

Lower Goshen: Archaeology of a Mormon Pioneer Town

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Lower Goshen, a Mormon community settled in 1860 and abandoned in 1868, is located in Goshen Valley, Utah County, three miles northwest of the present town of Goshen (fig. 1). Its occupation, though short, was extensive, and the town remained undisturbed by construction or agriculture for 120 years following its settlement.

Possibly the first question that arises about the archaeological investigation of Lower Goshen is Why expend all the time, money, and energy on a remote community, certainly not of national significance, dating to 120 years ago? Aside from the obvious answers — that archaeology is fun, exciting, or interesting to watch or has some other romantic appeal — the best reason is that excavation provides information not available in books, diaries, records, or other historical documents; it represents an added dimension to the study of the history of this old town and early Mormon culture. For example, how large were the log houses? How did residents build their dugouts? What type of local ceramic or glasswares did the settlers use in their homes? What kinds of domestic items did they make themselves? Archaeology can help answer many of these questions as well as those relating to human habits and the ways these pioneers coped with life on this remote edge of the American frontier. Not only do the artifacts indicate what was used, but they also suggest certain vital information about the occupants, such as whether they were better off than others in a similar situation or how industrious and innovative they were. The artifacts can also demonstrate the degree of craftsmanship and concern individuals had for their work. Bones, seeds, and other plant materials provide insights into the diet of specific households.

In addition, artifacts may help to identify ethnic origins of these pioneer households. Indeed, many clues to the lives of the Lower Goshen inhabitants remain entombed in the ruins.

In 1856 Phineas Cook, a resident of Payson, Utah, supposedly ventured into Goshen Valley while looking for stray animals. Though he found good farmland and water, he had no desire to settle because he already owned twenty acres several miles away in Spanish Fork. Soon afterward he learned that his title to this Spanish Fork land was invalid and could not be made legal. The same year, with permission from both his bishop and Brigham Young, Cook and twenty-five other men built a dam across Salt Creek (now Currant Creek) and settled in Goshen Valley. Because of disagreements on where to settle, blowing sand, and unhealthy conditions such as a high water table, which caused saturated ground, the pioneers were forced to move their settlement three times.¹ In the fall of 1860, they selected and surveyed their third site, Lower Goshen.

The Journal History of the Church refers to Lower Goshen several times, calling it "Goshen" (apparently named after Goshen, Connecticut, the birthplace of Phineas Cook). Lower Goshen seems to have been a relatively typical town. William W. Smith built a grist mill three miles up Salt Creek. On 18 May 1863, Brigham Young visited the town on his way back to Salt Lake City from southern towns in the territory and advised the residents to build a road up the canyon into Juab Valley to reduce the miles needed to circle the ranges between Nephi to the south and Goshen. On 1 July 1863, people from Goshen, Santaquin, and Nephi started work on the road and finished it before the end of the month.

Lower Goshen also had its share of problems. A report in the Journal History dated 13 June 1863 described an attempted Indian attack on Goshen. Several Indians who lived along Salt Creek in Juab Valley, led by a man called Shaocook and armed with a few guns, bows, and arrows, were heading toward Goshen. The report indicates only that they were stopped. Another common Utah problem arose in 1866 when the people of Gardnersville, a newly developed settlement south of Lower Goshen, disputed the use of water from Goshen dam and the choice of a townsite.

Regarding everyday life in the town, one inhabitant of Lower Goshen described his first home as "a dugout facing the west, with a single window in the east and an entrance by means of steps into the ground: it had a fireplace and chimney."² A large log room built in 1864 to be used as a school, church, and social hall "had a large fireplace in one end, the door in the other, and window on each side. There was no floor and the roof was of white clay."³

