
1 cap/lid
1 musical instrument part
1 miscellaneous

FC#8779
1 stirrup
1 'T' pipe joint
1 lamp part
1 penny, 1899
1 sugar tong with name Reymen
1 safety pin
4 suspender parts
1 key hole
3 caps/lids
1 spoon handle
1 garment fastener
1 small caliber shell case

FC#8904
1 jewelry pin fragment
1 pipe fragment
1 door hinge
1 pot/pan fragment

FC#8912
1 spoon fragment
2 crown top caps
2 caps/lids
2 pieces jewelry
1 garter
2 miscellaneous

FC#8738
1 penny, 1889
1 lady's compact
1 wrench
2 lipstick tubes
1 furniture handle
1 pickle fork
1 spoon
3 suspender parts
1 coaster/ash tray
1 garter
1 garment fastener
2 light bulb fragments
5 caps/lids
5 miscellaneous

FC#8891
2 vice clamps
1 fuse
1 light bulb fragment
1 spring
1 key
1 crown top cap
1 buckle
1 sugar tong fragment with name MacDonald
1 tin with name Rexal Throat Tablets
1 miscellaneous

FC#8810
3 wire fragments
1 pot/pan handle
2 hooks
1 lamp part
1 jewelry stick pin
1 door hinge
1 furniture leg
1 pipe elbow
2 spoon fragments
1 button
1 spring fragment
3 sugar tong fragments with names Reymen
1 safety pin fragment

1 spring fragment
1 furniture handle
4 miscellaneous

FC#8801
1 shallow fluted baking dish
4 light bulb fragments
3 container/can fragments
1 drain cover
2 crown top caps
4 canning jar lids: 2 whole, 2 fragments
1 jewelry ring
4 miscellaneous

FC#8681
1 suspender part

FC#8908
1 pan/dish fragment, brown spatter
1 harmonica part
1 small caliber shell case
1 container/can fragment
4 miscellaneous

FC#8839
1 Iron City Beer Can with the Pittsburgh Pirates 1974 TV Schedule
1 lady's compact
1 door hinge
1 caster wheel leg
3 pot/pan handles
6 pot/pan fragments
1 toy horse
1 bracelet
1 lamp part
1 utensil fragment
8 caps/lids
2 garters
3 suspender parts
16 miscellaneous

FC#8855
1 brush fragment
1 stove grate fragment
1 pipe fragment
1 container/can fragment
1 shot gun shell
1 suspender part
1 garment fastener
1 cap/lid
1 railroad spike
13 miscellaneous

8 caps/lids
1 light bulb fragment
3 garment fastenres
3 garters
1 hair pin
9 container/can fragments
12 miscellaneous

FC#8952
1 Iron City Beer Can with the 1974 Pittsburgh Pirates Roster
1 canning jar lid
1 furniture foot
1 door latch
1 hook
2 furniture handles
2 container/can fragments
7 miscellaneous

FC#8953
1 knife fragment
1 button
1 miscellaneous

FC#8788
1 tag
1 umbrella fragment
1 door hinge
1 brace/bracket
1 hook
1 sugar tong with name Price Bros
1 garment fastener
3 container/can fragments
2 canning jar lids
1 furniture foot
1 purse frame
1 pot/pan fragment
1 lamp part
1 cap/lid
1 spring

FC#8914
1 lamp part
1 jewelry cross
1 sewer, gas, etc, cap
1 spoon fragment
4 hooks
1 candlestick holder fragment
1 gas stove connection
2 spring fragments
1 door hinge
1 sugar tong fragment with name Price Bros
3 garters

FC#8790
1 suspender part
3 clock parts
1 pot/pan fragment
1 file
1 shoe hook
8 miscellaneous

FC#8950
1 door latch
2 furnitures pulls/handles
1 caster wheel leg
1 garter
1 pipe fastener
2 lamp parts
1 cap/lid
1 hook
1 furniture hinge
7 miscellaneous

FC#8794
1 shot gun shell
1 shoe eyelet
4 caps/lids
1 safety pin
1 suspender part
1 lamp part
3 miscellaneous

FC#8785
4 lamp parts
1 garment fastener
1 door latch
1 trivet/iron rest
2 miscellaneous

FC#8755
1 pipe fragment
1 foil fragment
1 spoon fragment
3 light bulb fragments
1 shirt collar tack
1 eyed hasp
1 flip top cap
1 shot gun shell
1 door hinge
2 jewel box, etc. hinges
1 canning jar lid fragment
7 miscellaneous

FC#8754
1 foil fragment
1 shot gun shell
1 cap.lid fragment
1 door lock
13 miscellaneous

FC#8814
1 jewerly pin
1 cap/lid
2 bolts
1 door hinge
1 caster wheel leg
2 miscellaneous

FC#8920
1 spoon
1 utensil handle
1 eyed hasp
1 wire fragment
1 cap/lid fragment
1 furniture handle
8 miscellaneous

FC#8679
2 lamp parts
1 buckle fragment
1 hook
2 shoe hooks
1 picture hanger
1 horse head, jewelry?
2 miscellaneous

FC#8826
1 furniture handle
1 safety pin fragment
1 eyed hasp
1 key hole
1 suspender part
1 sugar tong fragment with name Huyler
2 miscellaneous

FC#8818
1 cap/lid
1 miscellaneous

FC#8698
1 container/can fragment

FC#8700
1 furniture handle
1 buckle
1 eyed hasp
1 safety pin
1 spoon fragment
1 garter

1 cap/lid
1 miscellaneous

FC#8760
1 shoe eyelet
1 shoe hook
1 button
1 light bulb fragment
2 key holes
1 garter
1 watch fragment
1 miscellaneous

FC#8913
1 shot gun shell
1 garment fastener
1 container/can fragment
1 jewelry fragment

FC#8874
1 lamp part
1 purse frame

FC#8757
1 miscellaneous

FC#8716
1 Heinz Ketchup packet
1 coin, poor condition
2 garment fasteners
2 miscellaneous

FC#8856
1 lady's compact
6 miscellaneous

FC#8962
1 chain link fragment
1 container/can fragment

FC#8684
2 container/can fragments
1 shot gun shell fragment
1 garment fastener
1 suspender part

FC#8798
1 anchor pendant
1 thimble
1 lamp part
2 miscellaneous

1 suspender part
3 caps/lids
2 garment fasteners
2 shoe hooks
1 small caliber shell case
2 miscellaneous

FC#8813
1 toothpaste type tube fragment
1 lamp part
1 bird fragment
2 cap/lid fragments
1 wire fragment
2 miscellaneous

FC#8831
1 cap/lid
2 garters
1 safety pin fragment
1 fuse
1 suspender paet
1 miscellaneous

FC#8919
1 pocket knife fragment
1 furniture foot
1 garter
1 miscellaneous

FC#8822
1 knife fragment
1 garment fastener
1 garter
1 cap/lid
1 wire fragment

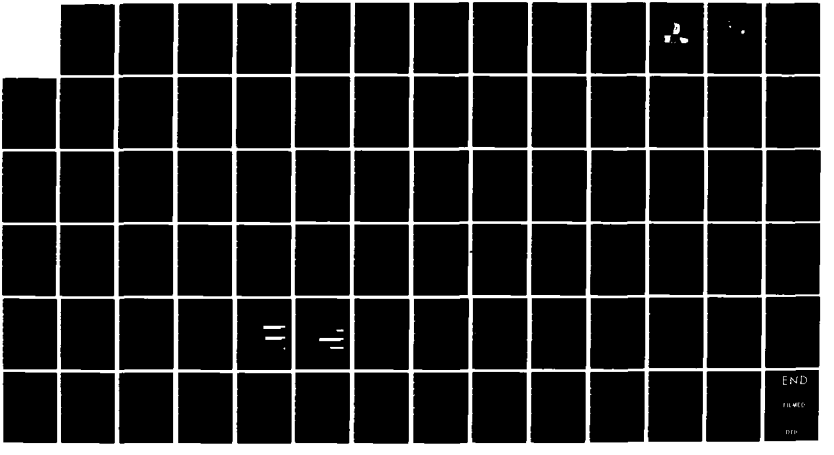
FC#8781
1 purse fragment
1 cap/lid
1 miniature candle stick holder
1 sugar tong fragment with name
Price Bros
5 miscellaneous

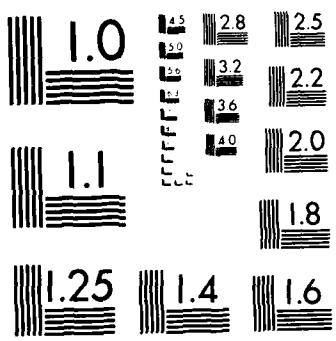
FC#8720
1 miscellaneous

FC#8762
3 container/can fragments
2 miscellaneous

AD-A153 688 ANALYSIS OF ARCHAEOLOGICAL GEOLOGICAL AND HISTORICAL ARTIFACTS AND DOCUME..(U) CARNEGIE MUSEUM OF NATURAL HISTORY PITTSBURGH PA J B RICHARDSON MAR 85 10/10

UNCLASSIFIED DACW59-81-C-0003 F/G 5/6 NL





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS 1963 A

DIVISION 8

Engraved Window Glass

It is clear that these fragments of engraved window glass are from the windows in the ballroom of the Neville House. These windows have glass panes which have been engraved with names of people and other inscriptions. Many of the names are of prominent personages in western Pennsylvania. The inscriptions were made by engraving the glass with a sharp pointed instrument. As the windows were broken, many of the fragments were thrown in the dump. The remains consist of 53 fragments of green, light green, and light blue engraved window glass with undecipherable writings and lines.

FC#8871-1
Light blue glass: "R C"

FC#8872-1
Light green glass: "W S"

FC#8839-3
Light blue glass: "Je"

FC#8760-2
Light blue glass: "L"?

FC#8785-2
Light blue glass: "M or W"

FC#8817-1
Light green glass: writing scratched-out

FC#8877-3
Light blue glass: "nuay or nway"

FC#8969-1
Light blue glass: "H and W"

FC#8864-2
Light green glass: "E or &"

FC#8863-3
Light green glass: "ie, u or w"

FC#8768-1
Light green glass: "Na"

FC#8683-1
Light green glass: "n"?

FC#8785-4
Light green glass: "J"

FC#8654-1
Light green glass: "essie"

FC#8753-1
Light blue glass: "W"

FC#8738-1
Light green glass: "Mo"

FC#8696-2
Light green glass: "W or M"

FC#8863-2
Light blue glass: "ay"

FC#8653-1
Light green glass: "Ch"

FC#8863-2
Light blue glass: "oh"

FC#8785-3
Light green glass: "Wre"

FC#8877-4
Light green glass: "U, M, or W"

FC#8852-1 and FC#8963-2
Light blue glass: "U and W" or 2 "W's"

FC#8771-1
Light green glass: "n or ne"

FC#8966-1
Light green glass: "W"

FC#8818-1
Light green glass: "L"

FC#8809-3
Light green glass: "R"

FC#8839-4
Light green glass: writting
scratched-out

FC#8737-1
Light green glass: "Deni"

FC#8768-2
Light green glass: "sha and w"

FC#8692-1
Light green glass: "rtha"

FC#8712-1
Light green glass: "Ch"

FC#8817-4
Light green glass: "y"

FC#8768-3
Light green glass: "S"

FC#8788-2
Light green glass: "ght" and
possibly German?

FC#8877-7
Green glass: "Re"

FC#8696-3 and FC#8749-2
Green glass: "Cr...s and Cooke"?

FC#8806-1
Light green glass: "W"

FC#8755-3
Light blue glass: "M or W"

FC#8756-1
Light green glass: "Me"

FC#8816-1
Light blue glass: "ew and nshal"

FC#8817-3
Light green glass: "Juli"

FC#8891-2
Light green glass: "lasting and
All ha"

FC#8891-3
Light green glass: "let"

FC#8954-3
Light green glass: "rby"?

FC#8877-5
Light green glass: "just 2 U"

FC#8891-4
Light green glass: "ove" (Love?)

FC#8702-1
Green glass: "Cra"

FC#8749
Green glass: "Geom Dent of L Lo"?
and "Ne"

PREHISTORIC ARTIFACTS

by

Richard L. George

A total of 107 prehistoric artifacts were found during the 1979 excavation of the Neville House site, 36AL29, Collier Township, Allegheny County, Pennsylvania. Excavations were conducted in an area of a historic dump and prehistoric artifacts were located interdispersed with the glass, ceramics and metal items described above. Because none of the prehistoric artifacts were found in an undisturbed situation, the question of original provenience is paramount.

Topographically, the site lends itself to prehistoric utilization as a level "bench" high enough above Chartiers Creek to be protected from flooding but near enough for exploitation. Subsequent historic utilization could have eleminated any possible undisturbed prehistoric evidence although investigations away from the dump could prove otherwise. Much would depend upon depths of cultural strata since one can expect that the upper zone has been severely disturbed by cultivation and building.

Forty eight 5' squares were excavated and of these 60% or 29 units contained at least one prehistoric artifact. Eight adjacent units in the central area of the excavation contained 59 of these items or 55% of the total whether this "clustering" represents disposal during a relatively short period cannot be known but it is suggestive.

Most of the prehistoric artifacts, as described below, are of locally available lithics whether derived from the glacial material of the nearby Ohio River or from bedded chert deposits of the lower Chartiers valley. Exotic cherts can be noted among the biface tools but all of the debitage and uniface tools except one are made of locally available chert. Lower Chartiers valley prehistoric sites contain a preponderance of gray, white, tan and red tabular cherts that strongly suggest a local origin although the exact source has never been located.

That the Neville House prehistoric artifacts represent more than a collection from the immediate vicinity of the dump is suggested by several considerations. The presence of a Scallorn Point (Bell 1960: 84-84) that occurs in the south central United States could indicate that an artifact collector was residing nearby. Secondly, although the diagnostic artifacts have archaeological significance, few if any can be considered of relic collector value. Few of the items are undamaged and none are large and esthetically satisfying. Thirdly, the presence of a plow scar on a gorget fragment may indicate surface collecting from a nearby cultivated area. There are nine recorded prehistoric sites within a one mile radius of Neville House and a 35 site cluster located between 1 1/2 and 4 1/2 miles south. Artifacts from these

sites span many millennia from the Paleoindian period to Late Woodland (Mayer-Oakes 1955) and only the former is not represented in the Neville House sample described below.

It is this writer's conclusion that the 36AL29 sample represents the discards of a collector(s) who had not far to travel to gather a quantity of "relics" that are essentially local in type and material. The existence of the Scallorn Point in an otherwise provincial accumulation may indicate that the collector was not above buying or trading artifacts. Although whole, it would be easily lost because of its diminitive size. The point is the only aberrant artifact in a sample that was collected from nearby sites and probably, from 36AL29 itself.

This conclusion has been independently corroborated by the historical research of Ronald Carlisle (see History Section). He quotes letters from the Wrenshaw family stating that local Indian sites, as well as sites in other states, were excavated, or collected from, by family members in the 1860's. Thus, many of the prehistoric artifacts recovered in the excavations probably pertain to discarded family collections.

GROUND AND PECKED STONE TOOLS

1. Gorget midsection: steatite, two perforations drilled from both sides - parallel sided, biconvex cross-section, plow scar on one surface. Middle Woodland. (Figure 1)
   L 47 mm (?), W 50 mm, T 8 mm

2. Three-quarter grooved axe poll: granite, break occurs at distal edge of groove, poll is asymetrical. Archaic. (Figure 1)
   L 53 mm (?), W 78 mm, T 49 mm

3. Adz poll: granite, break at suggested mid-section, fire stained slightly asymetrical cross-section. Archaic.
   L 76 mm ?, W 51 mm, T 27 mm

4. Celt poll: granite, symetrical cross-sections, battered, flattened poll, fire stained. Undiagnostic.
   L 66 mm?, W 50 mm, T 39 mm

5. Unfinished pendant fragment: banded sandstone, water worn pebble with flattened edges exhibiting striations, one unfinished perforation begun from both surfaces, end exhibits battering, fire stained. Middle Woodland. (Figure 1)
   L 56 mm?, W 39 mm, T 17 mm

6. Celt bit: fine grained sandstone, use dulled and scarred, asymetrical, Undiagnostic.
   L 41 mm, W 47 mm, T 26 mm

7. Celt poll fragment: granite, poll flattened, rust stained. Undiagnostic.

L 48 mm?, W 38 mm?, T 30 mm?

8. Bipitted stone: granite, pitted on two surfaces and battered around 1/4 of circumferance and one end. Undiagnostic.
L 81 mm, W 74 mm, T 50 mm

9. Bipitted stone: sandstone, some end surfaces battered, fire reddened. Undiagnostic.
L 98 mm, W 85 mm, T 52 mm

10. Hammerstone: sandstone pebble, battered and/or rubbed "edges." Undiagnostic.
L 93 mm, W 90 mm, T 65 mm

11. Hammerstone: sandstone pebble, heavily battered surfaces suggesting use in flint working, almost round. Undiagnostic.
L 78 mm, W 71 mm, T 70 mm

12. Hammerstone: sandstone pebble, asymetrical with multiple battered surfaces. Undiagnostic.
L 59 mm, W 50 mm, T 42 mm

13. Hammerstone fragment: sandstone pebble, fire cracked with one utilized area. Undiagnostic.
L 79 mm?, W 55 mm?, T 42 mm?

CHIPPED STONE TOOLS - BIFACE

1. Madison Point (Ritchie 1961:33-34, 88): fossiliferous pebble chert, tip missing, one edge damaged, incurvate base straight edges. Late Woodland. (Figure 2)
L 24 mm?, W 18 mm, T 4 mm

2. Madison Point (Ibid.): gray chert of unknown origin, one tang missing, damaged tip, relatively thick,has crude quality that could represent unfinished tool. Late Woodland. (Figure 2)
L 22 mm?, W 16 mm?, T 4 mm

3. Chesser Notched Point (Pruffer 1967:21-22, 54): dark gray chert, basal portion, elongated shallow side notches, excurvate base, surface "hump" indication of breakage during knapping process. Middle Wooland. (Figure 2)
L ? mm, W 26 mm, T 8 mm

4. Chesser Notched Point? (Ibid.): Flint Ridge chalcedony, tip missing, large side notches, unground, excurvate base, incipient serrations, possible variation of Chesser Notched Point although notches are relatively deep. Middle Woodland. (Figure 2)
L 32 mm?, W 21 mm, T 6 mm

5. Side notched point: Flint Ridge chaledony, tip and one distal edge missing, base partially turncated, point has unfinished

quality due to unsuccessful attempts at thinning represented by hinge fractures. Middle Woodland?
L ? mm, W 21 mm, T 7 mm

6. Kiski Notched Point (George 1981: 207-208): unidentified gray chert, symetrical blade and stem with ine truncated tang, characteristicly thick. Middle Woodland. (Figure 2)
L 25 mm, W 16 mm, T 5 mm

7. Biface Knife: Onondaga Chert, tip missing, thin, biconcave cross section with uneven edges and base, one surface exhibits fire spalling. Middle Woodland. (Figure 2)
L ? mm, W 23 mm, T 5 mm

8. Adena Point (Ritchie 1961:12-13, 60-61): banded gray-brown chert, basal portion, unfinished quality suggested by hinge fractures formed by attempts at thinning and "rough" edges. Early Woodland.
L ? mm, W 29 mm, T 8 mm

9. Rossville Point (Ibid.: 46, 103): mottled light gray chert, one shoulder damaged, typical thick lozenge shaped with biconcave cross-section, straight blade edges, thick stem. Early Woodland? (Figure 2)
L 40 mm, W 21 mm, T 9 mm

10. Expanded stemmed point: Onondaga Chert, tip missing, narrow thick stem, prominent shoulders, rough uneven edges. Early Woodland.
L 33 mm?, W 23 mm, T 6 mm

11. Steubenville Stemmed Point (Ibid.: 51-52, 106-107): gray, tan chert, basal portion, weak shoulders, unground stem, biconvex profile. Late Archaic. (Figure 2)
L ? mm, W 26 mm T 8 mm

12. Stemmed point: grainy gray black chert, distal portion missing, unfinished quality reflected by irregular flaking and untrimmed edges. Late Archaic? (Figure 2)

13. Stemmed point: mottled gray, brown chert, distal portion missing, symetrical blade edges, slighty contracting stem that is almost ovate. Late Archaic or Early Woodland.
L ? mm, W 30 mm, T 8 mm

14. Stemmed point: mottled light gray and tan chert, base and portion of one shoulder, thick crudely finished straight stem. Late Archaic?
L ? mm, W ? mm, T 8 mm?

15. Brewerton Side Notched Point Ibid.: 19-20, 72): fossiliferous pebble chert, tip missing, one tang truncated, convex blade edges, elongate shallow notches. Late Archaic. (Figure 2)
L 30 mm?, W 12 mm, T 6 mm

16. Brewerton Side Notched Point (Ibid.): Onondaga Chert, distel portion missing, elongated shallow notches and typically thick overall, flat base. Late Archaic.
L ? mm, W 21 mm, T 9 mm

17. Brewerton Side Notched Point (Ibid.): vesicular gray chert, distal portion missing, one truncated tang, unfinished quality due to refined surfaces and edges, heat pitted. Late Archaic.
L ? mm, W 21 mm, T 7 mm

18. Expanded stemmed point: Uniontown Chert, tip missing, short, stubby with excurvate saw-toothed edges, incipient stem and excurvate base. Late Archaic. (Figure 2)
L 29 mm, W 21 mm, T 6 mm

19. Expanded stemmed point: dull gray, grainy chert, base and one shoulder intact, deep symetrical notch and prominent shoulder, elongated stem with slightly excurvate base. Cultural affiliation unknown.
L ? mm, W ? mm, T 7 mm

20. Side notched point: Onondaga Chert, distal portion missing, deep large notches, crude uneven base, possible unfinished. Cultural affiliation unknown.
L ? mm, W 21 mm, T 5 mm

21. Side notched point: mottled black gray chert, one tang missing, shallow elongated side notch, unrefined blade suggests that point was not finished. Unknown cultural affiliation (possible unfinished Chesser point (Prufer 1967:21-22, 54) of Middle Woodland origin).
L 34 mm, W 24 mm, T 8 mm

22. Contracting stemmed point: Onodaga Chert: base and distal portion of blade truncated, one surface is heat pitted, thick cross section. Cultural affiliation unknown.
L ? mm, W 24 mm, T 7 mm

23. Scallorn Point (Bell 1960:84-85): mottled black gray chert, narrow blade with flared stem, plano-convex cross-section, one edge slightly serrated. Late Woodland. (Note: The Scallorn Point has a wide distribution in south central United States i.e., "most sections of the Mississippi Valley Region" (Ibid). It does occur in the Upper Ohio Valley and its presence at 36AL29 could indicate collector initiative). (Figure 2).
L 28 mm, W 12 mm, T 3 mm

24. Point fragments. (See Table 1).

TABLE 1

POINT FRAGMENT ATTRIBUTES

Intact Portion	Lithic Material	Dimensions(mm)		
		L	W	T
Notching element	Vesicular gray chert	-	23	5
Blade mid-section	Flint Ridge	-	35	5
Blade	Banded gray	-	25	6
Blade	Banded gray	-	-	8
Blade	Grainy brown	-	25	9
Blade & shoulders	Mottled dark gray	-	26	9
Tip	Mottled gray	-	-	-

25. Preforms. (See Table 2).

TABLE 2

PREFORM ATTRIBUTES

Intact Portion	Lithic Material	Dimensions(mm)		
		L	W	T
Complete	Grainy black chert	59	42	23
Complete	Delaware	47	28	13
Complete	Onondaga	57	38	25
Complete	Mottled black-brown	39	25	11
Complete	Onondaga	37	21	11
Base*	Uniontown	-	39	10
Basal portion	Banded gray	-	-	7
Blade	Mottled gray-brown	-	38	12
Blade	Uniontown	-	41	13

*Portion of intact edge exhibits retouch.

CHIPPED STONE TOOLS-UNIFACE

1. Prismatic blade: Flint Ridge chalcedony, promimal portion missing, typically curved longitudinal axes with rectanguloid medical ridge on dorsal surface, both edges exhibit heavy wear damage. Middle Woodland. (Figure 2)
   L 39 mm?, W 13 mm, T 3 mm

2. Side scraper: gray pebble chert, crude example fashioned from a wedge shaped portion of a pebble core, 46°, 18 mm long working edge. Cultural affiliation unknown.
   L 35 mm, W 29 mm, T 14 mm

3. Side scraper: mottled gray chert (local), wedge shaped core

fragment with multiple utilized edges at distal end, steep 90° scraping edge nar tip, exhibits heavy use wear resulting in numerous tiny hinge fractures. Cultural affiliation unknown. L 66 mm, W 30 mm, T 21 mm

4. End scraper: light gray chert (local), crude scraping edge (26 mm long) with 70° angle, tool is otherwise unrefined. Cultural affiliation unknown.
43 mm, W 27 mm, T 14 mm

5. Side Scraper: Onondaga Chert, uneven working edge with 61° angle on an unrefined flake. Cultural affiliation unknown.
L 25 mm, W 20 mm, T 5 mm

6. Utilized flakes and core fragments: ten artifacts with one or more utlized edges are undiagnostic, all are fashioned from locally available chert, i.e., two of Onondaga pebble chert and eight of various hued local tabular chert. Sizes range from 66 mm to 21 mm long. Cultural affiliation unknown.

7. Debitage: thirty one examples of chert debitage which includes 23 flakes and core fragments of local tabular chert, seven of Onondaga chert and one of Delaware chert. Sizes range from 76 mm to 14 mm in length. Cultural affiliation unknown.

POTTERY

1. Monongahela Cordmarked Rim Sherd (Mayer-Oakes 1955:196-198): one small rim sherd with shell tempering leached out, exterior cord marking perpendicular to plain, flattened lip, plain interior. Late Woodland Monongahela.
L 26 mm, W 18 mm, T 6 mm

2. Monongahela Cordmarked Body Sherds (Ibid.): five shell tempered cord marked body sherds with plain interiors. Late Woodland Monongahela.

Dimensions:

Length(mm)	Width(mm)	Thickness(mm)
48	45	8
60	42	8
51	39	6
48	25	6
40	29	7

3. Monongahela Ware (Mayer-Oakes 1955:196-200): three shell tempered body sherds are missing exterior surfaces due to recent splitting. All bear close affinities to the above described Monongahela Cordmarked sherds. Late Woodland Monongahela.



Figure 1. Ground and Pecked Stone tools. Upper, type 2; Lower left, type 1; Lower right, type 5.



Figure 2. Biface chipped stone tools. Reading from left to right. Upper Row type 1, 2; 2nd row, types 3, 4, 6; 3rd row, type 9, 11, 19 4th row, type 15, 18, 23; Lower right. Uniface stone tool, type 1.

DISCUSSION OF THE CERAMIC AND GLASS ANALYSIS

by

John Eddins

Formation of a Data Base and Analytical Procedures

When analysis of the artifact sets recovered at Neville House began, the research team at CMNH decided to organize and encode all their data for entry into a computerized data base. The researchers had strong feelings about the importance of such a move, but were really not aware of all the ramifications. The decision coincided with an ongoing program at CMNH, Section of Anthropology, for the computerization of all assession files for the ethnographic and archaeological collections.

The goals of the Neville House researchers were focused initially on the efficient development of an inventory of recovered artifacts and the documentation of frequencies and percentages of occurrence of different classes, categories, subcategories, and varieties of artifacts, their functions, their technological, decorative, and chronological attributes, and their relationships to time and place of origin and to in-site provenience. Various members of the research team also hoped to use the computer and data base in the computation, alteration, and evaluation of new variables and attributes derived from the basic data at the artifact, subgroup, group, category, class, provenience unit, site, and varied temporal and geographic unit levels.

With no adequate model of data analysis and computerization for archaeological materials of the period in question to rely on, the researchers attempted to select important variables and attributes and applicable levels of measurement (nominal to interval). They also developed original coding lists and data formats. In the early phase of analysis the researchers reviewed the usually inconsistent and unsystematic literature on their artifact categories and developed a familiarity with their own data sets. They began to perceive the types of questions they could ask of their data. They also realized that there were problems with some of the initial decisions about the importance of various attributes and about the methods of coding. Such inconsistencies between data sets (usually resulting from idiosyncracies in coding or characterization of attributes) were tracked down and standardized so that cross category analysis could be attempted.

Standard analysis of historic sites tends to settle at the level of description of architecture, foundations, and features, description and ennumeration of specific artifacts, and, recently, the derivation of mean-median dates for total assemblages (usually mean-median dates are not even contrasted between proveniences within sites). Such a standard analysis is then contextualized by reference to general social and economic trends noted for the region and period and by loosely developed and 'non-justified' evaluations of how the data at hand are

TABLE 3

Dates for Analyzed Categories in Selected Squares of Feature 21

Feature	Square	Class	Category	Mean-median Date	Lag
21	N5W80	Ceramics	Class date	1915	
			Ceramic maker's marks	1909	36
			Whiteware	1918	27
			Semi-vitreous	1918	27
			Porcelain	1912	33
		Glass	Class date	1912	
			Whole bottles	1916	29
			Bottle fragments	1912	33
			Jars and jar rims	1920	25
			Glass maker's marks	1909	36
			Square date	1913	
	N0W85	Ceramics	Class date	1921	
			Whiteware	1926	19
			Semi-vitreous	1918	27
			Porcelain	1907	38
		Glass	Class date	1919	
			Whole bottles	1924	20
			Bottle fragments	1922	23
			Pontil bottles	1853	92
			Jars and jar rims	1923	22
			Square date	1919	
	N5W120	Ceramics	Class date	1913	
			Ceramic maker's marks	1909	36
			Whiteware	1915	30
			Semi-vitreous	1914	31
			Porcelain	1912	33
		Glass	Class date	1908	
			Whole bottles	1910	35
			Bottle fragments	1904	41
			Jars and jar rims	1913	32
			Glass maker's marks	1908	37
			Square date	1910	
	N10W120	Ceramics	Class date	1914	
			Ceramic maker's marks	1912	33
			Whiteware	1917	28
			Semi-vitreous	1910	35
			Porcelain	1914	31
		Glass	Class date	1908	

TABLE 2

All Features With Datable Artifacts, All Analyzed Categories

Feature	Class	Category	Mean-Median Date$_1$	Mean-Median Date$_2$	Min Prov. Date	Max Prov. Date	Lag
20	Ceramic	Ceramic maker's marks	1916	1912	1868	1945	33
		Whiteware	1909	1909	1868	1937	36
		Semi-vitreous	1907	1907	1894	1936	37
		Porcelain	1928	1917	1883	1945	28
		Class as a whole	1915	1912	1868	1945	
	Glass	Whole bottles	1926	1918	1870	1945	27
		Bottle fragments	1921	1911	1840	1945	34
		Pontil bottles	1847	1847	1820	1860	98
		Jars and jar rims	1915	1911	1858	1945	34
		Glass maker's marks	1918	1911	1840	1945	34
		Class as a whole	1918	1910	1820	1945	
		Feature dates	1917	1910	1820	1945	
21	Ceramic	Ceramic maker's marks	1917	1912	1842	1945	33
		Whiteware	1918	1917	1868	1945	28
		Semi-vitreous	1916	1912	1878	1945	33
		Porcelain	1920	1913	1842	1945	32
		Class as a whole	1918	1914	1842	1945	
	Glass	Whole bottles	1925	1919	1810	1945	26
		Bottle fragments	1914	1907	1800	1945	38
		Pontil bottles	1847	1847	1790	1880	98
		Jars and jar rims	1922	1916	1850	1945	29
		Glass maker's marks	1917	1911	1832	1945	34
		Class as a whole	1917	1911	1790	1945	
		Feature dates	1917	1912	1790	1945	
27	Ceramic	Whiteware	1939	1938	1930	1945	7
		Class as a whole	1939	1938	1930	1945	
		Feature dates	1939	1938	1930	1945	
30	Ceramic	Whiteware	1938	1921	1896	1945	24
		Class as a whole	1938	1921	1896	1945	
		Feature dates	1938	1921	1896	1945	
Site Dates			1918	1912	1790	1945	

Table 1 con't.

Totals	70,925	100.00	56.29
Organic Objects			
Bone	2508	54.80	1.99
Shell	1043	22.79	0.83
Leather	568	12.41	0.45
Wood	170	3.71	0.13
Cloth	156	3.41	0.12
Miscellaneous	132	2.88	0.10
Totals	4577	100.00	13.18
Synthetic Objects			
Rubber	72	29.27	0.06
Celluliod	24	9.76	0.02
Plastic	102	41.46	0.08
Unknown	48	19.51	0.04
Totals	246	100.00	0.20
Metal Objects			
Identifiables	3163	19.05	2.51
Unidentifiables	8716	52.51	6.92
Fasteners	4721	28.44	3.75
Totals	16,600	100.00	3.63
Prehistoric Artifacts			
Lithics	90	89.11	0.07
Ceramics	10	9.90	0.01
Worked Bone	1	0.99	0.00
Totals	101	100.00	0.08
Miscellaneous	274	100.00	0.22
Totals	274	100.00	0.22

TABLE 1

Classes, Categories, and Frequencies

Class	Category	# of Count	# of Count	Total
Ceramicware				
	Decorated Porcelain	5062	15.21	4.02
	Undecorated Porcelain	3453	10.38	2.74
	Decorated Whiteware	4864	14.62	3.86
	Undecorated Whiteware	8663	26.04	6.88
	Glazed Stoneware	1147	3.45	0.91
	Unglazed Stoneware	37	0.11	0.03
	Glazed Redware	2108	6.34	1.67
	Unglazed Redware	797	2.04	0.63
	Decorated Yellow ware	316	0.95	0.25
	Undecorated Yellow ware	504	1.51	0.40
	Decorated Semi-Vitreous	1527	4.95	1.21
	Brick Fragments	400	1.20	0.32
	Flower Pots	2934	8.82	2.33
	Miscellaneous Ceramics	479	1.44	0.38
	Porcelain Marks	536	1.61	0.43
	Semi-Vitreous Marks	61	0.18	0.05
	Whiteware Marks	383	1.15	0.30
	Totals	33,271	100.00	26.41
Glassware				
	Whole Glass Bottles	541	0.76	0.43
	Glass Bottle Necks and Rims	3496	4.89	2.75
	Whole Glass Jars	170	0.24	0.13
	Glass Jar Rims	1268	1.79	1.01
	Glass with Marks	5670	7.99	4.50
	Decorated Glass	4706	6.64	3.74
	Clear Glass Containers	27,267	38.44	21.64
	Blue Glass Cotainers	2736	3.86	2.17
	Light Blue Glass Containers	6260	8.83	4.97
	Green Glass Containers	2030	2.86	1.61
	Light Green Glass Containers	2244	3.16	1.78
	Brown Glass Containers	2978	4.20	2.36
	Amythyst Glass Containers	645	0.91	0.51
	Yellow Glass Containers	72	0.10	0.06
	Red Glass Containers	22	0.03	0.02
	Milk Glass Containers	1022	1.44	0.81
	Miscellaneous Glass	1615	2.28	1.28
	Glass Bottle/Jar Bases	3320	4.68	2.64
	Window Glass	4890	6.75	3.80

often in catalogues produced by the original makers. However, recent research by people like Miller (1980) or Sussman (1977) on 19th century material, and current struggles over the definition, description, and boundaries of various 18th to 19th century wares calls such a "fixed-type" perspective into question. It is suggested here that detailed description and data base encoding of artifact attributes for historic site assemblages will enable and promote movement beyond "fixed-type" analysis. The goals of research can then become the investigation of any apparent structure in the co-variation of: manufacturing techniques; style, technique, and motifs of decoration; function; artifact category and class; place of origin (manufacture); place of use and deposition; chronology; intra-and inter-site provenience; selection, use, and deposition; and the social and economic states and behaviors of the manufactures and users of the artifacts constituting the sites under study.

SYMAP, a synagraphic mapping program, cross-tabulations, and cluster analysis were used in attempts to determine if there were any loci within the site which represented short term deposition and to discern functional and chronological spacing in deposition at the site. Most of these attempts produced unsatisfactory and insignificant results. This is due to the concentrated nature of the deposits and to the mixing of deposits from extensive bottle hunting.

Cross-tabulations using various statistics revealed no significant associations among artifact classes, functions, or proveniences. However, the computations were hampered by the large number of cells in the contingency tables required for a meaningful analysis and by the number of cells with missing data. The density and contour maps normally produced by SYMAP proved of little use because of the relative concentration of artifacts in the midden. However, SYMAP maps with frequency counts of artifact classes and function per square were useful. A few examples of these maps are given in Figures 19 and 20).

Table 3 gives the mean-median dates for Feature 21 by square, and Figure 19 gives the SYMAP presentation of mean-median dates by square for Feature 21. They show that throughout the midden the mean-median dates and date ranges are fairly similiar. The mean-median dates for whiteware by square in Feature 21 (Table 3) range from 1906 to 1938. The mean-median dates for all artifact categories combined as shown in Figure 19 range from 1904 to 1926. If there is any chronological variation at all to be noted it is a slight tendency for the mean-median dates to be a little older to the east of the W115 grid line.

Figure 20 demonstrates that the artifacts are concentrated in the square from the west 120 to west 140 grid line and from the north 5 to the north 2.5 grid lines. Another concentration is evident between west 80 to west 100 and north 0 to north 15. The majority of artifacts came from a limited number of squares: N10W125, N15W125, N10W130, N15W135, and to a lesser extent N10W120, N15W130, and N5W95.

CONCLUSIONS

The results of the analysis need to be complimented by extensive documentary research and by comparisons with other site assemblages. Such would provide a background for a realistic evaluation of the assumptions behind our methods of analysis and interpretation. The significance of the Neville House project derives not only from the idiosyncratic description of the assemblage and its social or historical relevance but also from the potential for long term, innovative research inherent in the data base that has been created, in some of the techniques used to study that data, and in the general orientation to the research.

Ivor Noel Hume (1975:13) has stated that historic archaeologists have no need to employ complex quantified trait analyses of artifacts as prehistorians do because the types, patterns, forms, and styles are already well-known by experts and described with reliable date ranges,

type-single counts of artifact classes and categories may have some implications for the discernment and evaluation of the true nature of "lag" as developed by Adams and Gaw (1977). They have suggested that the variable lags between production and use/deposition of artifacts (or the products they contain) for different functional categories can be used for the derivation of information about behavior. Lag is computed by subtraction of the mean-median date of any artifact group from the site terminal date. Hochrein (this report) gives an analysis of lag as it applies to the function of products associated with some of the glass containers using 1979 as the terminal date. Table 2 gives the lags for the major artifact classes and categories in Feature 21, using 1945 as the site terminal date.

The interpretations and uses of lag in the literature have been somewhat open-ended and the dynamics of lag have been only recently considered (Hill,1982). Table 3 gives date ranges, mean-median dates, and lags for the major artifact categories in Feature 21 grouped by square. As can be seen there are differences among the lags computed for the squares for any one category. This suggests an interesting avenue of study. Is the computation and interpretation of lag only applicable at the total site assemblage level, and if so, why? If it can also be applied to smaller intra-site groupings, at what levels is this possible and what is the significance of the differences in lags computed for any one artifact class or category across these intra-site units?

INTRA-SITE VARIATION

Table 2 gives date ranges, mean-median dates, and lags for artifact classes and categories in the site features, and Table 3 gives the same information for Feature 21 broken down by squares. Figures 17 and 18 present the Feature CPDRC's by weighted count and Figure 2 shows CPDRC's by single count for each of the features in the midden. Although some major differences can be noted in the quantity of artifacts in different proveniences, the general proportions of artifacts types and dates seem fairly uniform throughout the site.

Feature 10 contains brick fragments and redeposited prehistoric material from collections of the site occupants. Feature 20 has 2572 artifacts consisting mostly of redware, clear container glass, and brick. The date range for Feature 20 extends from 1820 to 1945. The associated mean-date is 1910. Feature 21 is the major cultural unit of the site and contains 112,173 artifacts including all the artifact categories in the site. The potential dates associated with artifacts in this feature range from 1790 to 1945. The mean-median date is 1912. Feature 26 produced 572 artifacts, of which 54% are glass and 10% redware. The associated date range is 1858-1945 and the mean-median date is 1911. Feature 27 held 14 artifacts. Two fragments of whiteware provided the date range of 1930 to 1945 and the mean-median date of 1938. Feature 30 contained only 3 artifacts. One piece of whiteware provided a date range of 1896-1945 with a mean-median date of 1921. Stratum 3 included Feature 21 and was the major cultural material bearing stratum at the site. It produced 117,456 artifacts with an associated date range of 1790 to 1945 and a mean-median date of 1912.

The CPDRC for the midden based on the fragment count, one count per year per fragment having a date range including that year, is shown in Figure 6. A curve plotting the percent of the total range for each year in the fragment count curve is almost exactly the same as the raw fragment count curve (see Figure 7). A curve based on the type-single count, one count per year per type in the site having a date range including that year, has some differences from the fragment count curve (Figure 8). From the late 1870's to the late 1890's, the fragment count is lower, relative to the overall curve, than the type count. From 1905 to 1935 the type count is lower, relative to the overall curve, than is the fragment count. The lower relative fragment representation from 1870 to 1895 may reflect the increase in datable glass and ceramic fragments, since technical innovations and laws requiring certain maker's marks were developed during this period. However, why this would not be reflected in a greater number of types as well is not known. The higher relative representation of types as opposed to fragments from 1905 to 1935 may reflect the fact that the midden was being phased out of use in that period possibly because of the institution of city garbage removal services in Collier Township (this date is not known by Collier Township officials). The curve produced from one count per year per type in each FC (the weighted count) is slightly different from both the type-single count and fragment count curves (see Figure 9). It seems somewhat smoothed, with more gradual increases and decreases in the curve.

The CPDRC's for the major artifact classes, ceramics and glass, are shown in Figures 10 to 13. In each of the curves, i.e., by each variation of weighting the frequencies or percentages of glass show sharp inclines from 1900 to 1905 while the frequencies and percentages of ceramics show inclines from 1890 to 1905. It is not certain whether these inclines are a product of a sharp increase in the availibility of these glass and ceramic categories or whether they are reflections of behavior. In both the artifact classes there is a general jump in frequency and percentage from 1860 to 1905. This may reflect the "datability" of artifacts or it may indicate the beginning of the use of the midden. In the artifact class fragment count percent curve (Figure 11), bottles have a relatively greater percent of their total potential dates between 1845 and 1890, while ceramics have a greater relative proportion between 1905 and 1935. This may result from the computations of dates and the "datability" of artifacts (i.e. early ceramics do not contribute) or it may be a factor of reuse of glass containers until broken prior to 1890, combined with rapid discard of glass containers after primary use after 1890. Other interpretations are possible.

The CPDRC's for major artifact categories are presented in Figures 14 to 16. The curves for semi-vitreous wares and whitewares are both bimodal though the significance of this is not certain (Figure 14). The whiteware curve does not fall off until 1935 to 1940, somewhat later than the curves for semi-vitreous and porcelain, which drop between 1920 and 1925. This may demonstrate fashion, availability, or the effects on porcelain and semi-vitreous production after World War I. The curves for whole and partial bottles, jars, and jar rims, and pontil bottles, are derived for the most part from manufacturing techniques.

The differential representation of curves for fragment counts and

this report. However, on occasion, such as in Figures 2 to 5, 8, 9, 12, 13, 17, and 18 and in the following discussion, type is used to refer to the smallest distinguishable subgroup or variety of an artifact category.) Thus, the three differing cumulative potential date ranges for a specific feature would consist of the frequencies for dates derived from: (1) one count for each year potentially associated with each dated fragment in the feature, (2) a single count for each year associated with each analytical grouping of specimens present in the feature, (3) a single count for each date associated with the presence of an analytical grouping of specimens in each bag lot comprising the feature. The results of these different weightings are compared in the following sections.