Like other forts and townsites in Goshen Valley, Lower Goshen had to be abandoned, but this time because of soil conditions. The soil around the community was primarily Lake Bonneville clay, which allowed water to run off rapidly, and the ground was full of what the pioneers called "saleratus," or alkali.⁴ When dry, it is hard and firm, but when wet, it becomes plastic and sticky. Significantly, in the immediate area of Lower Goshen there are no trees, only wild grasses and sagebrush. The combination of clay and saleratus, the latter causing the plants to turn yellow and dry up, deterred the pioneer families from growing gardens and shade trees near their homes although they did cultivate the same fields and grazed their livestock in the same open areas throughout all the relocations of their townsites.⁵ (Their primary crops were wheat, potatoes, and corn while domestic livestock included cattle, sheep, and horses.⁶)

In 1867 Brigham Young selected a new townsite for the residents of Lower Goshen. In a letter to Franklin D. Richards on 18 October 1867, Brigham Young wrote, "I have just returned from a visit to Goshen whither I have been for the purpose of locating a new site for their city. A place was selected at the head of their farming lands, east and south of Gardnersville, a small village lying south of Goshen proper."⁷ Lower Goshen residents made the move to "Newtown," as they wanted to call it, in the fall of 1868. Because there was already a town by that name in Cache Valley, the relocated settlement became present-day Goshen. By March of 1869, most residents of Lower Goshen had moved to the new location, the rest planning to follow soon. Initially, the new townsite was mostly dugouts, but many structures from Lower Goshen were moved to the new Goshen. By 2 November 1869, all the settlers except one, Thomas Job, had moved to the new townsite.

The excavations at Lower Goshen have produced some interesting insights into Mormon pioneer settlement. Even before the initial settlement, the community was well organized and well planned for growth. The townsite was founded on the western edge of a delta marsh located at the south shore of Utah Lake. The gently sloping alluvial plain on which the remnants of the town are located drains eastward from the East Tintic Mountains. The southern shore of Utah Lake, a remnant of ancient Lake Bonneville of terminal Pleistocene times, can be seen approximately three miles to the northeast.

The town plan described for the settlement of Lower Goshen was to be laid out in forty blocks: four families to each block, with home and garden plots for 160 families. This basic grid came from the City of Zion plan proposed by Joseph Smith, Jr., in 1833. The

plan ideally consisted of streets running north-south and east-west, lots of one size with one family per lot, public buildings in the middle of town, no barns or stables in the city, farms away from the city, all streets of one width, one house per lot set back twenty-five feet, and all houses of brick and stone.⁸ Although the original town plan featured forty blocks with four families per block, survey thus far indicates that between twenty and twenty-five blocks were actually occupied during the eight-year history of the town.

During the first field season, both aerial photographs of the site and a ground surface survey were taken to determine possible locations of individual foundations of former structures. The survey revealed a total of 121 components (individual homesites) in the townsite, consisting of rock foundations of cabins, dugout depressions, and artifact scatters. The aerial photographs of the site reveal linear areas where vegetation was sparse or absent (fig. 2). These lines, running north-south and east-west, are probably the town's streets. These blocks turned out to be four hundred feet square, the exact size of city blocks in Provo, which was established in 1849. An overlay of the ground survey map and the aerial photograph reveals that almost all the structures are situated along the streets (fig. 3).

So far three homesites have been completely unearthed and five partially excavated. Each of these eight ruins consisted of a stone foundation, a depression or dugout, and surface artifact scatters. Excavations to locate outbuildings or other outlying features have not taken place beyond these main structures.

There is no naturally occurring stone in the Bonneville clays of the actual townsite. For footings for their cabins, settlers probably collected and hauled by wagon creek cobbles of igneous rock eroded from East Tintic Mountains five miles to the west, the nearest source for these rocks. At present, the closest locations of timber for walls and bark for roofs, which had to be cut and hauled, are the higher elevations of the East Tintic Mountains, approximately twelve miles southwest of Lower Goshen, and the Wasatch Mountains, an equal distance or farther to the east.