The assignment of the midden to the last half of the nineteenth century and first third of the twentieth century is supported by the date ranges, mean-median dates, and modal dates produced for all classes and categories of artifacts, as well as all features and strata. These dates were available for less than 15% of the artifacts in the site. The date range for the midden as a whole extends from 1790 to 1945. The 1790 date is used due to the presence of pontil bottle fragments present in the midden (see Winters, Pontiled Bottles, this report). As noted in the previous section, 1945 was used as a conservative end date for household deposition at the midden. Use of the date of excavation, 1979, was found to skew all date computations unrealistically away from the probable life of the midden as derived from historical analysis and the artifact inventory. The mean-median date for the midden, using South's (1972) formula, is 1918 using a 1979 end date, and 1912 using a 1945 end date. Table 2 gives date ranges and mean-median dates for classes and categories of artifacts in Feature 21, the main cultural unit of the site.

The research team saw a need to try and use the information about chronology that was essentially being lost by reliance on the mean-median date. He also wished to develop a technique for more direct graphic presentation of the potential date ranges of the site, units in the site, and artifact groupings that would enable easy comparisons. The cumulative potential date range curves (CPDRC) serve this function. Examples of some of the CPDRC's produced according to different weightings are presented in Figures 6 through 18 (see discussion of date range score weightings and the use of "type" above).

Modal dates can be derived from CPDRC's and these tend to be 5 to 10 years earlier than mean-median dates when the site terminal date of 1945 is used. The modal date for the midden is 1907. When the 1979 terminal date is used, the modal dates are about 15 to 20 years earlier than mean-median dates. However, the CPDRC modes, as perceived along the curve, tend to overlap and include the mean-median dates computed for the same data set. The benefits possible from using CPDRC's, aside from a more direct presentation of the cumulative potential date ranges associated with a group of artifacts, reside in the possible reliance on the magnitude and slope of increases and decreases in the curve for the development of hypotheses about social, economic, and technological change.

depositional, chronological, or perhaps behavioral distinctions among them.

Cumulative potential date ranges and modal dates were computed and used in the analysis of the Neville House assemblage but at this time no justifications for their reliability or reality content can be provided. Such a justification would require extensive research with other archaeological data sets and with documentary sources and would have to deal with a number of basic problems. These problems would include: (1) the problem of the relationship between mark, manufacturer, or product duration and the actual use, reuse, and ultimate deposition of artifacts into the archaeological setting; (2) the problem of the relationship between the recovered archaeological assemblage and the total assemblage of material goods used by the occupants of a site; (3) the problem of the representativeness of statistics about the popularity and availability of artifacts with various attributes, and about the production and market shares of geographic locations which are made from data which has been channeled through the selectivity of the occupants of the site and the selectivity of discard and preservation at the site. The utility of cumulative potential date ranges and modal dates, the latter clearly demonstrated by Grange (1977), for the Neville House assemblage is discussed in the following section.

The representation of dated artifact specimens of their associated attributes, and of higher level analytical groupings of these specimens was derived in three different ways for inclusion in analytical procedures. For the production of basic catalogue frequencies and percents, for mean-median dates, for one set of cumulative potential date ranges, and for some other procedures, counts were based on the number of fragments of each appropriate variety, subgroup, group, subcategory, or category included in the population being studied. This was called the fragment count. For other procedures and for a comparative set of cumulative potential date ranges, scores were based on one count each for the presence of an analytical grouping of artifacts in the study population regardless of the number of fragments of each grouping involved. This was referred to as the type-single count score. A third weighting was devised as an attempt to modify the effects of variable fragmentation inherent in the fragment counts and to be more representative of relative quantity and dispersal of dated specimen groupings in the site than the type-single count scores referred to above. This third weighting recorded scores for cumulative potential date ranges based on one count for the presence of the defined analytical group in each field excavation unit (ie., bag lot) included in the population under study (see Figures 3 to 5). This was referred to as the weighted score. (Note: In most cases the level of analytical grouping of artifacts focused on determining type-single count of the "category, subcategory, group, subgroup, variety" heiarchy that could be distinguished for an artifact category. Analytical groupings at the subgroup and variety level of inclusiveness may be roughly equated with the "type" concept of traditional usage in archaeology. In order to avoid inappropriate behavioral and chronological connotations usually associated with the type concept, and because of variations in the criteria for breakdown of different artifact categories into the analytical heirarchy, the term has been acheived for the most part in

that witnessed the mechanization of bottle manufacture and the promotion and mass consumption of varied products in glass containers.

The remainder of the artifact inventory is divided up among several classes. Metals, identified and unidentified, make up 13% of the total. Organic materials contribute over 3%. Synthetics were represented by only 0.2% of the artifact assemblage.

The analyzed categories (decorated whiteware, porcelains, yellow ware, and semi-vitreous wares, glass with maker and product marks, jars and bottles) were assigned functions when possible. The following are the combined functional categories: 36% tableware, 12.5% tea/social display items, 2.2% kitchenwares, 13.4% edibles, 18.9% medicinals, 4.5% personal care products, 2.7% household products, and 2.2% alcohol.

CHRONOLOGY

Mean-median dates have been accepted as somewhat reliable when applied to historic sites of the late 18th and early 19th centuries. However, they have also been criticized for being founded in as yet untested and unproven assumptions about the nature of change in the development, marketing, popularity, use, and disposal of ceramic wares (Cleland 1972, Jelks 1972, Leggitt 1972, Fitting 1972). Mean-median dates provide a handy key to the general period of a site and enable simple chronological comparisons among sites. However, they are very wasteful of potentially useful data. This unused data is applicable to the description and analysis of artifact assemblages and provenience units, the differential representation of manufacturers and points of origin for artifacts in sites, the differential popularity or availability of decorative techniques and motifs or other artifact attributes, etc., at least as these are filtered through the processes of selection, use, and deposition that produced the site in question.

That wasted information is available in cumulative potential date ranges which can be produced for any level of attribute or variable or study population associated with artifacts for which beginning and end dates are available (see Figure 2). The cumulative potential date range is derived from a set of dates consisting of frequency counts or relative frequency (percent) scores for each year between the earliest MRDATE and the latest EDATE of all artifacts having an attribute in question or found in a population under study. The score for each year within the range results from a count of the associated specimens or groups of specimens whose 'bracket date' ranges include that particular year. Each associated specimen or group is treated equally in the counts. The potential popularity or chronological representativeness of artifacts attributes like decorative technique and motif, or the market and production shares of geographic locations can be traced in cumulative potential date ranges and rather dramatically seen in simple plots (see Figures 2 to 5). Provenience units within the site can be given more distinctive identification in terms of their potential date range. The differences between the date frequencies and measures of central tendency and variance (mean, mode, median, standard deviation, etc.) associated with provenience unit cumulative potential date ranges may point to

object was to enable comparison of the mean-median dates and date-lags of the different artifact categories within features and strata as they were localized in different portions of the site. 'Bracket dates', if available, were used in this analysis.

Chi-square cross-tabulations were used to quantify and compare the correlations between classes, categories, functions, and other attributes of artifact varieties or subgroups with site features and strata, grid squares, date blocks, geographic origin points, etc. Attempts were also made to use cluster analysis and multidimensional scaling to group and order sub-units of features and strata so that functional or chronological groupings could be isolated and so that sub-units of the site could be in effect seriated. However, at this time none of the cluster or seriation attempts have proven satisfactory. This probably results from the extremely dense concentration of materials in the site, the essential chronological similarity of most units in the site, and the pot hunting and resultant mixing of deposits that informants have noted for the site.

The results of the analysis of the Neville House assemblage may be found in the appropriate chapters on each artifact category. Analysis of the artifacts recovered in the excavations at the Neville House site indicate that the site represents a household midden in use during the second half of the nineteenth century and the first third of the twentieth century. A total of 125,994 artifacts were recovered, reflecting a broad range of articles used in daily life (see Table 1 for a breakdown of the inventory by class and category).

Over 26% of the artifacts (33,271) were fragments from ceramic vessels, utensils, and objects. Over 72% of the ceramics, i.e.: porcelain (26%), whiteware (41%), or semi-vitreous wares (5%), served as tableware, social/tea/display items, kitchenware, and sanitary ware. Fifteen percent were stonewares, redwares, and yellow wares used in the kitchen and for storage. Results of the detailed analysis of these categories were presented earlier in this report. The decorated wares were made up of kitchen vessels (2.2%), tableware (36%), teaware (12.5%), decorative objects (1.5%), and vanity/sanitary ware (2.6%). It is probable that the ceramic material recovered from the Neville House midden is representative of the tastes and economic standing of the site occupants as well as the availability of patterns and wares in the Pittsburgh area during the life of the midden. There is, however, no sufficient body of data from other sites for direct comparisons (see Conclusions). In addition, no studies have been done on the marketing and status correlates of ware types, patterns, decorations, etc. of ceramics of the period in the Pittsburgh region. The different percentages of wares and functions do not represent any major temporal variations in ware use or popularity during the life of the midden.

Over 56% of the artifacts (70,925 items) are fragments from glass containers, window glass, and a few glass objects. Eight percent of these had glass maker's or product marks which provided information on the dates of manufacture, functions of the container or contents, needs and inclinations of the site occupants, and availability of products in the region (see Hochrein section). The life of the midden spans a period

The SYMAP (Synagraphic Mapping) (1975) computer mapping package was used in an attempt at evaluation of spatial patterning in the site. The program generated plan view maps showing the distribution of select artifact analytical groups, patterns, categories, classes, functions, attributes, and dates over the site according to feature and stratum. The goal for this procedure was the discernment of depositional regularities and irregularities among these variables which might lead to the development of questions about chronological, social, economic, or geologic processes that contributed to the depositional patterning observed. For reasons of visual clarity, only frequency scores were printed on these maps, and the normal products of this package (density contour and proximal maps) were not produced.

Dates were variables of major importance because of their interval character, their general and equivalent applicability for a number of data sets, and their importance in the analysis of higher level units. Dates used in the Neville House analysis were derived from start and end dates for: (1) specific marks on glass and ceramics; (2) glassware and ceramic ware producers and importers; (3) the products contained in glassware; (4) manufacturing techniques and composition for glass jars and bottles. Artifacts that had two sets of associated dats, i.e., a set of beginning and end dates for maker's marks of manufacturers or importers and a set associated with the products they contained, were given a third date set derived from a combination of the two. This 'bracket dates' set narrowed the time range represented by a particular artifact by taking the most recent (MRDATE) of the start dates and the earliest (EDATE) of the end dates for the two associated date sets. A 'terminus ante quem' of 1945 was given to the site and, therefore, to each 'bracket date' set even if an associated manufacturing technique or company or mark continued in existence past that time. This was necessary because the site assemblage (except for scattered surface litter) had a use life that did not extend beyond the first third of the 20th century (in spite of the fact that some marks, companies, and manufacturing techniques associated with artifacts in the site continued in existence beyond 1979). It is suggested that this terminal date is justified (and even conservative) because informants now in their 60's who lived at the site or visited there in their childhood have no recollection of the midden. It can also be noted that none of the ceramics at the site were produced by manufacturers that originated after the 1920's (see Figure 1).

Current usage of artifact dates in the analysis of late 18th through 20th century sites usually involves the production of mean-median dates for entire assemblages and occasionally for major intra-site sub-areas following the methods of Stanley South for pre-19th Century ceramics (South 1972, 1977). Mean-median dating has also been attempted with artifact classes other than ceramics with uncertain results (Lunn 1982). Attempts at the recovery of behavioral information from the comparison of date lags (the difference between a functional class' mean-median date and the site terminal date) of different artifact categories have been inspired by Adams & Gaw (1977). Mean-median dates and date-lags were produced from the Neville House data for the site, classes and categories of artifacts, features, and strata as wholes and for subsets of these units defined by the grid squares of the site (See Tables 2 and 3). The

representative of general behaviors, processes, statuses, etc. Recent research in historic archaeology has been stimulated by creative attempts at more sophisticated analysis and interpretation of the relationships between archaeological data and functions, statuses, economic and social contexts, etc. (Dickens 1982, Miller 1980).

The importance of such creative and sophisticated analysis was a basic motivation in the development of the Neville House data base. The Neville House research group was primarily concerned with the efficient cataloging and ennumeration of specific artifact categories. However, recognizing the large size of the assemblage (a result of complete recovery at the site) and its value as a research resource, they aimed at the production of a data base containing detailed attribute observations for various artifact categories. This data base will lend itself to long-term, comprehensive, additive evaluation of social, economic, technological, and stylistic questions as it is compared and contrasted with materials from other sites in various regions and time periods.

The specific variables and their attributes observed and recorded for the different artifact categories ranged from nominal to interval, most being nominal multi-state or presence/absence. Such nominal variables are often difficult to use reliably in sophisticated statistical techniques and were converted to percentages or frequencies within some higher level units for analysis. Nine detailed data sets, two limited data sets, and the general site catalogue were produced. The detailed data sets included: glass maker and product marks, whole bottles, whole jars, jar rims, bottle necks, ceramic makers' marks, whiteware, porcelain, and semi-vitreous ceramics. The limited data sets were yellow ware and pontil bottles. The specific variables and attributes encoded are discussed in the relevant chapters in this report.

The basic variables applicable for all categories were excavation unit number (bag lot), artifact identification number, square, feature, stratum, and level. The attributes for glass maker and product marks were all nominal except for the glass maker and product beginning and end dates. Whole bottles and bottle necks were described by dates (derived from manufacturing techniques) and various height, length and diameter measures and 12 presence/absence or multistate variables. Jars and jar rims were characterized by 6 presence/absence variables and 6 multistate variables. Interval variables for all ceramic categories included mark and company dates and rim and base diameter. These were complimented by 7 multi-state nominal variables detailing vessel shape and portion, decorative technique, decorative motif, paste, region, city and county of origin.

Analysis of the data sets was achieved through the use of a number of standard commercial "canned program" packages and several very limited and simple original Fortran programs. SPSS, BMDP, Tell-a-Graf, and a number of systems programs at the University of Pittsburgh were most heavily relied on for basic data manipulation, coding, re-coding, the derivation of new variables, the production of summary statistics, the creation and evaluation of higher level units of analysis, and the production of computer graphics.

TABLE 3 con't.

		Whole bottles	1910	35
		Bottle fragments	1905	40
		Pontil bottles	1844	101
		Jars and jar rims	1913	32
		Glass maker's marks	1910	35
		Square date	1910	
N15W120	Ceramics	Class date	1913	
		Ceramic maker's marks	1912	33
		Whiteware	1916	29
		Semi-vitreous	1907	38
		Porcelain	1913	32
	Glass	Class date	1908	
		Whole bottles	1918	27
		Bottle fragments	1906	39
		Pontil bottles	1853	92
		Jars and jar rims	1912	33
		Glass maker's marks	1908	37
		Square date	1910	

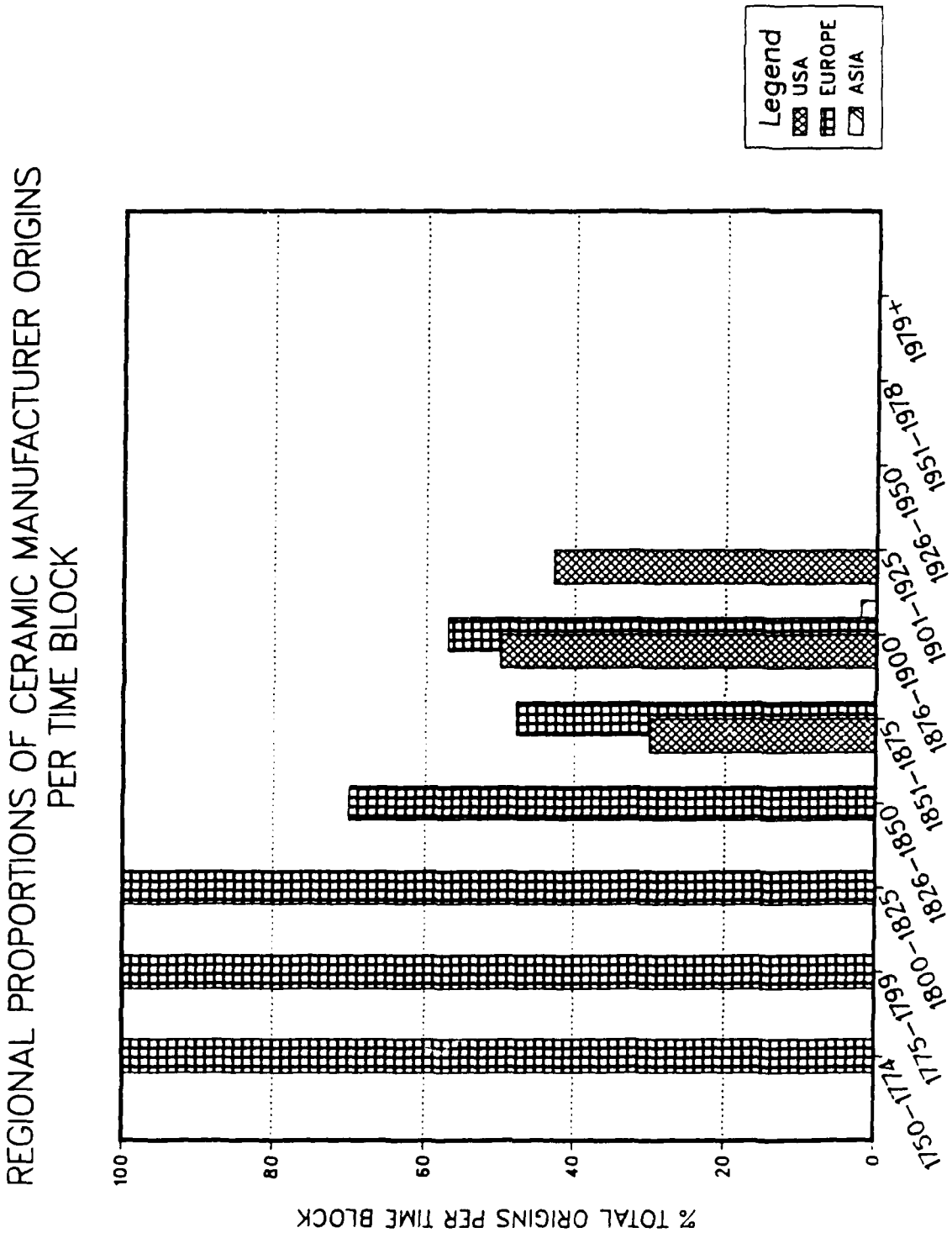

REGIONAL PROPORTIONS OF CERAMIC MANUFACTURER ORIGINS
PER TIME BLOCK
Legend
USA
EUROPE
ASIA
% TOTAL ORIGINS PER TIME BLOCK
0
20
40
60
80
100
1750-1774
1775-1799
1800-1825
1826-1850
1851-1875
1876-1900
1901-1925
1926-1950
1951-1978
1979+

Figure 1

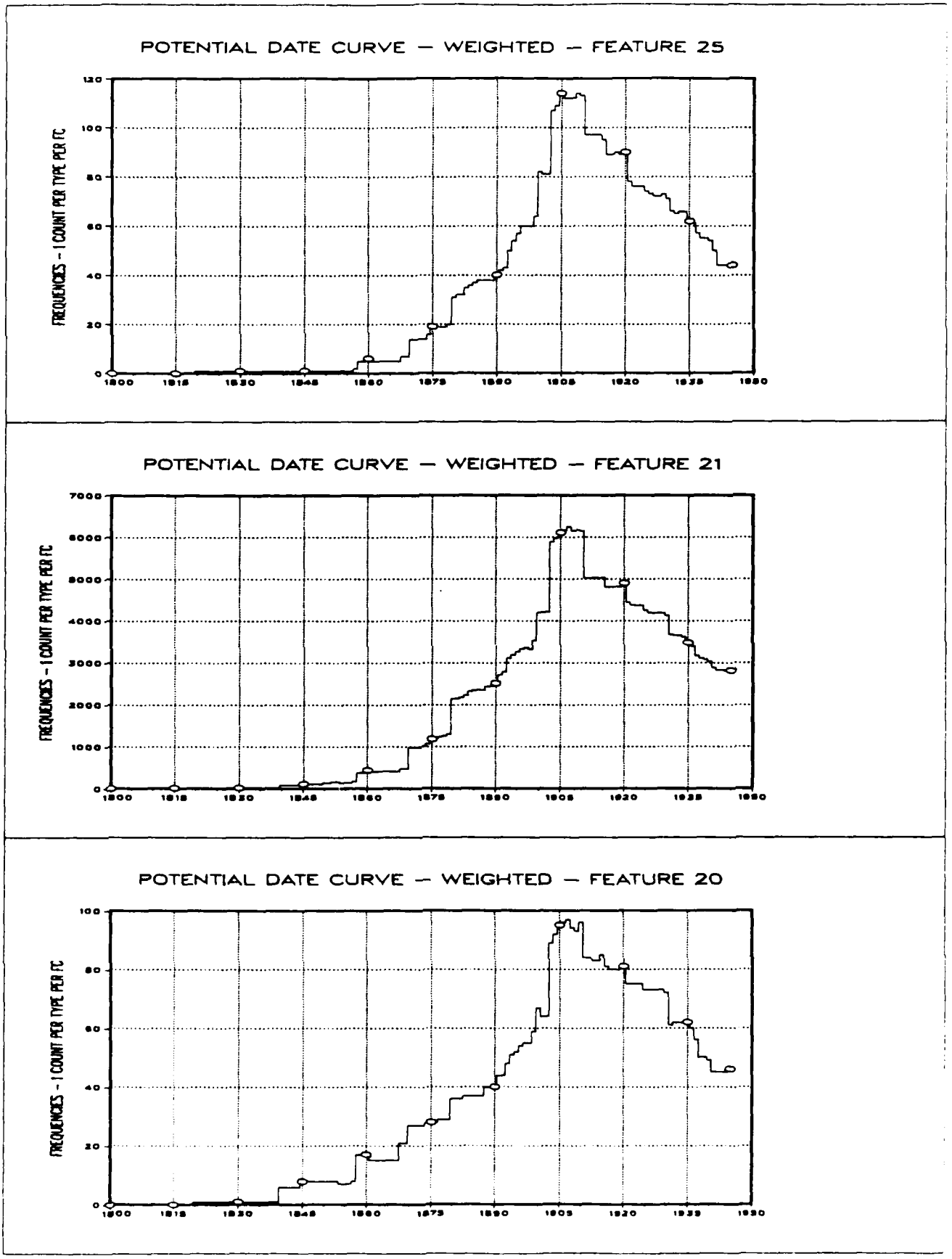

POTENTIAL DATE CURVE — WEIGHTED — FEATURE 25
FREQUENCIES - 1 COUNT PER TYPE PER ITC
0
20
40
60
80
100
120
1800
1815
1830
1845
1860
1875
1890
1905
1920
1935
1950
POTENTIAL DATE CURVE — WEIGHTED — FEATURE 21
FREQUENCIES - 1 COUNT PER TYPE PER ITC
0
1000
2000
3000
4000
5000
6000
7000
1800
1815
1830
1845
1860
1875
1890
1905
1920
1935
1950
POTENTIAL DATE CURVE — WEIGHTED — FEATURE 20
FREQUENCIES - 1 COUNT PER TYPE PER ITC
0
20
40
60
80
100
1800
1815
1830
1845
1860
1875
1890
1905
1920
1935
1950

Figure 2

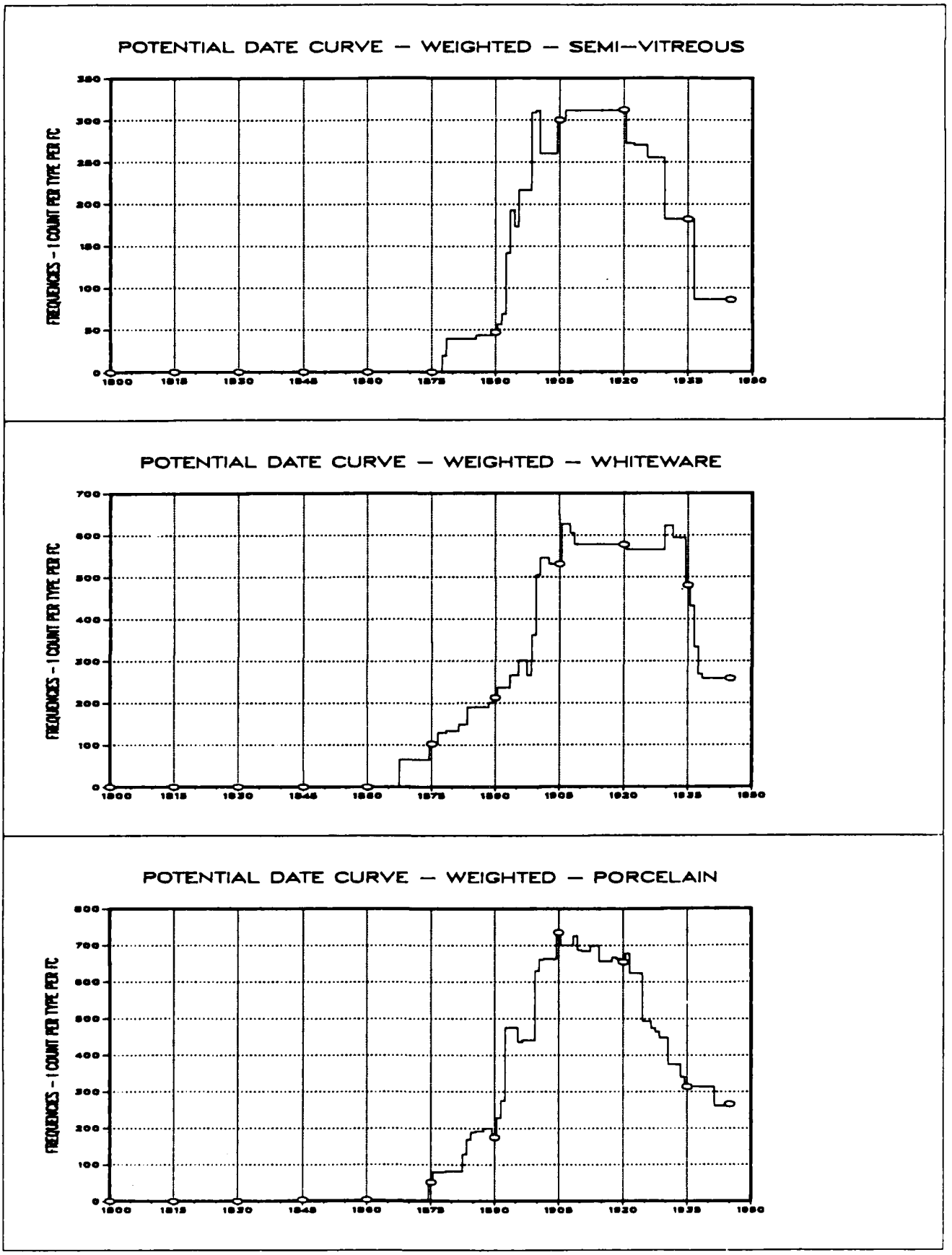

POTENTIAL DATE CURVE — WEIGHTED — SEMI—VITREOUS
FREQUENCIES - 1 COUNT PER TYPE PER FC
0
50
100
150
200
250
300
350
1800
1815
1830
1845
1860
1875
1890
1905
1920
1935
1950
POTENTIAL DATE CURVE — WEIGHTED — WHITEWARE
FREQUENCIES - 1 COUNT PER TYPE PER FC
0
100
200
300
400
500
600
700
1800
1815
1830
1845
1860
1875
1890
1905
1920
1935
1950
POTENTIAL DATE CURVE — WEIGHTED — PORCELAIN
FREQUENCIES - 1 COUNT PER TYPE PER FC
0
100
200
300
400
500
600
700
800
1800
1815
1830
1845
1860
1875
1890
1905
1920
1935
1950

Figure 3

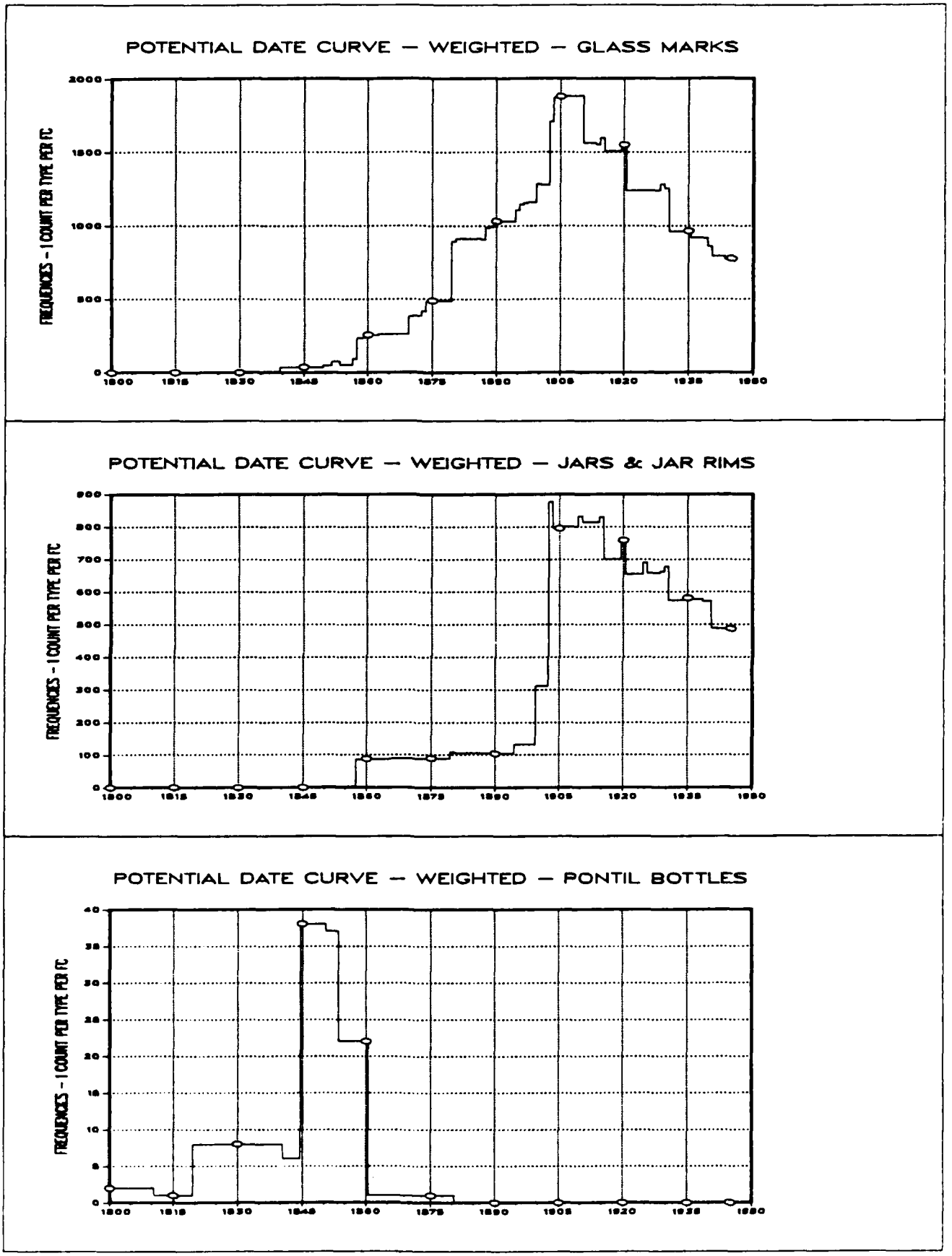

POTENTIAL DATE CURVE — WEIGHTED — GLASS MARKS
FREQUENCIES - 1 COUNT PER TYPE PER FC
2000
1500
1000
500
0
1800
1815
1830
1845
1860
1875
1890
1905
1920
1935
1950
POTENTIAL DATE CURVE — WEIGHTED — JARS & JAR RIMS
FREQUENCIES - 1 COUNT PER TYPE PER FC
900
800
700
600
500
400
300
200
100
0
1800
1815
1830
1845
1860
1875
1890
1905
1920
1935
1950
POTENTIAL DATE CURVE — WEIGHTED — PONTIL BOTTLES
FREQUENCIES - 1 COUNT PER TYPE PER FC
40
35
30
25
20
15
10
5
0
1800
1815
1830
1845
1860
1875
1890
1905
1920
1935
1950

Figure 4

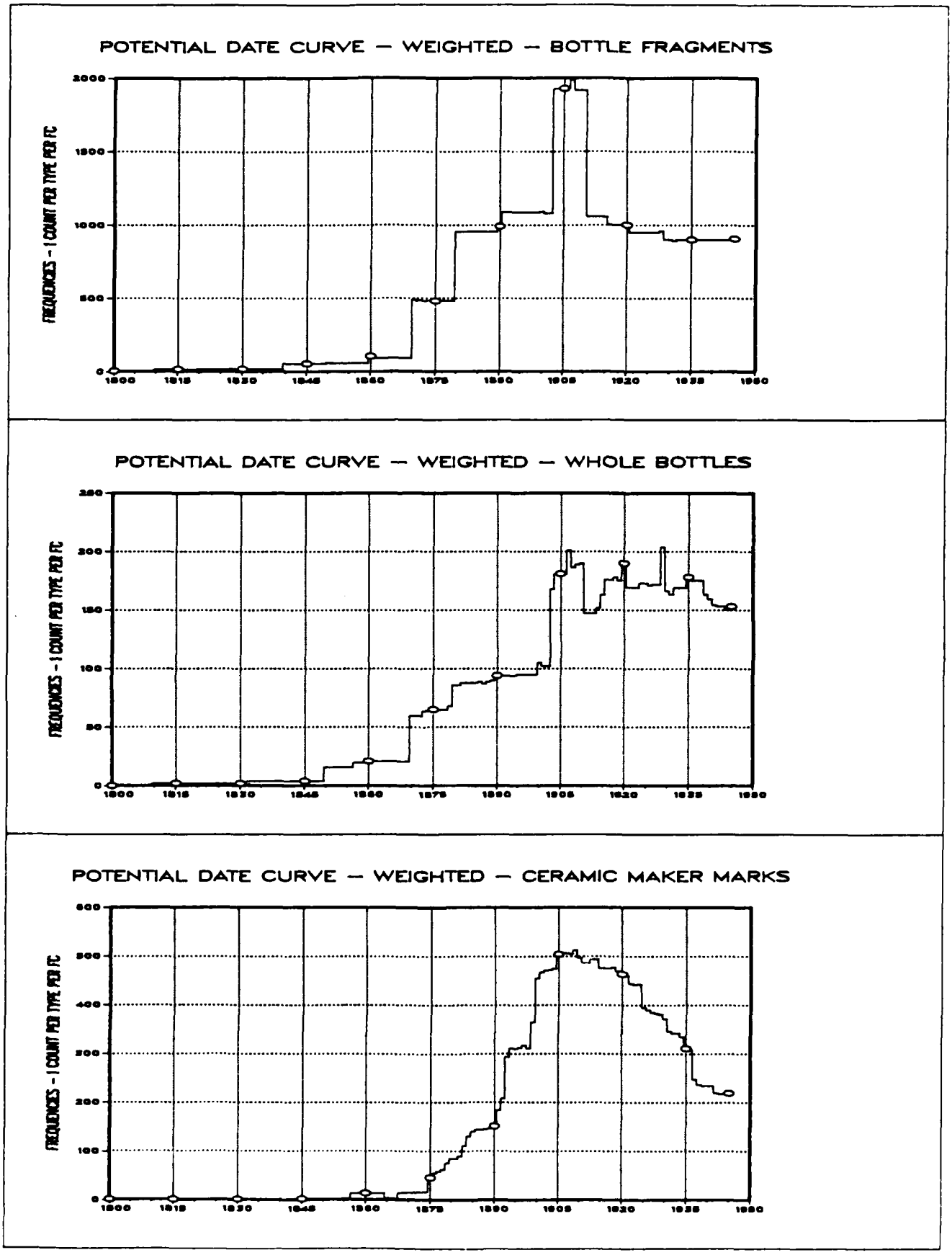

POTENTIAL DATE CURVE — WEIGHTED — BOTTLE FRAGMENTS
FREQUENCIES - 1 COUNT PER TYPE PER FC
2000
1500
1000
500
0
1800
1815
1830
1845
1860
1875
1890
1905
1920
1935
1950
POTENTIAL DATE CURVE — WEIGHTED — WHOLE BOTTLES
FREQUENCIES - 1 COUNT PER TYPE PER FC
250
200
150
100
50
0
1800
1815
1830
1845
1860
1875
1890
1905
1920
1935
1950
POTENTIAL DATE CURVE — WEIGHTED — CERAMIC MAKER MARKS
FREQUENCIES - 1 COUNT PER TYPE PER FC
600
500
400
300
200
100
0
1800
1815
1830
1845
1860
1875
1890
1905
1920
1935
1950

Figure 5

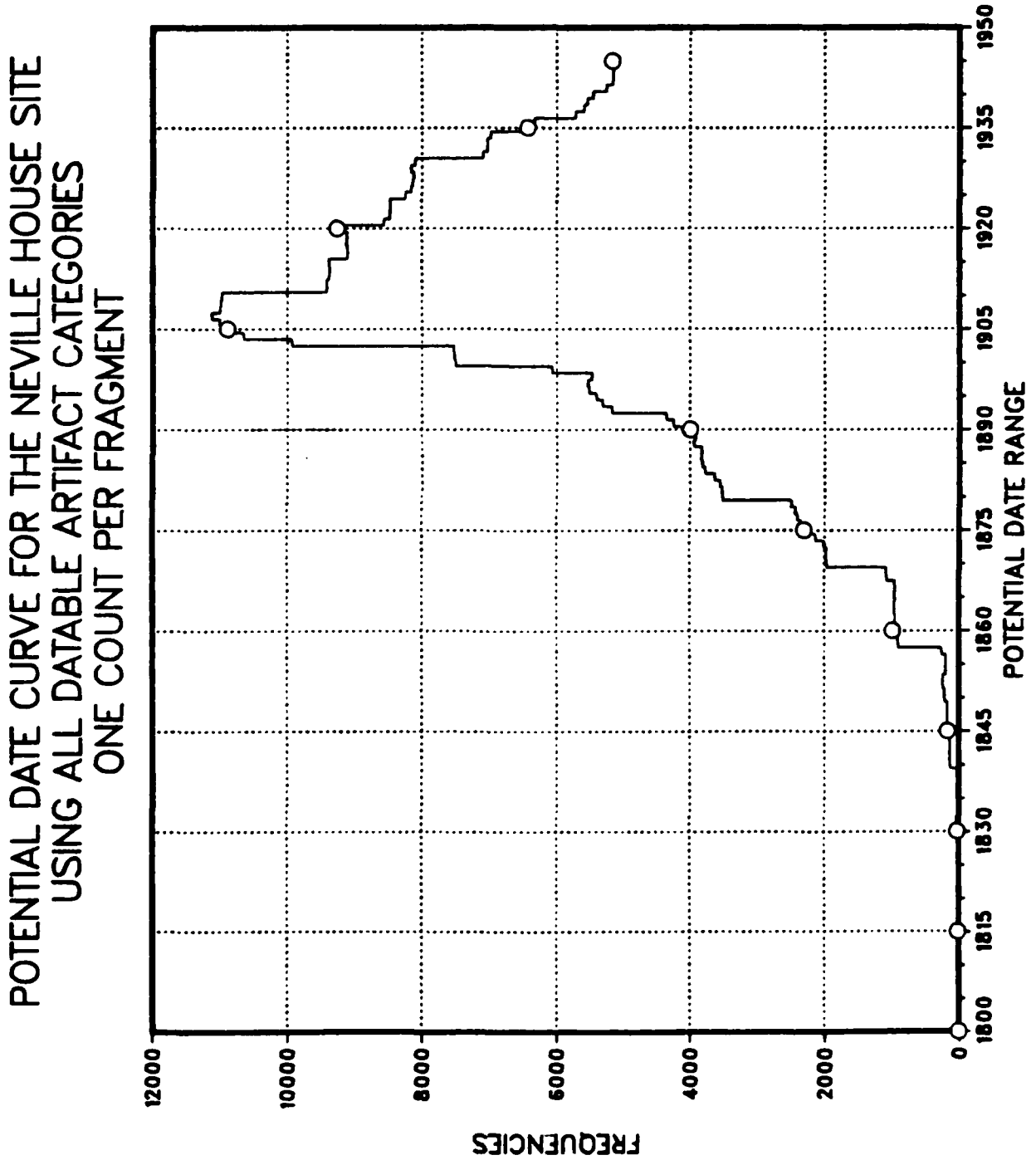

POTENTIAL DATE CURVE FOR THE NEVILLE HOUSE SITE
USING ALL DATABLE ARTIFACT CATEGORIES
ONE COUNT PER FRAGMENT
FREQUENCIES
12000
10000
8000
6000
4000
2000
0
1800
1815
1830
1845
1860
1875
1890
1905
1920
1935
1950
POTENTIAL DATE RANGE

Figure 6

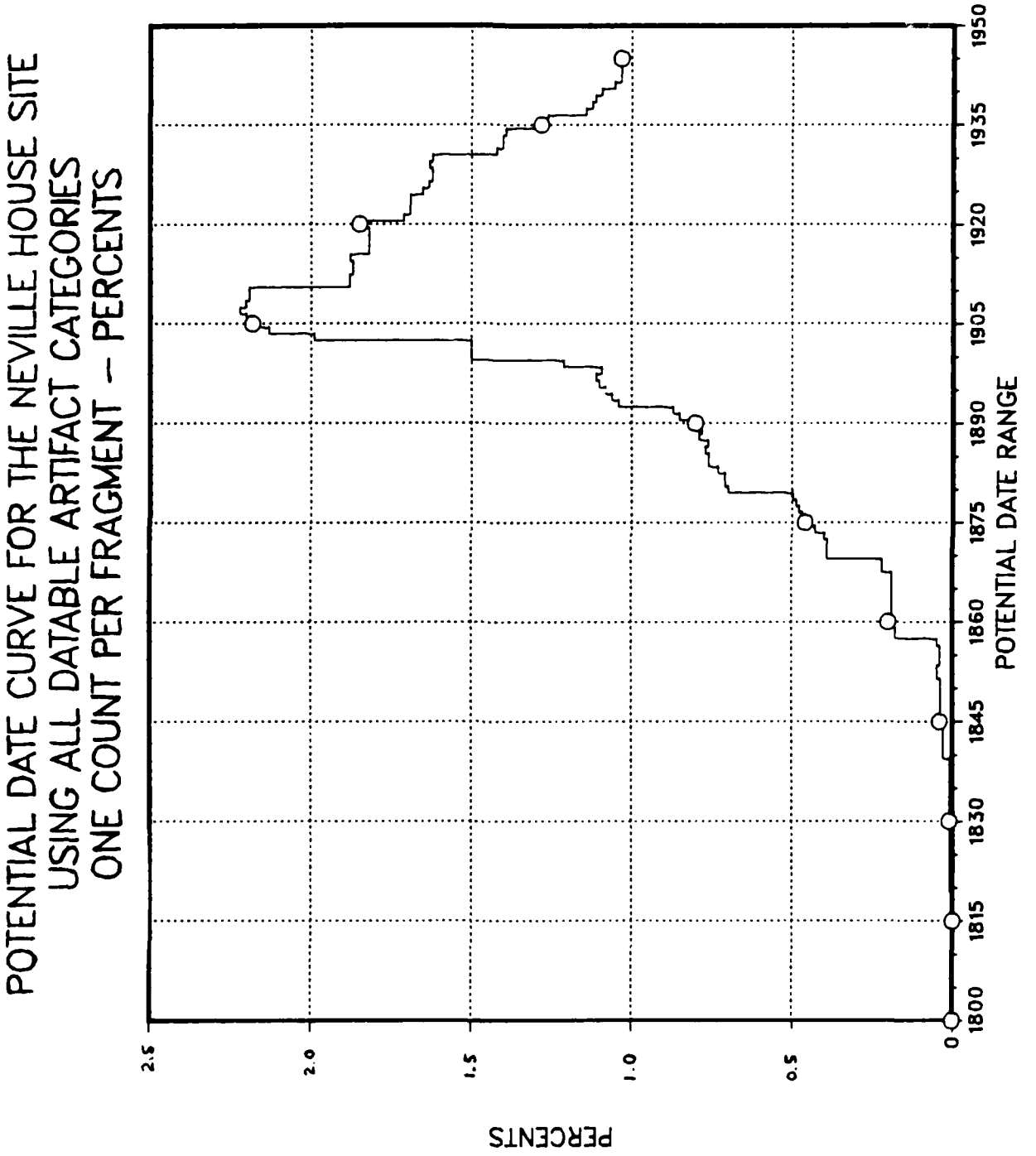

POTENTIAL DATE CURVE FOR THE NEVILLE HOUSE SITE
USING ALL DATABLE ARTIFACT CATEGORIES
ONE COUNT PER FRAGMENT — PERCENTS
PERCENTS
2.5
2.0
1.5
1.0
0.5
0
1800
1815
1830
1845
1860
1875
1890
1905
1920
1935
1950
POTENTIAL DATE RANGE