Apparently, according to evidence examined so far, few adobe bricks were used in building the structures; only a limited number have been found, and no foundation stones were found with clay accumulated on top or around them from eroding bricks. These data, along with historical information, suggest that most of the structures were log houses. Wood samples excavated include juniper, ponderosa pine, piñon pine, oak, possible white oak, other species of pine, and some unknown species. Juniper logs, most likely too small for the cabin walls, may have been used for the

roofs of the log houses and dugouts. Juniper trees, although not abundant in the valley today, could have been cut in the nearby mountains west of Lower Goshen. The cabin walls were probably constructed of larger logs, such as ponderosa pine or even Douglas fir — long, straight trees available in the Wasatch Mountains. Residents would have had to travel a long distance to obtain ponderosa pine for logs. Piñon pine could have been used for roof framing. Other floral materials found at the site include peach pits, squash (*cucurbita*) seeds, and juniper seeds. Possibly the peaches were grown locally within Goshen Valley.

An example of a relatively typical homesite structure is Component 18. The basic structure of this pioneer home had three, possibly four rooms, identified by igneous stone on or close to the ground surfaces (fig. 4). Rooms 1 and 2 represent the initial construction of Structure 1, the log house (the lack of brick, mortar, adobe, or stone suggests that this was a log home; historical data also support this conclusion). The foundation stones between the two rooms abut the inside of the exterior walls, indicating that the wall between the two rooms was a partition rather than part of the outside walls. Room 1 measured 17 1/2 feet square, while Room 2 measured 17 1/2 feet by 10 feet. The south wall of Room 1 contained the footing of a fireplace, 6 feet by 3 feet.

Room 3 represents a somewhat later addition since the foundation was laid against the outside walls of Rooms 1 and 2 and was not an integral part of the initial construction. This room, also with a fireplace in the south wall, is 13 feet by 10 feet. Part of the west wall had been destroyed, possibly by stone removal. None of these rooms showed any evidence of floor joists; however, loose dirt accumulation associated with artifacts seems to suggest a plank floor rather than a dirt floor (which would leave a thin layer of hard-packed soil).

Room 4, which may not have been a room but possibly a porch, consisted of an alignment of stone 6 1/2 feet long and 8 feet from and parallel to the north wall of Structure 1. It was probably not a separate room but was associated with Structure 1 because two adobe brick footings or possibly joist supports extend in the direction of Structure 1.

Structure 2 may have been an outside kitchen. It was small, 12 feet by 10 feet, with a large fireplace, which was full of ash, extending 3 feet deep into the wall. The floor was constructed of flat stone slabs, while the north wall and possibly the east wall were made of igneous rock. The west and south walls were constructed of adobe bricks 6 inches wide and 10 inches long. Outside the south wall were several flat stones, perhaps the threshold to the structure.