Figure 7

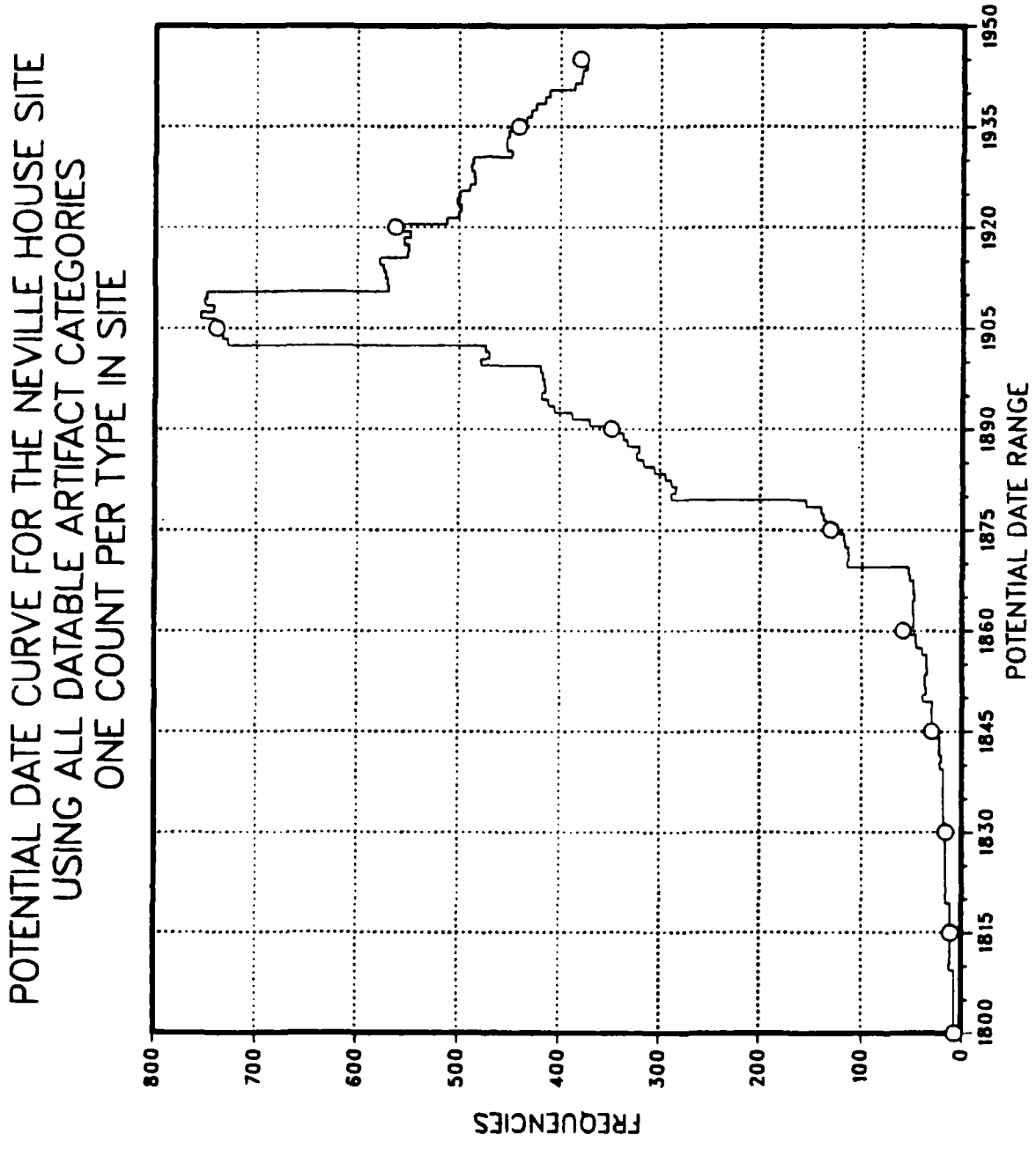

POTENTIAL DATE CURVE FOR THE NEVILLE HOUSE SITE
USING ALL DATABLE ARTIFACT CATEGORIES
ONE COUNT PER TYPE IN SITE
FREQUENCIES
800
700
600
500
400
300
200
100
0
1800
1815
1830
1845
1860
1875
1890
1905
1920
1935
1950
POTENTIAL DATE RANGE

Figure 8

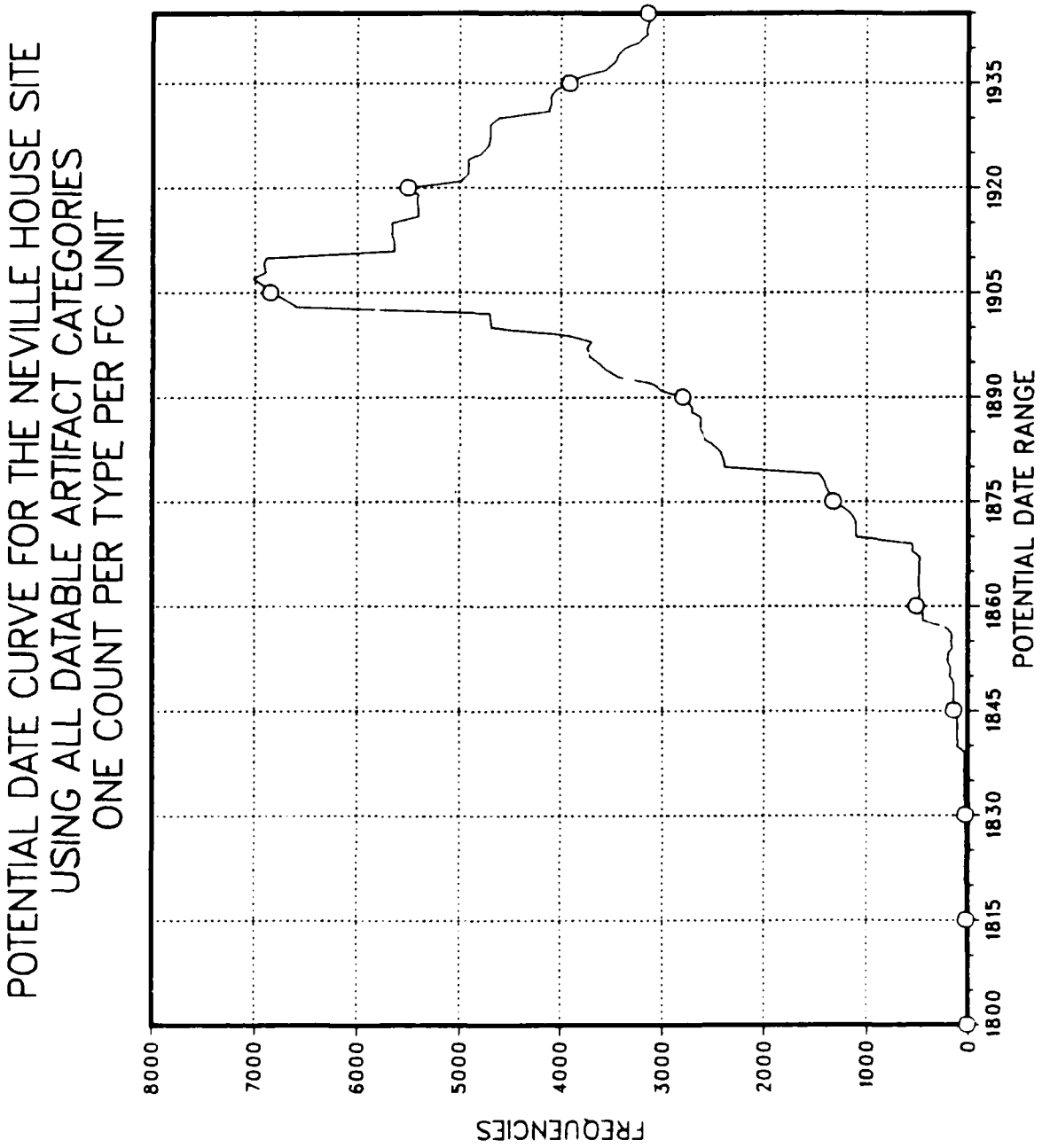

POTENTIAL DATE CURVE FOR THE NEVILLE HOUSE SITE
USING ALL DATABLE ARTIFACT CATEGORIES
ONE COUNT PER TYPE PER FC UNIT
FREQUENCIES
8000
7000
6000
5000
4000
3000
2000
1000
0
1800
1815
1830
1845
1860
1875
1890
1905
1920
1935
POTENTIAL DATE RANGE

Figure 9

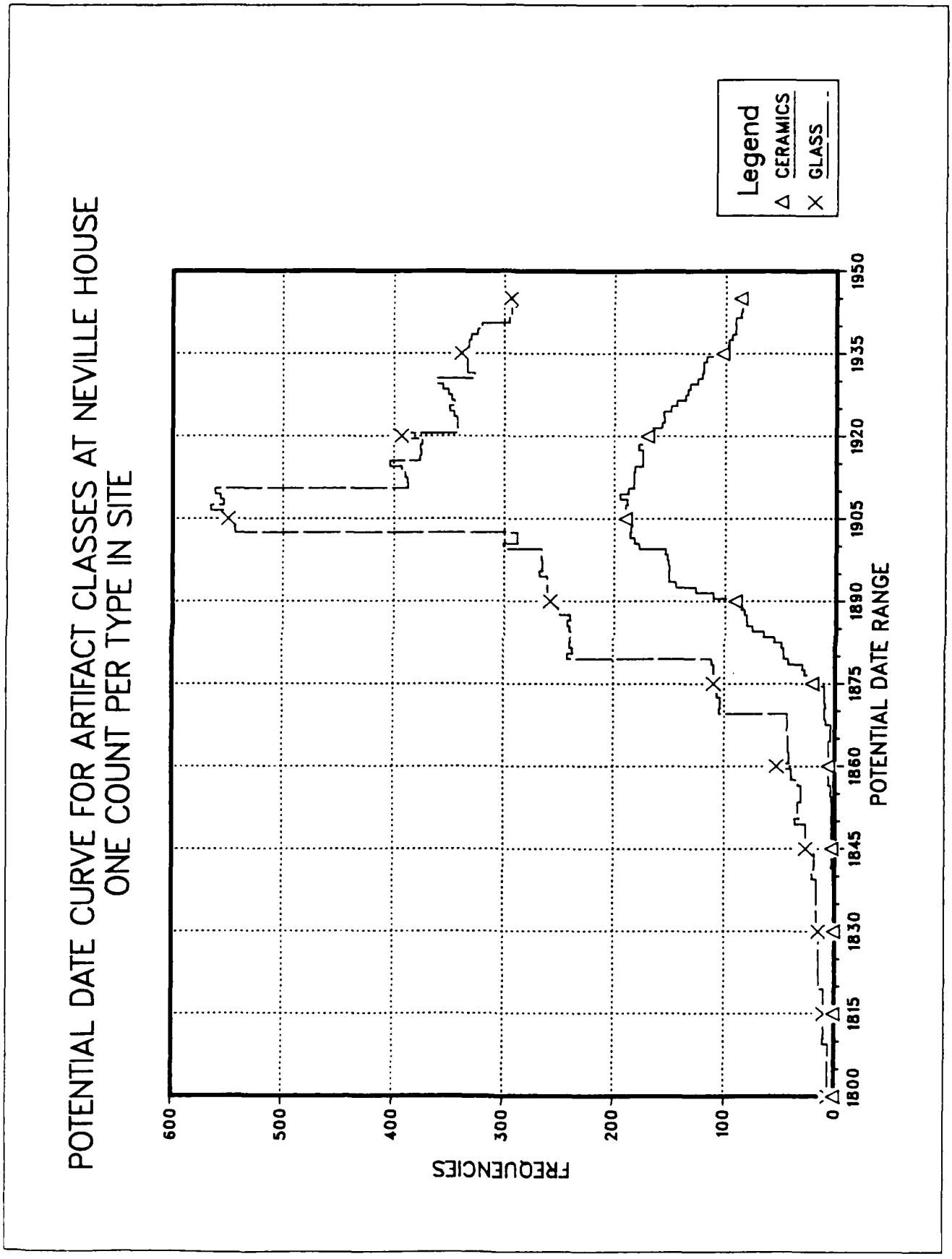

POTENTIAL DATE CURVE FOR ARTIFACT CLASSES AT NEVILLE HOUSE
ONE COUNT PER TYPE IN SITE
Legend
CERAMICS
GLASS
FREQUENCIES
0
100
200
300
400
500
600
POTENTIAL DATE RANGE
1800
1815
1830
1845
1860
1875
1890
1905
1920
1935
1950

Figure 10

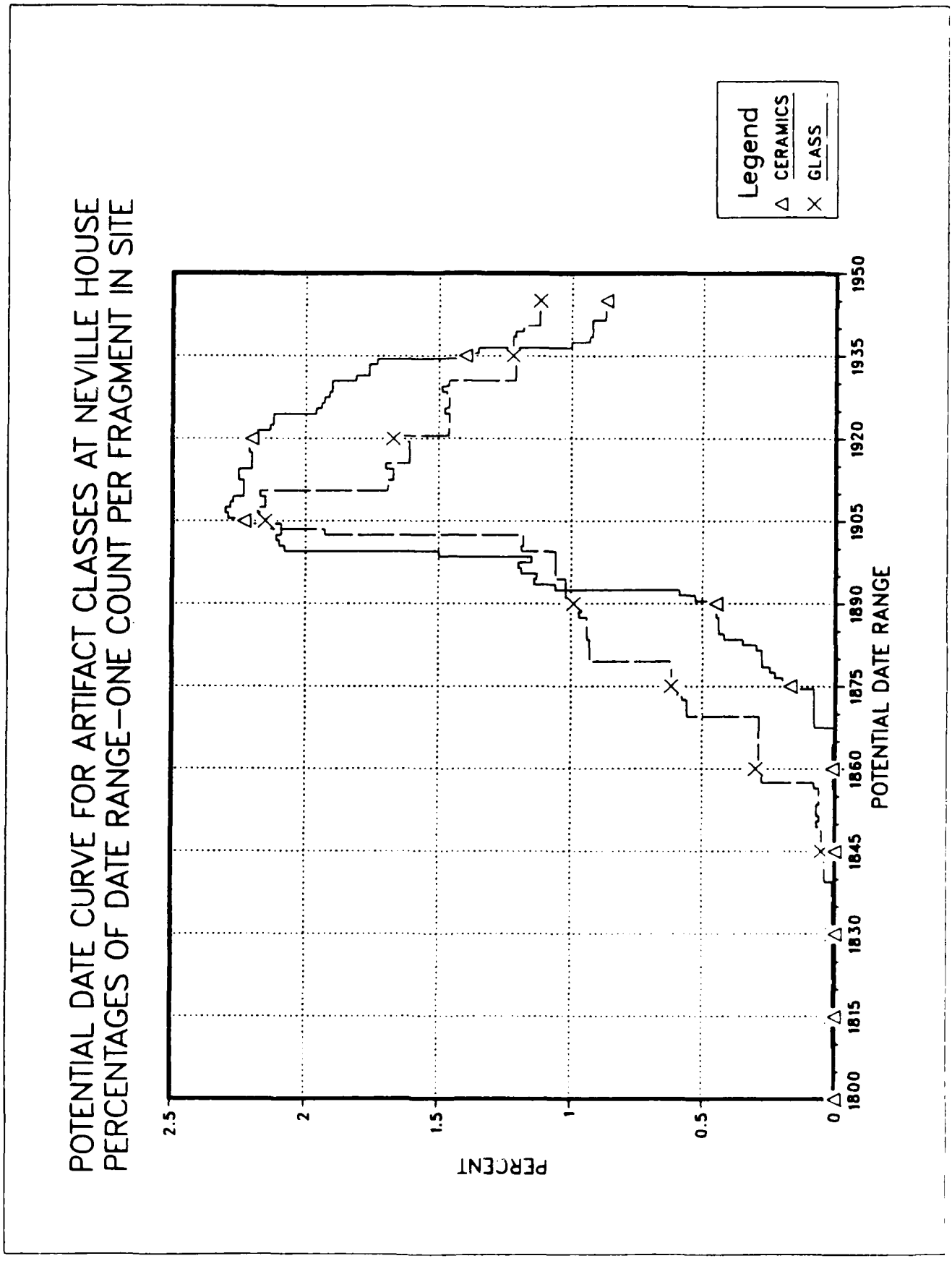

POTENTIAL DATE CURVE FOR ARTIFACT CLASSES AT NEVILLE HOUSE
PERCENTAGES OF DATE RANGE—ONE COUNT PER FRAGMENT IN SITE
Legend
CERAMICS
GLASS
PERCENT
2.5
2
1.5
1
0.5
0
1800
1815
1830
1845
1860
1875
1890
1905
1920
1935
1950
POTENTIAL DATE RANGE

Figure 11

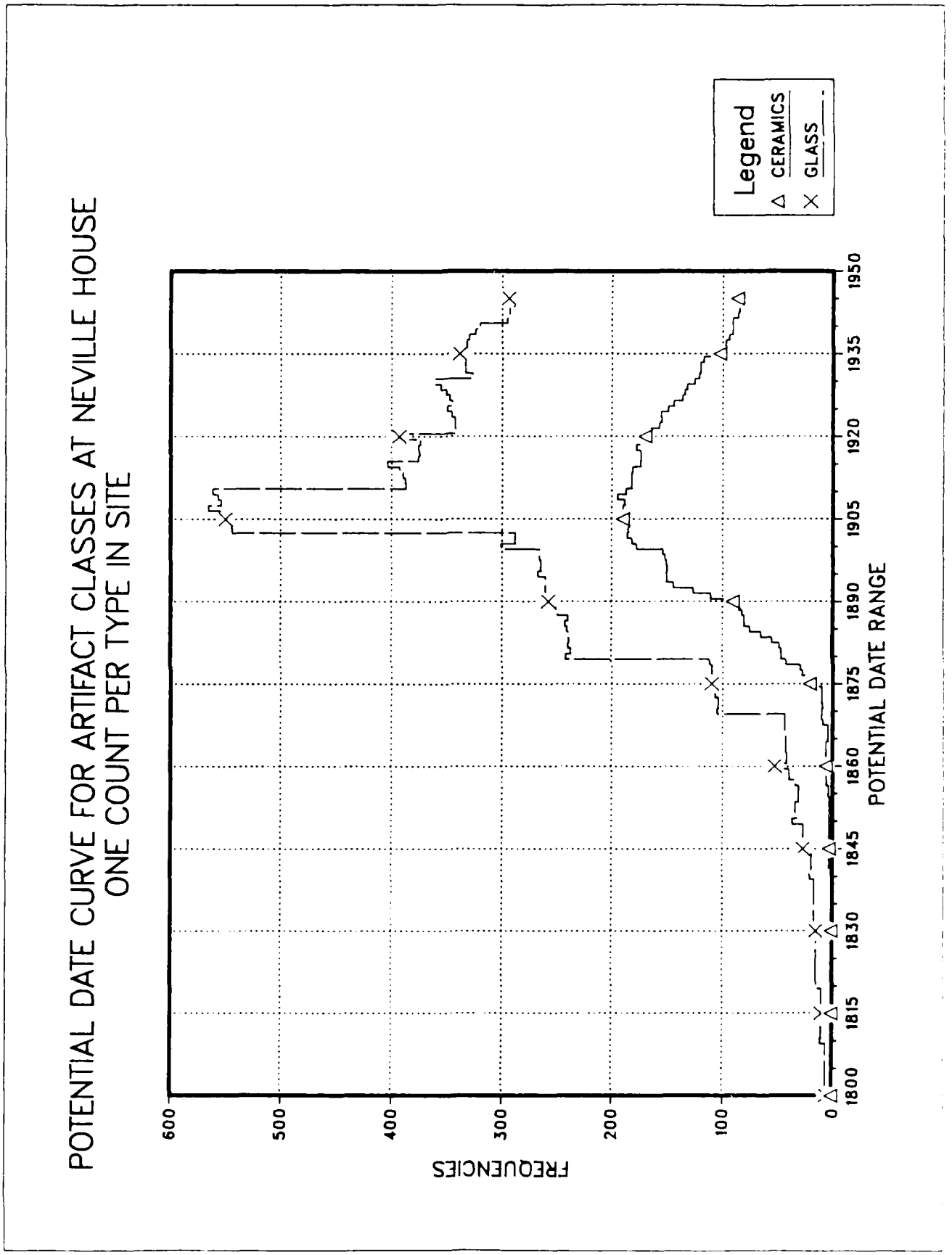

POTENTIAL DATE CURVE FOR ARTIFACT CLASSES AT NEVILLE HOUSE
ONE COUNT PER TYPE IN SITE
Legend
CERAMICS
GLASS
FREQUENCIES
0
100
200
300
400
500
600
1800
1815
1830
1845
1860
1875
1890
1905
1920
1935
1950
POTENTIAL DATE RANGE

Figure 12

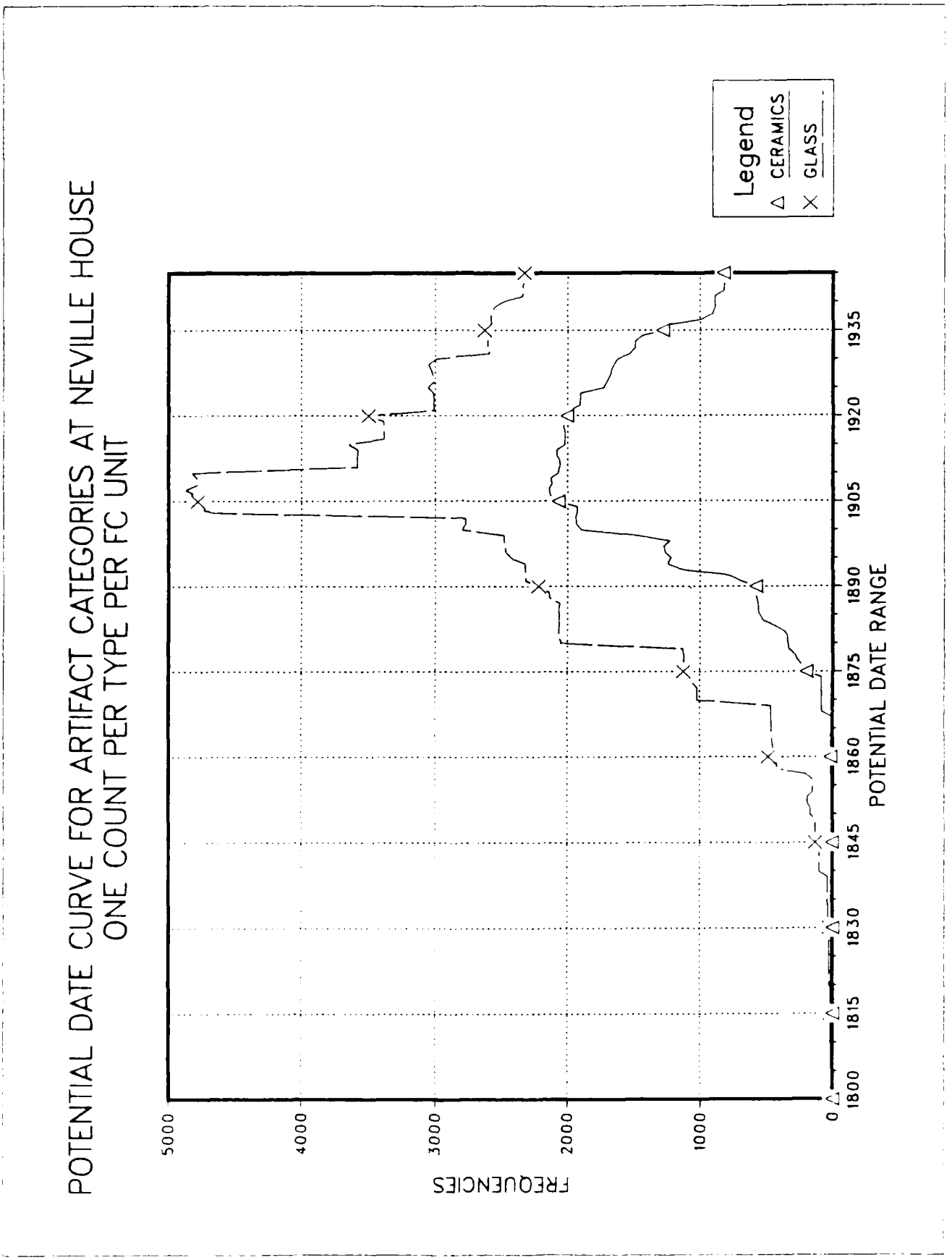

POTENTIAL DATE CURVE FOR ARTIFACT CATEGORIES AT NEVILLE HOUSE
ONE COUNT PER TYPE PER FC UNIT
Legend
CERAMICS
GLASS
FREQUENCIES
5000
4000
3000
2000
1000
0
1800
1815
1830
1845
1860
1875
1890
1905
1920
1935
POTENTIAL DATE RANGE

Figure 13

TABLE 1 con't.

Historic Sites Excavated in Western Pennsylvania

Type	Dates	References
Rural:Domestic/Tavern		
Foreman's Tavern	1770-1790	Richardson and Wilson 1976
Hanna's Town	1770-1800	Richardson and Wilson 1976, Cowin 1984, Fryman and Eddins (in preperation)
Ramsey Tavern*	1780-1830's	Davis 1980 and 1984
Neill Log Cabin*	1787-1870	Wilson 1970
Woodville	1790's- 1974	Richardson and Carlisle 1978
Peter Colley Tavern	1801-1854	Michael and Carlisle 1973 and 1976
Settlers Cabin*	1816-1855	Wilson, K. and H. 1970
Searight Tavern	1821-1910	Michael 1973
Brownsville Log House	1820-1850?	Michael 1972
Urban		
Pittsburgh Plate Glass Headquarters*	1790's-1900	Cowin 1983
Pittsburgh Subway System*	1800-1900	Carlisle 1983

*not analyzed

In the published literature on the archaeology of the period, three sites stand out as points of reference: Custer Road Dump Site, Mackinac Island, Michigan (Brose 1967, Hill 1982); Edgewood in Atlanta (Hill 1982, Worthy 1982); and Silcott in southeast Washington State (Adams 1976, Adams, Ray, and Leonhardy 1975, Hill 1982). None of these sites are directly comparable to Woodville, for the Custer Road Dump Site was a military installation, Edgewood in an urban area, and Silcott a rural community. All three further contrast with Woodville in that each site had numerous contributors to their trash accumulations, while Neville House had only several discrete families.

The Custer Road Dump site is adjacent to Fort Mackinac and it was in use from 1876 to 1896, a period of 20 years, by both military and civilian personnel. Over the twenty year period these was an increase in American made ceramics over English, which Brose (1967:81-82) attributes to improved railway transport. He sees communication as the major factor in stylistic changes in the ceramics used by the Fort population. The porcelains are not plentiful in any level and only one piece has a maker's mark (English) dating to 1878. Most of the remainder of the porcelain is of Asian derivation. There is a high percentage of storage

HYPOTHESIS 1

The artifact assemblage will mirror the socio-economic status of the occupants of Woodville (the Neville, Cowan, Wrenshall, and Fausett families) over a ca. 175 year period. It should reflect their affluence and position in western Pennsylvania society and economy.

There is a noticeable lack of late 19th and early 20th century artifact assemblages with which to compare and contrast the 125,994 artifacts from Neville House. If we are to provide useful answers to the questions and hypotheses posed above, we need adequate, statistically valid samples of the myriad of behaviors that were extant for the 75 year period that produced this complex and poorly understood period - from an artifact viewpoint.

No comparable archaeological assemblages have been analyzed for western Pennsylvania. Two projects, currently under analysis, have the potential for providing a large data base for comparison with the Woodville assemblage. In 1982 the headquarters site for PPG Industries was monitored by Verna L. Cowin (1983) of Carnegie Museum and over 30 wells and one building foundation were excavated. In 1983, the University of Pittsburgh under the direction of Ronald Carlisle (1983) excavated a series of wells in the right-of-way of the Pittsburgh light rail transit system. It will be these two projects that will have the greatest potential for direct comparisons on inner city behavioral patterns with their more rural counterparts at Neville House, 10 miles east of Pittsburgh. It will not be for another several years that these projects will reach fruition and the data become available for comparison.

Prior to these two urban archaeological projects, historic archaeology (as is true most elsewhere) has concentrated upon the Colonial, Revolutionary, and early 19th century periods. In western Pennsylvania 4 forts, 4 taverns, 3 log houses, and a frontier settlement (see Table 1) have been excavated.

TABLE 1

Historic Sites Excavated in Western Pennsylvania

Type	Dates	References
Military		
Fort Necessity	1754	Harrington 1957
Fort Ligonier	1758-1766	Grimm 1975
Fort Pitt	1759-1783	Swauger et.al. 1959 and 1967
Fort McIntosh	1778-1788	Carlisle 1977 and 1979

conciousness, providing a conduit to the styles and fashions from Europe. Pittsburgh was a major transportation hub (railway and inland waterway) for the Midwest, West, and South. The City of Pittsburgh emerged as an industrial giant of the period and goods and services were readily available to all levels of consumers, from laborer to millionaire.

The ceramic and glass categories reflect the technological trends of the period. The porcelains represented 26%, the whiteware 42%, and the semi-vitreous 5% of the ceramic assemblage. As can be graphically seen in Figures 2 and 3, 70% of the porcelain was imported from Europe or Asia (see Casselberry for further breakdown). Thirty of the 60 porcelain patterns were manufactured at Limoges, France. Haviland porcelains were very popular and pattern 201 represents a portion of a complete set of table and serving ware that was probably purchased from a department store, since sets of this size were never advertised in the Sears and Roebuck catalogues. The distribution of this pattern throughout the site again substantiates the vertical and horizontal homogeneity of the deposits due to years of subsurface disturbance. Whiteware produced in the United States predominates over imported varieties, reflecting the high quality American manufacture of these wares and their acceptibility to both the American consumer and the Wrenshall and Fuasett families (Figures 2 and 3). The semi- vitreous wares are evenly divided between domestic and imported varieties (Figures 2 and 3). The ceramic categories are in keeping with the product availability in the Pittsburgh region, for it appears that popular trends and technological achievments were soon capitalized upon by the Neville House occupants, which can be attributed to the fact that Pittsburgh was a major transportation center.

The glass containers reflect the greatly expanded bottling industry and the proliferation of new products, due to the machine production of glass containers. The majority of the glass containers were manufactured within 200 miles of Pittsburgh (see Hochrein) as one would expect of the leading glass manufacturing region. The large quantity of discarded glass containers reveals the change in the production of these items from scarce hand produced items to machine made containers, available in enormous numbers. After the 1860's, machine-made glass containers were abundant and this technological change initiated our current "disposable" society.

The ceramics show preference for high quality porcelains by the Wrenshalls and Fausetts as well as their ability to purchase them. The imported wares from England, France, Germany, and Asia demonstrate the involvement of the occupants of Neville House within the distribution networks for ceramics on one hand and their personal preferences, on the other, which tended toward porcelains and decorated white and semi-vitreous wares. The functions of the ceramics are predominantly tableware and tea, social, and display items, all attesting to the fact that the Wrenshalls and Fausetts probably had the social graces of the upper middle class of the period.

Comments on the first hypothesis, concerning the socio-economic status of the Neville House occupants, will be restricted to the same 75 year period, due to the chronological placement of the midden.

these were joined by the Birmingham Glassworks, also located on the south side. By 1831 there were 20 glassworks in western Pennsylvania; 8 of which were in Pittsburgh. In 1837, 13 glass factories were producing in Pittsburgh. By 1840, there were 38 glass manufacturers and cutters throughout western Pennsylvania. Twenty-six of them were in Allegheny County. Eight flint glassworks, 7 vial furnaces, and 11 window glass works were in operation in the Pittsburgh district by 1850. Six years later 45 glassworks and 9 window glass factories could be found throughout Pittsburgh and Allegheny County.

Although the Civil Was had a disruptive influence on the merchandising of glass, the industry soon recovered and by 1870, 32 glassworks operated in Allegheny County. These houses produced fully half the national output of glass. In 1890 Pittsburgh and western Pennsylvania glassworks ranked third in production between the ever expanding iron and steel industries. Glass is still a major western Pennsylvania industry, though no longer produced in Pittsburgh proper.

The first iron foundry was established in Shadyside (Pittsburgh) in 1793 by George Anshutz, but two years later was closed due to a lack of wood for charcoal and other raw materials. In 1805, McClung, Smith, and Gormly opened a foundry in Pittsburgh. Pittsburgh had no blast furnaces during this early period, but in surrounding counties there were numerous furnaces. Stimulated by the low cost of iron ore and coal, the iron industry soon began to take shape.

In 1812 (see Historical section), Christopher Cowan constructed a steam driven rolling mill in Pittsburgh. The number of steam mills increased with time, and by the Mexican War, Pittsburgh became a center for munitions and armament production. By 1860, steelmaking had become a vital western Pennsylvania industry. In 1855 the Bessemer process was being used in many mills and the production of iron switched to steel between 1860 and 1870. In 1859, James Laughlin built 2 blast furnaces on the north side of the Monongahela and by 1864 Andrew Carnegie had entered the iron industry by purchasing a 1/6 interest in the Iron City Forge Company. At this time, the Pittsburgh district was the major iron producer of the north, and by 1870 it was producing fully 40% of the country's iron.

In 1870 there were 33 rolling mills in Allegheny County. The steel industry became a giant during the 1880's and Andrew Carnegie its prime mover. The Carnegie Steel Company Ltd. was the largest coke and steel company in the world and employed 30,000 workers in 1892. The necessity of good transportation routes have insured that long stretches of the Allegheny, Monongehela, and Ohio River banks are covered with these steel making facilities and railroad tracks (Richardson and Carlisle 1977: 51-53).

It was during this intense period of industrialization in the Pittsburgh region that the Neville House midden was deposited. The Wrenshalls and Fausetts assuredly were participants in this development and they benefited from the accessibility of the world market at this time. It was during this period that many millionaires were "born" in Pittsburgh and they contributed to the raising of the social and cultural

began to perfect wares that emulated their English counterparts. This was a concerted effort on the part of these manufacturers to duplicate the English wares that so appealed to the American consumer. By 1900, the United States produced wares that rivaled the imports, for they provided wear-resistant items, a wider variety of decorations, and most importantly at a more economical cost. The English imports decreased during this period, but there is a marked increase in both French and German wares.

This period also saw the development of mail-order businesses that brought the cornucopia of domestic and imported products to the most rural of Americans. The founding of major metropolitan department stores contributed to the accessibility of an incredible range of products that the world market provided.

As explained above, the midden did not reveal a 175 year period of usage; however, it does transcend a circa 75 year period centering on 1912, allowing us to comment upon the technological trends, functions, and trade patterns of this period.

THE INDUSTRIAL PERIOD IN PITTSBURGH

After the end of the Revolutionary War and the Indian Wars which followed, the regions around Pittsburgh became the locus of a series of major industries that rose and fell with the economic and political events of the period. As has been pointed out in the previous historical section, Pittsburgh is strategically located to take advantage of water and coal resources. Of prime importance to the industrialization of western Pennsylvania were the Monongahela, Allegheny, and Ohio Rivers critical for the transportation of both raw products and finished goods. Pittsburgh soon became a primary industrial center for production of those essentials, which supported the counry's westward expansion, and early markets for Pittsburgh products were found both to the west and farther south along the Mississippi. Pittsburgh is noted for two major industries, that until recently have been the mainstay of the region's economic system.

The earliest major industry to develop in western Pennsylvania was the glass industry. There were 2 main centers of glass production in western Pennsylvania at the turn of the 18th century: the area around New Geneva (Greene County), and Pittsburgh. Many of Pittsburgh's early glass factories were located on Pittsburgh's Southside. The first glass furnace here was built by Isaac Craig and James O'Hara in 1795.

The Ohio Glassworks was established on the north side of the Ohio river just opposite the head of Brunot's Island ca. 1800-1801 and produced window glass. Although most early glass works in the area concentrated upon the production of window glass, by 1807 the Robinson and Ensell Glassworks manufactured flint glass tableware, and it became one of the most famous glassworks in Pittsburgh.

In 1809, 3 glassworks were in operation in Pittsburgh and in 1812

first two questions deal with the temporal span of the site and identification of the persons responsible for its composition. Prior to its excavation, the midden at Woodville held the promise of containing the temporal record of 175 years of four successive related families (the Nevilles, Cowans, Wrenshalls, and Fausetts). The excavations revealed layers of waterlain sediments within the channel, which first alerted us to the possible function of the depression. Upon further examination the midden proved to be situated in a millrace. The historical research demonstrated that there was an active grist and shingling mill at Woodville as early as 1831, which ceased operations in the 1860's. It was at this time that the Wrenshall and Fausett families used this linear depression for waste disposal, between the 1870's (?) to the 1940's (?). The artifactual assemblage clearly places the midden within the late 19th and early 20th centuries (Figure 1). In the previous section the mean-median date of the midden was calculated at 1912 using a 1945 end date (the last date of artifact manufacture) and 1918, using a 1979 end date (date of excavation).

The classes of material in the midden included ceramics, glass, metal, organic, synthetic, and prehistoric artifacts. All of these classes reflect the disposal of items relating to a domestic household. Although Woodville was an operating farm into the late 19th century, there are no artifacts that are associated with agriculture in the midden. The artifacts can be associated with the Wrenshall and Fausett families and with the mansion house at Woodville.

Much of the research by the investigators of this report was focused upon the documentation of frequencies and percentages of the various artifact classes and categories, their functions, their technological, decorative, and chronological attributes, and their origins. These foci are detailed in the various sections and in the preceeding discussion by Eddins. It is the ceramic and glass classes that allow us to support the hypotheses stated in the Introduction of this report. The percentages of ceramic categories, their manufacturing origins, and the glass container categories and their manufacturing and product locations form the basis for the remaining discussion. Hypothesis 2 will be addressed first.

HYPOTHESIS 2

> The analysis of the midden deposition will reflect technological trends, function, and trade distribution patterns of many of the artifact classes and categories. This will in turn reveal information on the behavioral patterns and preferences of their purchasers and consumers over the ca. 175 year span.

At the turn of the century, there were major changes in technology, a great increase in the availability of domestic wares versus imported wares, and changes in the marketing of products, due to expanded shipping routes (especially railways). The manufacture of ceramics in the United States greatly increased in the 1870's as the potteries of East Liverpool, Ohio ceased to produce yellow wares for whitewares (see Eddins and Fryman sections). Prior to the Civil War, Americans preferred English tablesets, but after this time American ceramic manufacturers

CONCLUSIONS

by

James B. Richardson, III

> Since urban archaeology is a relatively new field, it is striving to develop its theory, method, and data base all at the same time. The gradual evolution from description, to method, to theory that has characterized prehistoric archaeology will not be possible for urban archaeologists, nor would it even be appropriate at this time. Our challenge is to formulate creative theories, develop useful and productive methods, and compile a sound and well-ordered data base, simultaneously.
>
> (Dickens 1982:xx)

The late nineteenth and early twentieth century has only recently become a focus of archaeological research. This is due, in part, to the Federal legislation mandating the recovery of significant cultural resources from federally funded projects in both rural and urban settings and secondly to the growing realization that the archaeology of our grandparents (and in some cases, parents) is a fruitful field of research. The majority of historic archaeological research in the eastern United States has concentrated upon pre-1850's urban, rural, and industrial sites. Their artifact classes, their functions, and temporal spacing are better understood and more abundant in the literature.

The archaeology of the American city has increasingly, over the past five years, confronted the archaeologist with the 20th century. The excavation of late 19th and early 20th century wells, privies, and architecture produces a multitude of artifacts that only antique dealers and collectors (until recently) knew well. This enormous data base is presently poorly understood, for it has not received the rigorous analysis that its 17th, 18th, and early 19th century cousins have enjoyed.

The archaeological record of the last hundred years reflects the ever accelerating processes of cultural change at the time that the United States was an integral part of the transformation of the world's culture into an essentially world society, interlinked by a vast communication and economic network of staggering proportions.