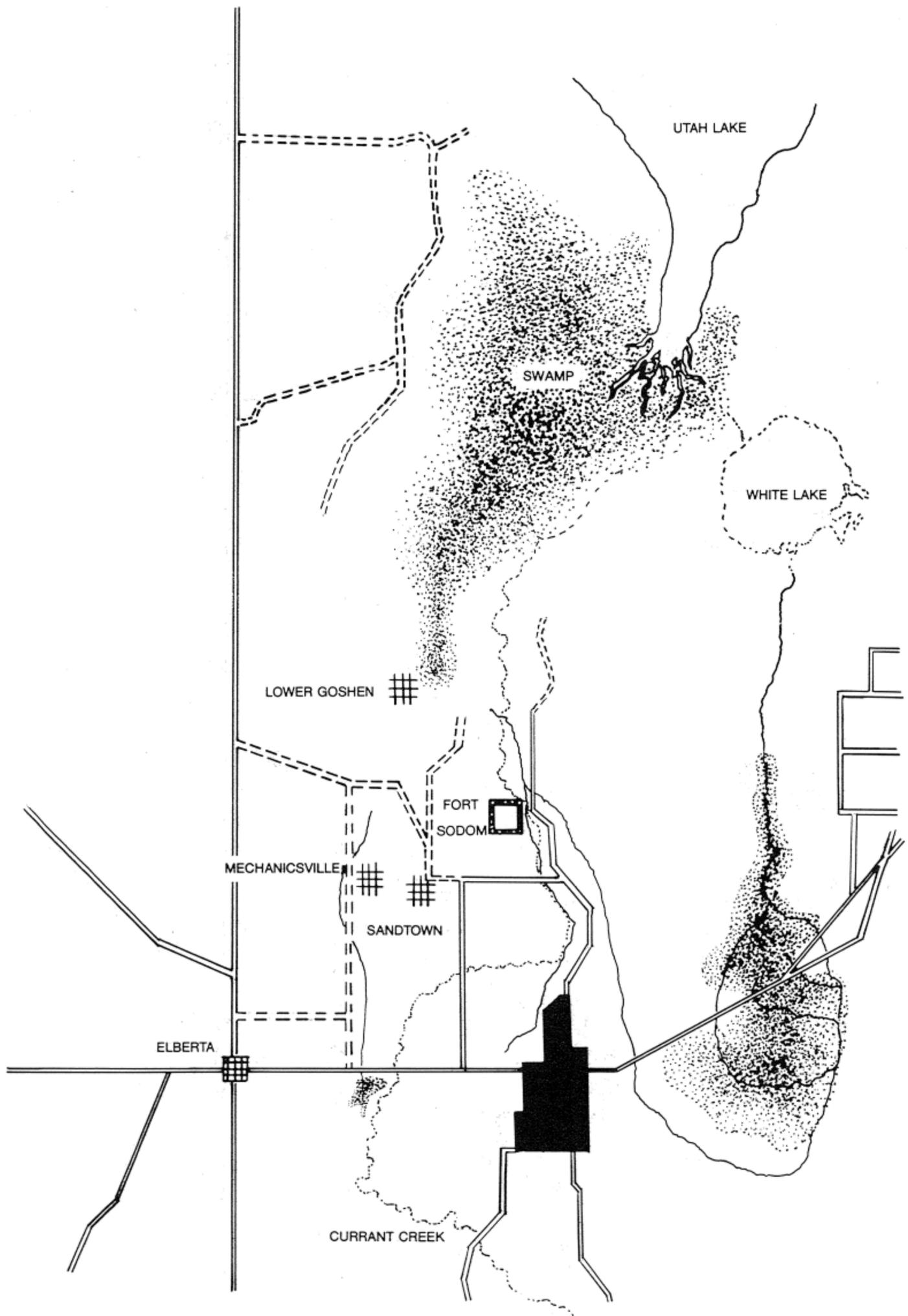