SUMMARY OF THE ARTIFACT RECORD

Seven questions were to be asked of the data (see Introduction), most of which have been answered in detail in the previous sections. The

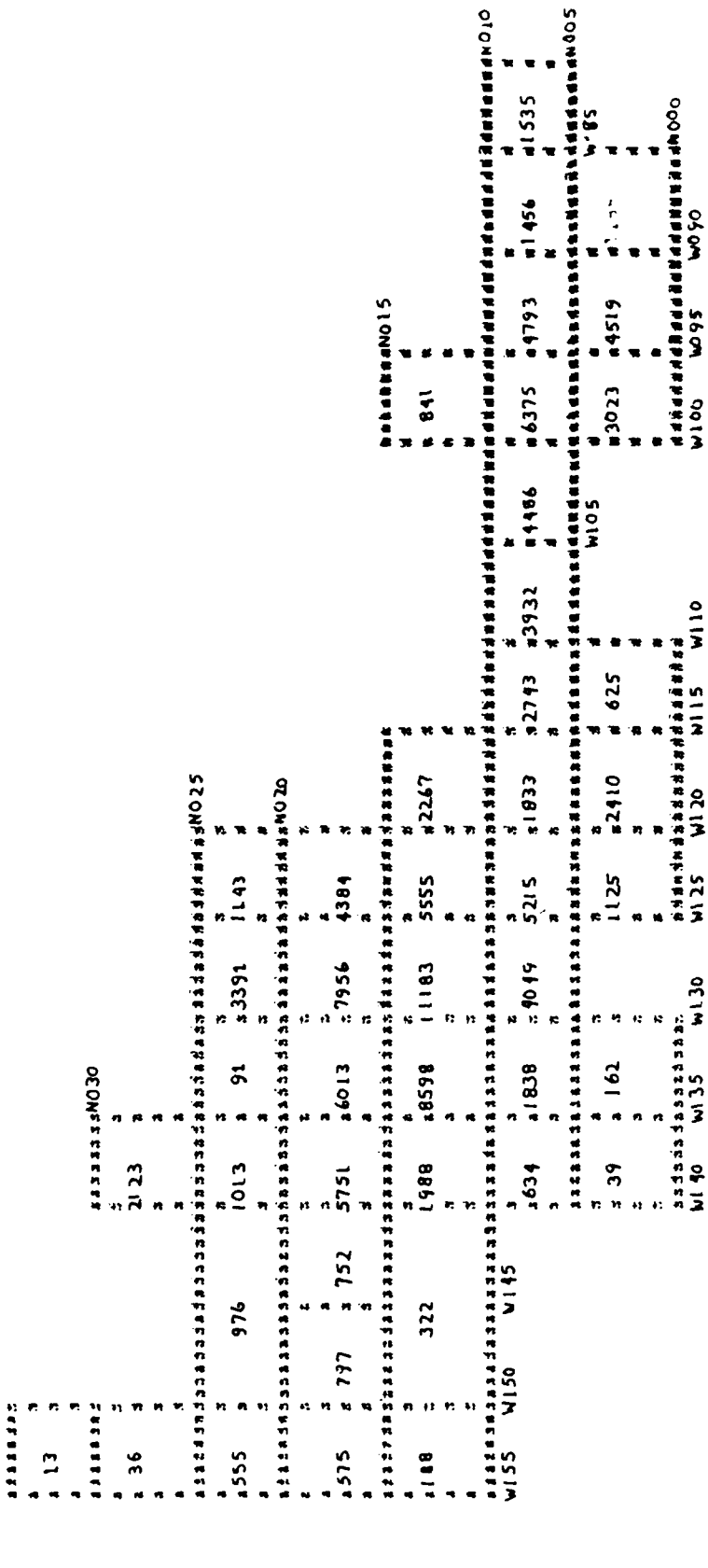


Figure 20: Number of artifacts per square

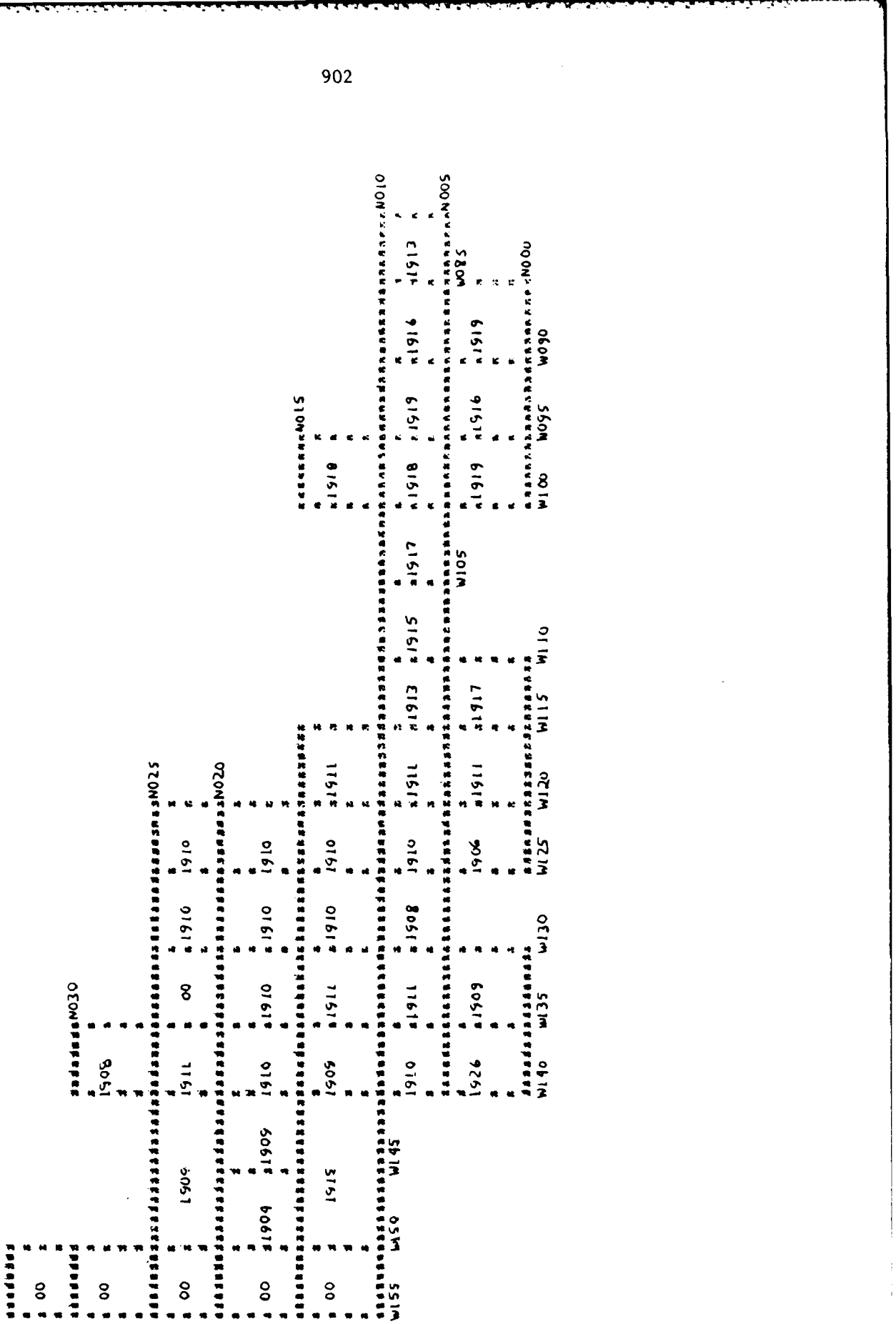


Figure 19: Mean Median Dates per Square

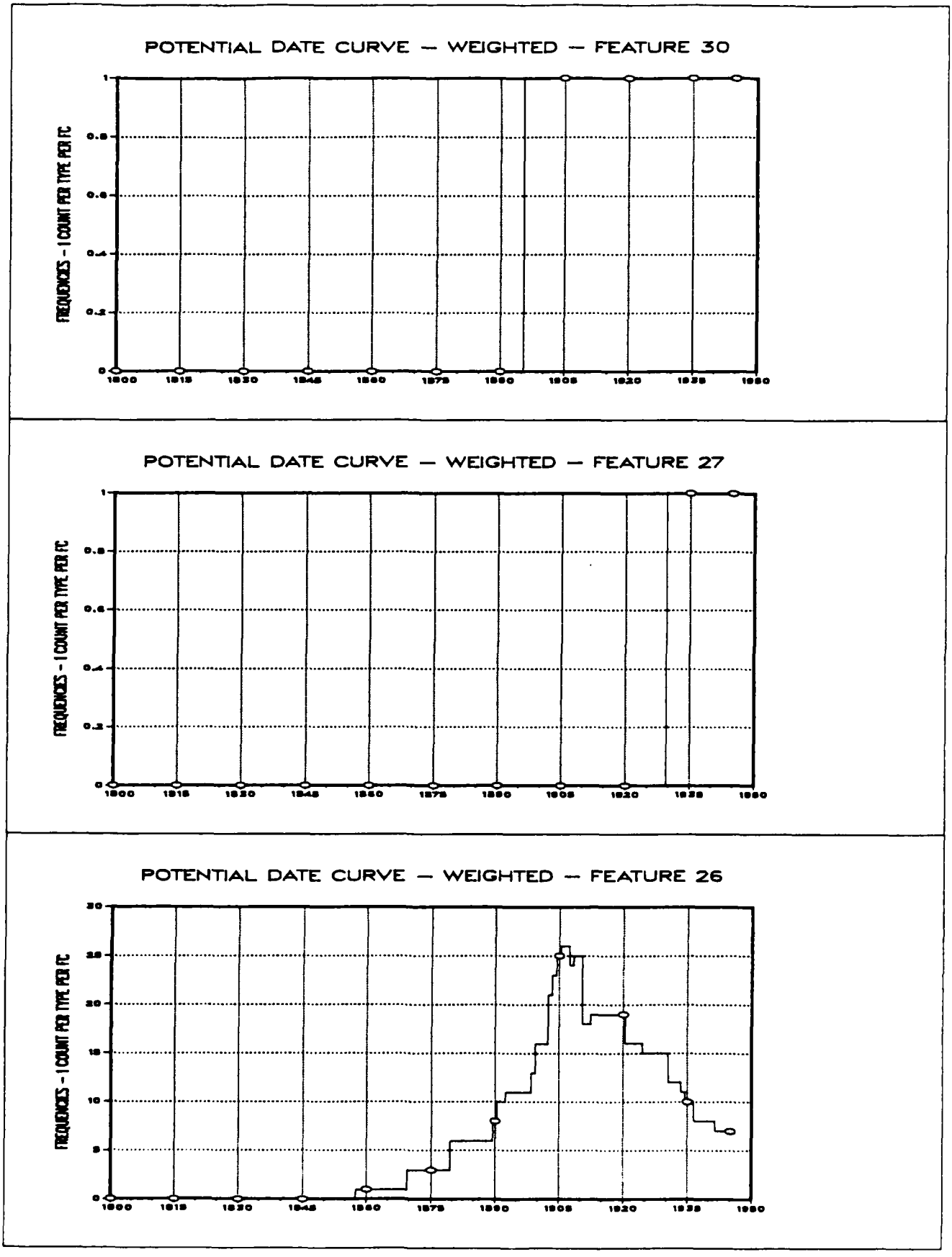

POTENTIAL DATE CURVE — WEIGHTED — FEATURE 30
FREQUENCIES - 1 COUNT PER TYPE PER FC
1
0.8
0.6
0.4
0.2
0
1800
1815
1830
1845
1860
1875
1890
1905
1920
1935
1950
POTENTIAL DATE CURVE — WEIGHTED — FEATURE 27
FREQUENCIES - 1 COUNT PER TYPE PER FC
1
0.8
0.6
0.4
0.2
0
1800
1815
1830
1845
1860
1875
1890
1905
1920
1935
1950
POTENTIAL DATE CURVE — WEIGHTED — FEATURE 26
FREQUENCIES - 1 COUNT PER TYPE PER FC
30
25
20
15
10
5
0
1800
1815
1830
1845
1860
1875
1890
1905
1920
1935
1950

Figure 18

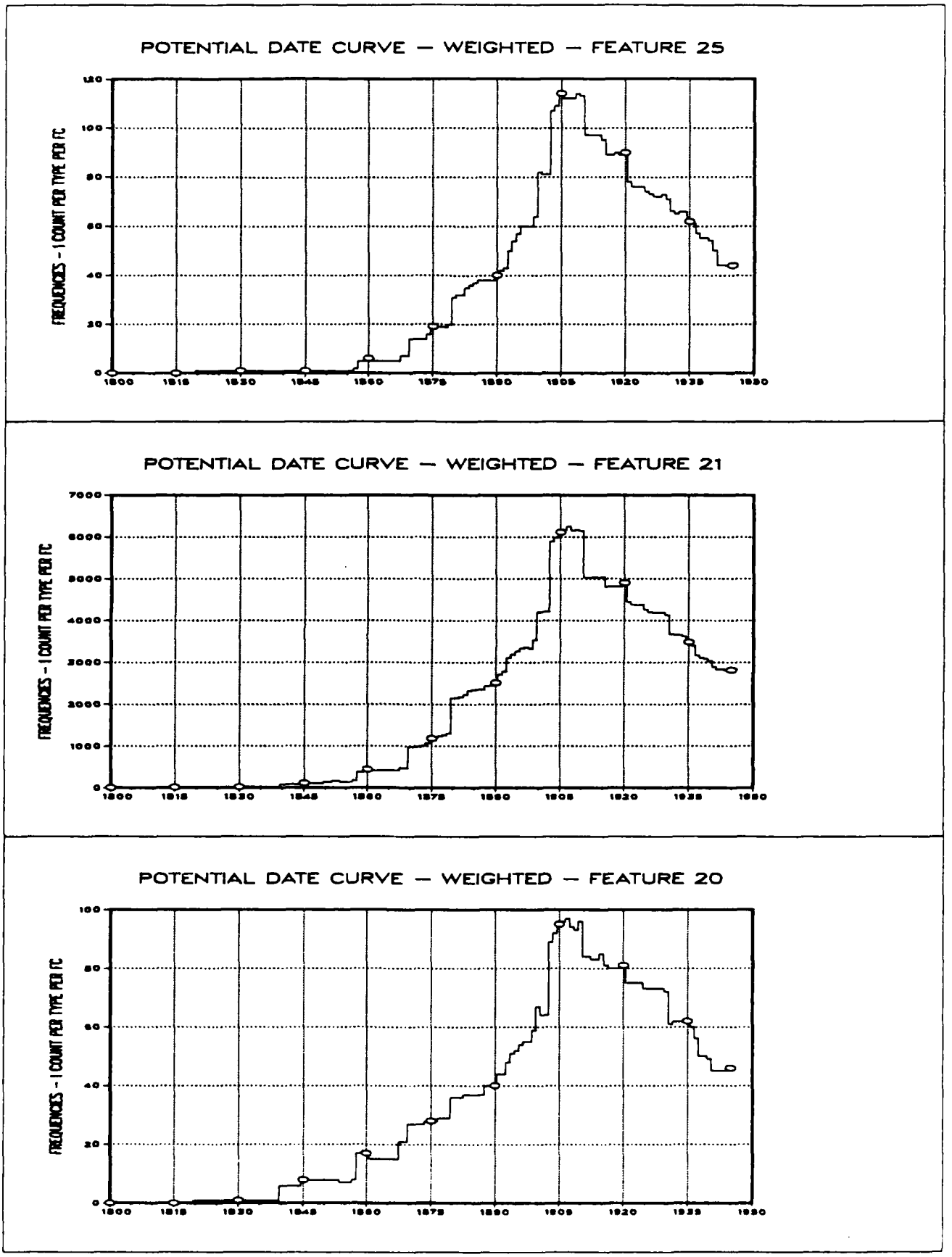

POTENTIAL DATE CURVE — WEIGHTED — FEATURE 25
FREQUENCIES - 1 COUNT PER TYPE PER FC
0
20
40
60
80
100
120
1800
1815
1830
1845
1860
1875
1890
1905
1920
1935
1950
POTENTIAL DATE CURVE — WEIGHTED — FEATURE 21
FREQUENCIES - 1 COUNT PER TYPE PER FC
0
1000
2000
3000
4000
5000
6000
7000
1800
1815
1830
1845
1860
1875
1890
1905
1920
1935
1950
POTENTIAL DATE CURVE — WEIGHTED — FEATURE 20
FREQUENCIES - 1 COUNT PER TYPE PER FC
0
20
40
60
80
100
1800
1815
1830
1845
1860
1875
1890
1905
1920
1935
1950

Figure 17

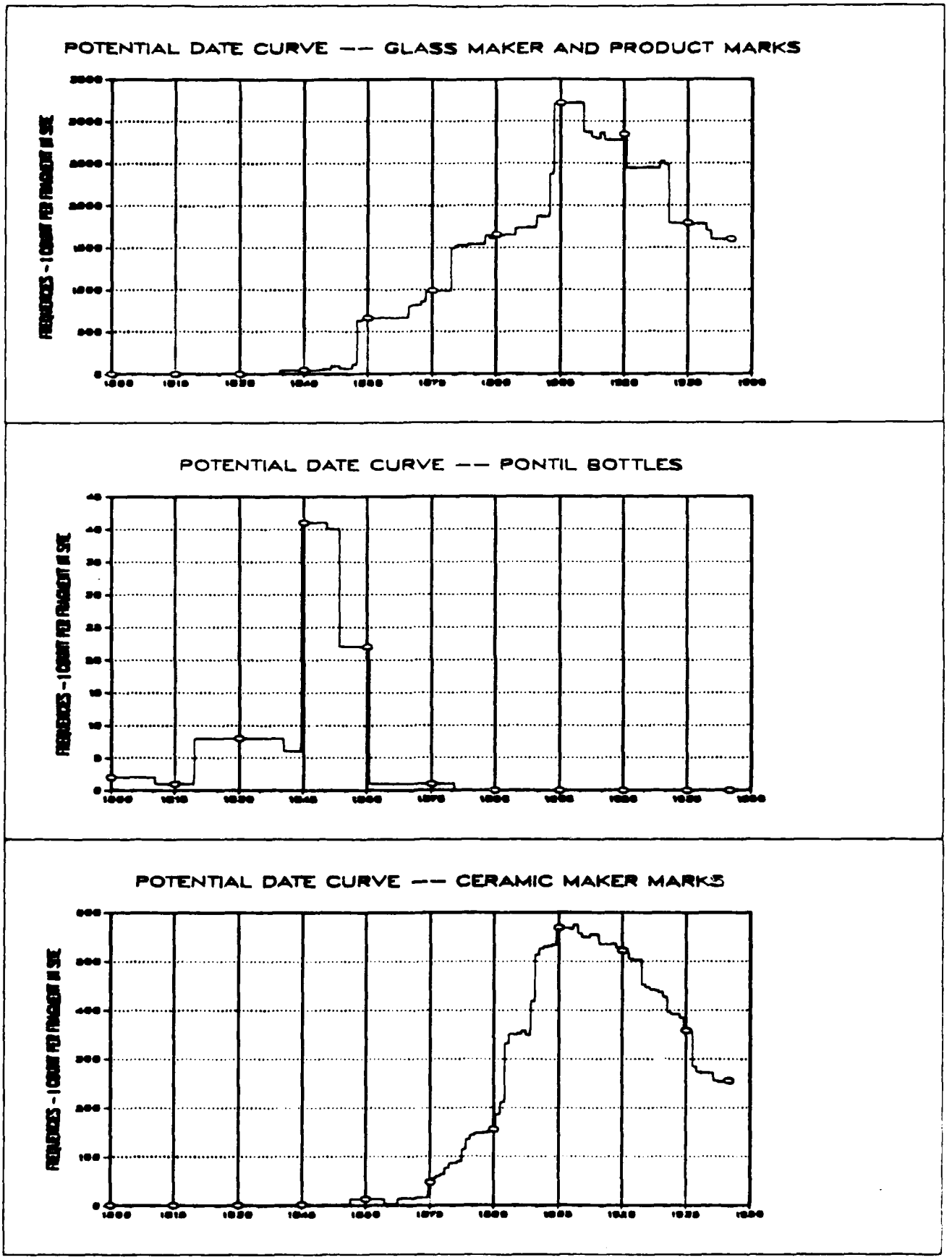

POTENTIAL DATE CURVE -- GLASS MAKER AND PRODUCT MARKS
POTENTIAL DATE CURVE -- PONTIL BOTTLES
POTENTIAL DATE CURVE -- CERAMIC MAKER MARKS

Figure 16

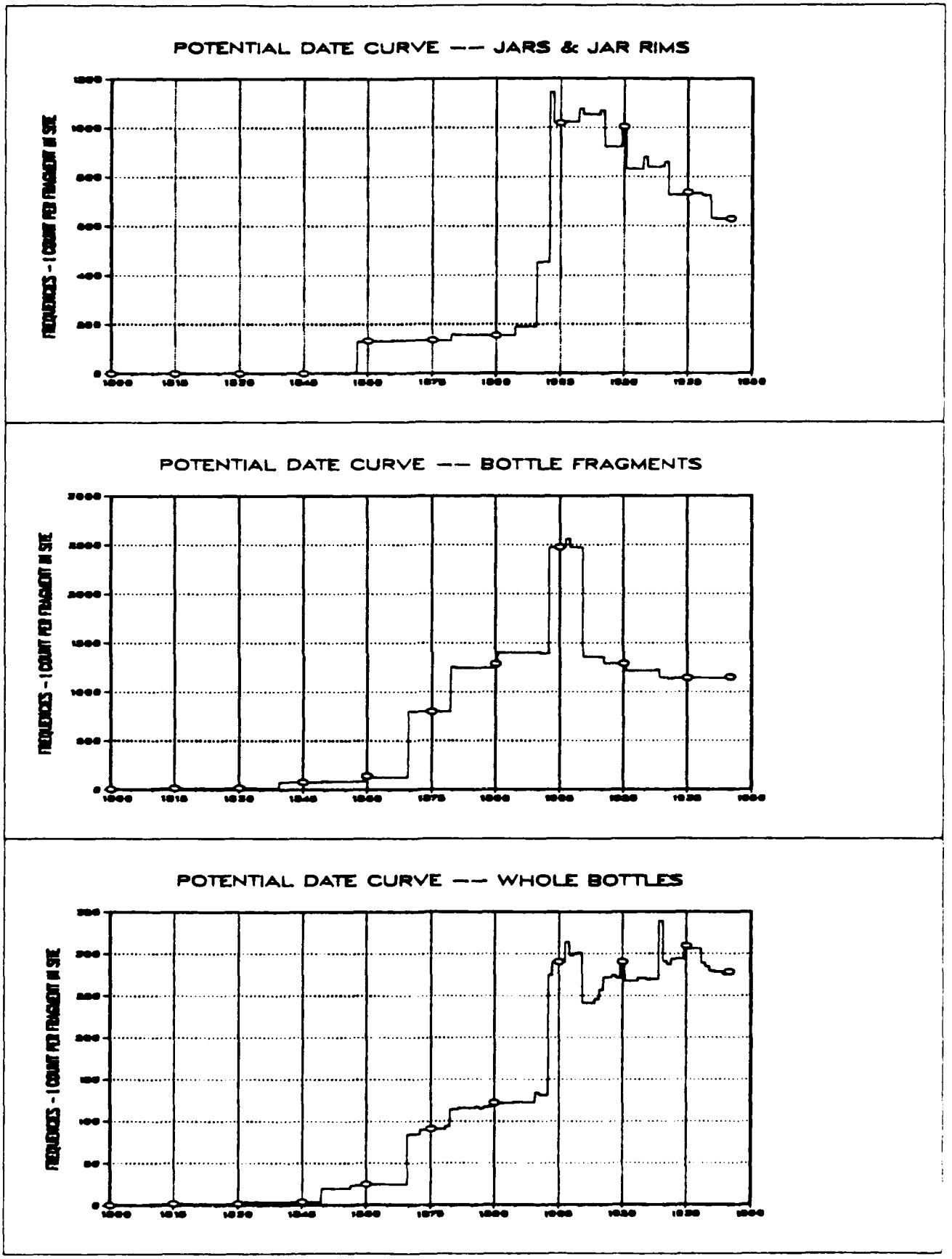

POTENTIAL DATE CURVE -- JARS & JAR RIMS
POTENTIAL DATE CURVE -- BOTTLE FRAGMENTS
POTENTIAL DATE CURVE -- WHOLE BOTTLES

Figure 15

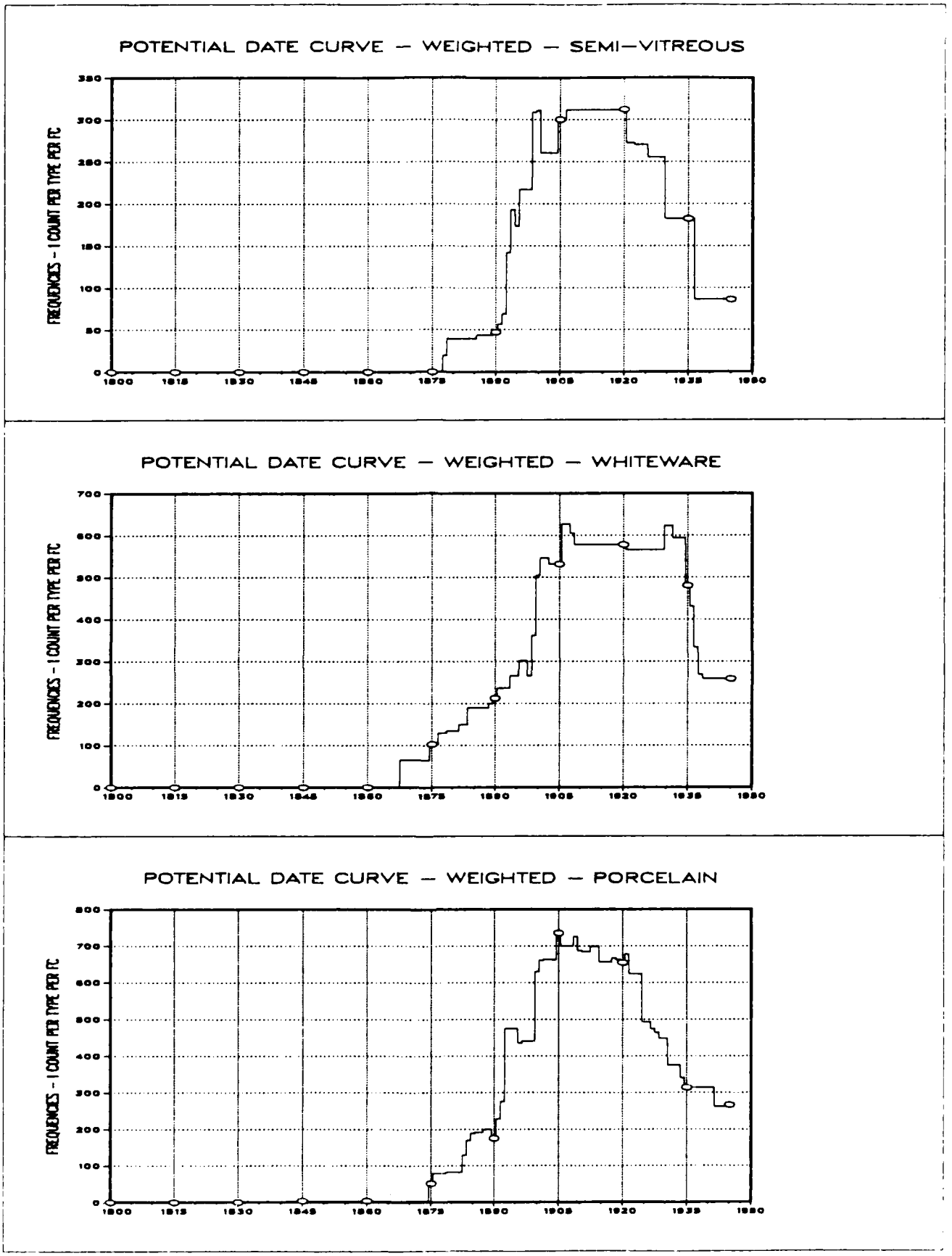

POTENTIAL DATE CURVE — WEIGHTED — SEMI—VITREOUS
FREQUENCIES - 1 COUNT PER TYPE PER FC
350
300
250
200
150
100
50
0
1800
1815
1830
1845
1860
1875
1890
1905
1920
1935
1950
POTENTIAL DATE CURVE — WEIGHTED — WHITEWARE
FREQUENCIES - 1 COUNT PER TYPE PER FC
700
600
500
400
300
200
100
0
1800
1815
1830
1845
1860
1875
1890
1905
1920
1935
1950
POTENTIAL DATE CURVE — WEIGHTED — PORCELAIN
FREQUENCIES - 1 COUNT PER TYPE PER FC
800
700
600
500
400
300
200
100
0
1800
1815
1830
1845
1860
1875
1890
1905
1920
1935
1950

Figure 14

crocks (305) and a predominance of earthenware (whiteware) vessels, both decorated and undecorated, many with U.S.QM.D. (military issue) stamped on them. The total assemblage reflects the military nature of the site.

The Edgewood site is a small trash midden in a ravine that was sealed by a house in 1910-11. The 1183 ceramic artifacts reflect a modest way of life as demonstrated by the utilitarian quality of the ceramics. A high proportion were bowls, indicating the consumption of soups during the fall and winter. Of the 35 maker's marks recovered at the site, 17 were domestic products and 18 were imports (Worthy 1982:356). Atlanta was the location of a number of railroads which provided access to the imported items, again stressing communication as a key factor in their presence. The gold trimmed earthenwares and stonewares were interpretated to have been used on special occasions. A lower socio-economic class appears to be represented by the Edgewood assemblage.

Silcott was an isolated rural farming community in southeastern Washington dating to between 1900 and 1930. Fully 65% of the Silcott ceramics were imported. American ware comprised 35%, English 40%, and other imports 25%. The difference is explained by the accessibility of ceramic products to the communtiy. The large percentage of English ceramics may be due to limited access to domestic sources, due to the isolation of the community, which may have been dependent not only on the local store but on mail order catalogues for their tablewares (Worthy 1982:356).

The Neville House midden ceramics reflect a family with social standing, seen in the great number of patterns represented and the presence of high quality table services. There are 236 patterns of porcelain, 87 with identifiable maker's marks (65 European, 18 Japanese, and 4 U.S.). Eight of the patterns represent parts of complete sets of table services, the largest being the Haviland 201 pattern. Many of the surviving pieces for these sets may still exist in the collections of the Wrenshall-Fausett relations (Carlisle, personal communication).

The economic status still remains to be clarified, but the fact that the Wrenshalls and Fausetts could trace their lineage to General John Neville, his son Presley Neville (a good friend of Lafayette's), Christopher Cowan (an early iron magnate), and to a relation who became the wife of President Grant all suggest that we are dealing with a family that through time has enjoyed a high socio-economic status. The presence of so many porcelain table services also argues for at least moderate wealth.

SIGNIFICANCE OF STUDY

The significance of this report is twofold. First and foremost it presents the analysis of the largest assemblage of late 19th and early 20th century artifacts that we know of to date. As Dickens (1982:xx) has stressed, the formation of the data base for this period is crucial to our understanding of the cultural dynamics of the period as reflected in

artifacts. Secondly, the study provides an example of a trash midden that was produced by a high status family.

This period of archaeology is just attracting attention, and the authors of this report hope that the data presented herein will add significantly to our knowledge of both the material culture of the period, the bahavioral patterns represented in the ceramic and glass categories, and the interpretation of socio-economic status from the late 19th and early 20th century archaeological record.

RECOMMENDATIONS

Each of the 125,994 artifacts have been individually numbered, coded, and placed on the computer. This computer data base and the artifacts themselves are available for future researchers to manipulate. The following are some suggestions that future research directions might profitably take:

1. Detailed analysis of many of the artifact catagories has not been explored in depth. Future analysis of many of the glass, metals, synthetics, and organic classes will add to the cultural inventory of the period.

2. The comparison of the Neville House assemblage with the PPG and Subway data has great potential for adding significant information on the complexity of life in the Pittsburgh region during this period.

3. Further historic research needs to be done on the last several generations of the Woodville occupants as well as upon the Pittsburgh region in order to better place Neville House within the context of the time period.

4. The analysis of the faunal material would provide data upon the butchering and dietary preferences of the Neville House occupants. This data will have to be treated, as have all the other classes, as coming from a single unit, due to the extensive disturbances in the midden prior to excavations. Thus the 75 year period will have to be treated as a single event in time.

5. The ceramic decorative patterns for the turn of the century have not been well defined and as yet no precise chronology has been developed for this period based upon ceramic decoration. Within each category of ceramics there are gradations based on quality, decoration, and form which can only be assessed through pattern analysis and by determining the price of each pattern from avaliable catalogues of the period. All too often ceramic categories are attributed to high status persons (i.e. porcelain) while in reality there is a gradation of patterns and quality in each which caters to most socio-economic levels.

CONCLUDING COMMENT

The 125,994 artifacts from the Neville House midden are silent witnesses to and products of the complex processes that set the stage for the merging of nations and continents into a single global community. The industrial revolution is, in many respects, the base line for interpretations and hypotheses regarding our modern world.

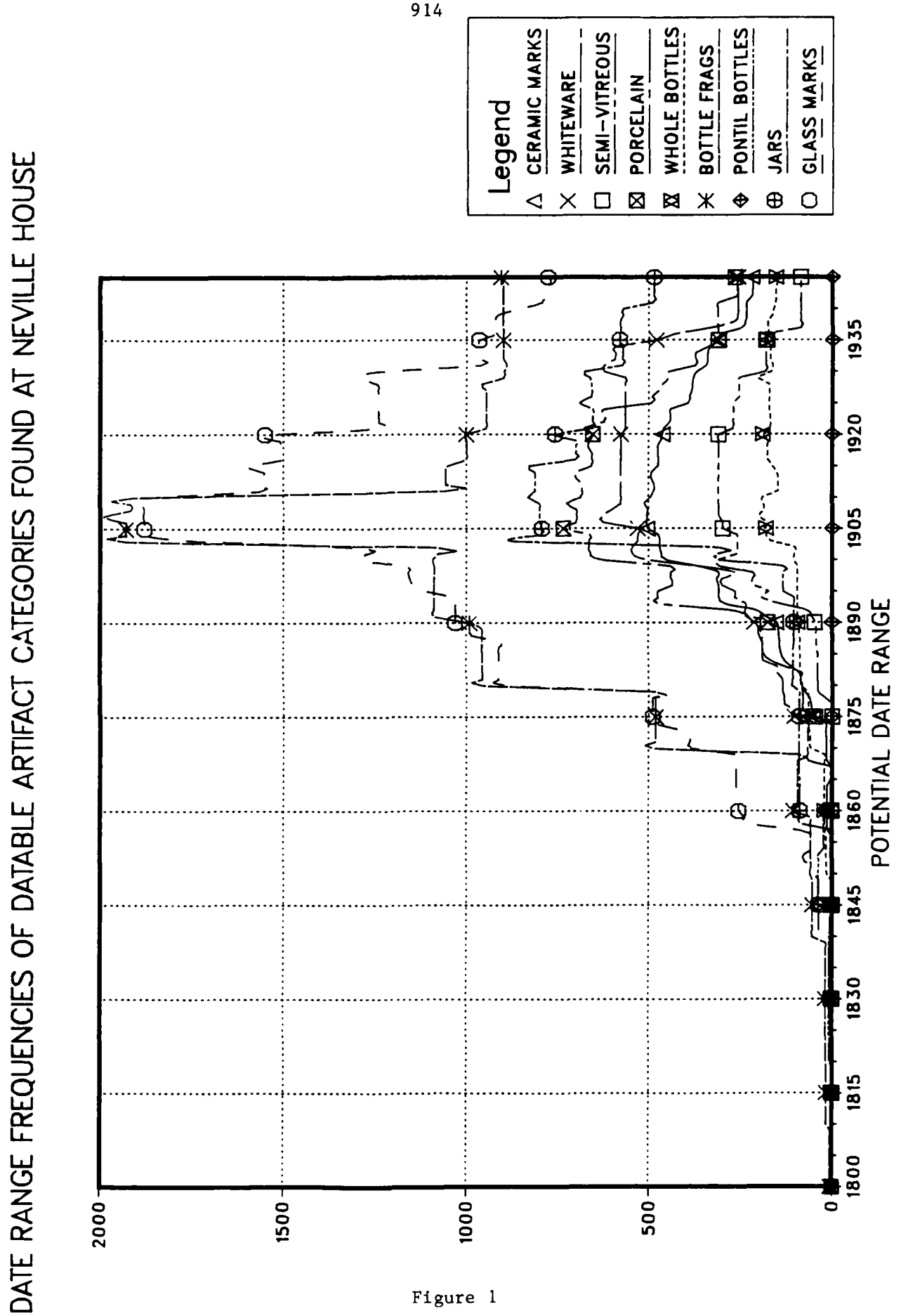

DATE RANGE FREQUENCIES OF DATABLE ARTIFACT CATEGORIES FOUND AT NEVILLE HOUSE
Legend
CERAMIC MARKS
WHITEWARE
SEMI-VITREOUS
PORCELAIN
WHOLE BOTTLES
BOTTLE FRAGS
PONTIL BOTTLES
JARS
GLASS MARKS
2000
1500
1000
500
0
1800
1815
1830
1845
1860
1875
1890
1905
1920
1935
POTENTIAL DATE RANGE

Figure 1

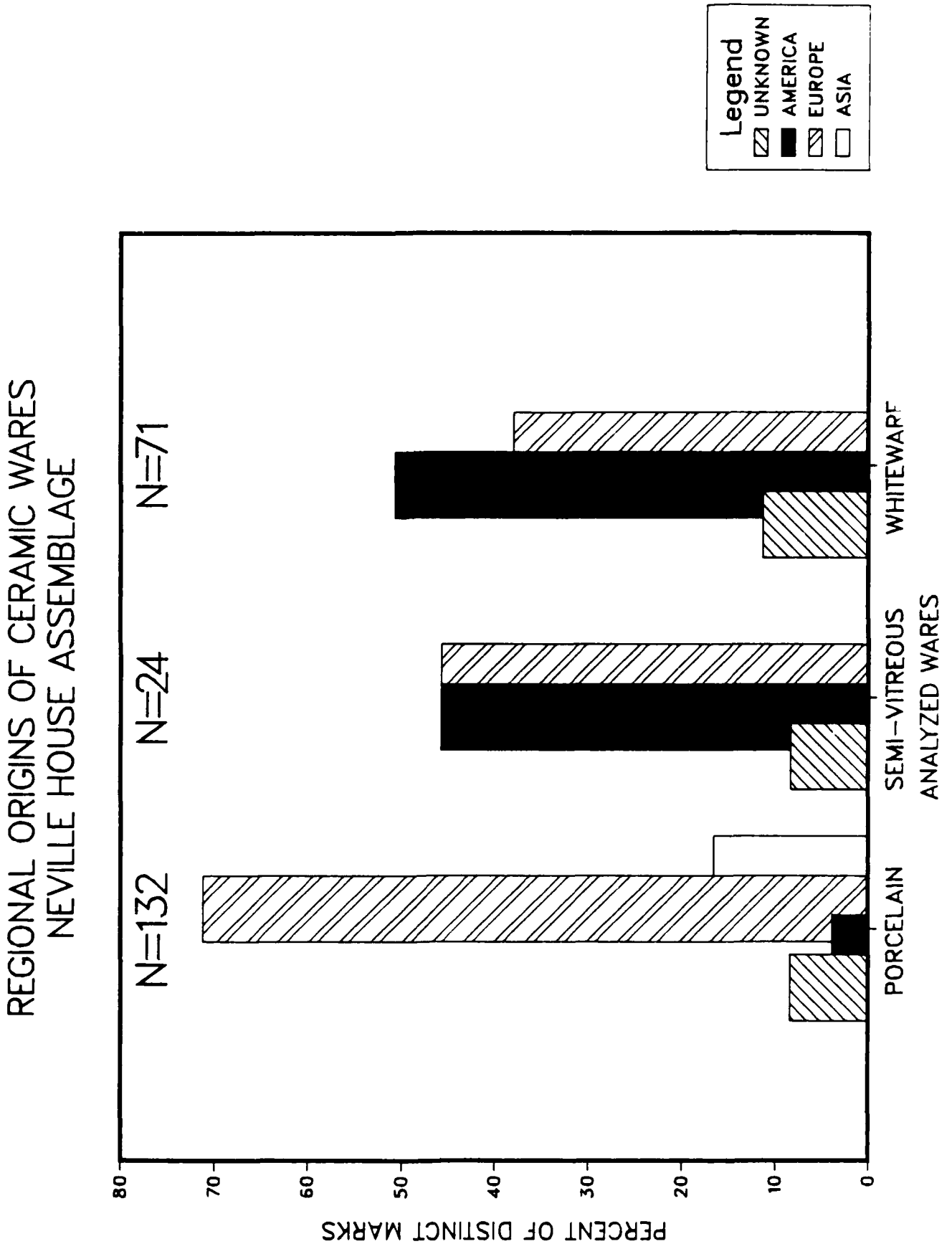

REGIONAL ORIGINS OF CERAMIC WARES
NEVILLE HOUSE ASSEMBLAGE
N=132
N=24
N=71
Legend
UNKNOWN
AMERICA
EUROPE
ASIA
PERCENT OF DISTINCT MARKS
0
10
20
30
40
50
60
70
80
PORCELAIN
SEMI-VITREOUS
WHITEWARE
ANALYZED WARES

Figure 2

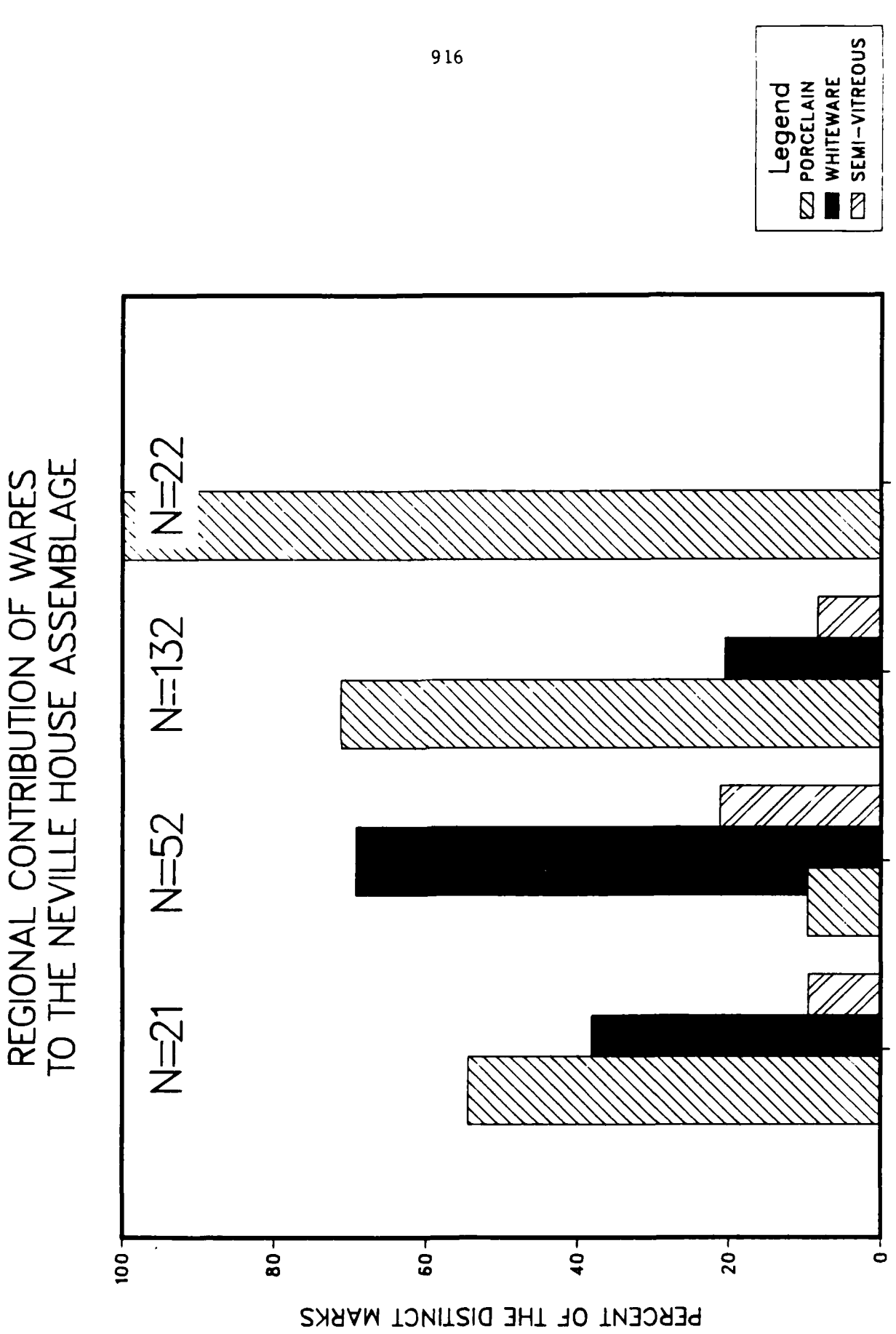

REGIONAL CONTRIBUTION OF WARES
TO THE NEVILLE HOUSE ASSEMBLAGE
N=21
N=52
N=132
N=22
Legend
PORCELAIN
WHITEWARE
SEMI-VITREOUS
PERCENT OF THE DISTINCT MARKS
0
20
40
60
80
100
UNKNOWN
USA
EUROPE
ASIA

Figure 3

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