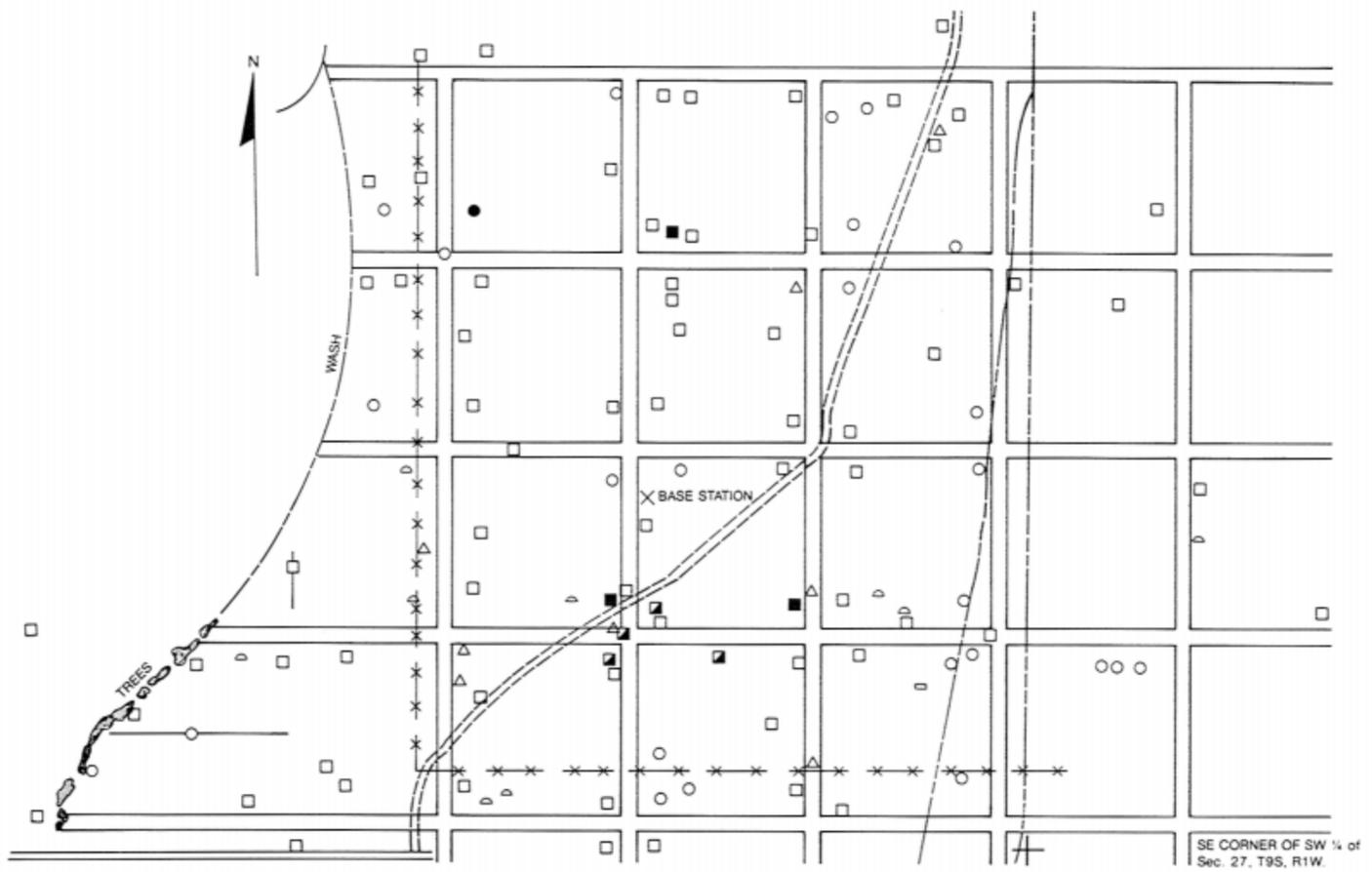


Figure 1
Map of pioneer settlements in Goshen Valley.



Figure 2
Aerial view of Lower Goshen
showing street alignments.



Legend

- △ TRASH AREA
- ◻ ASH DUMP
- ◐ UNKNOWN
- ◻ STONE FOUNDATION UNEXCAVATED
- ◼ STONE FOUNDATION PARTIALLY EXCAVATED
- STONE FOUNDATION EXCAVATED
- DUGOUTS UNEXCAVATED
- DUGOUTS EXCAVATED
- CURRENT ROAD
- ×—× FENCE
- --- DITCH

Figure 3
 Map of foundations (components)
 found at Lower Goshen.

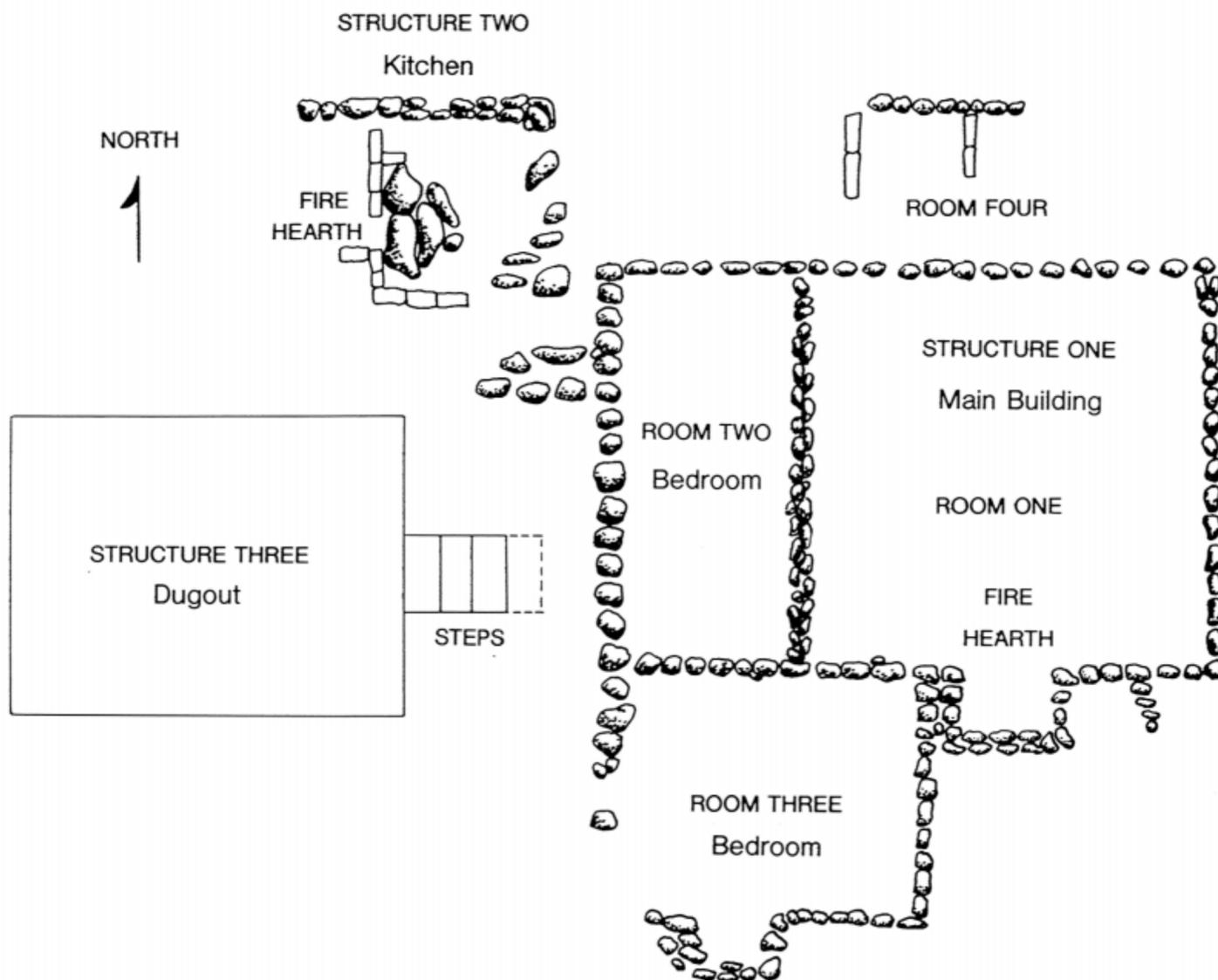
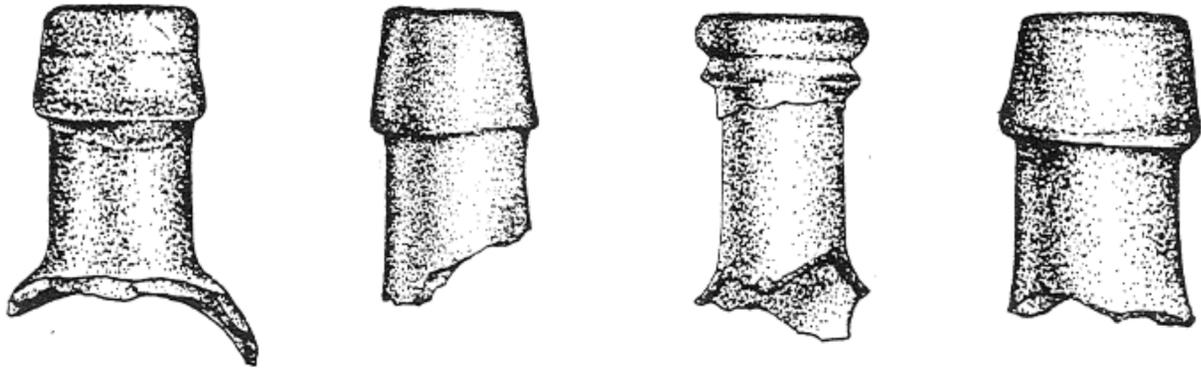
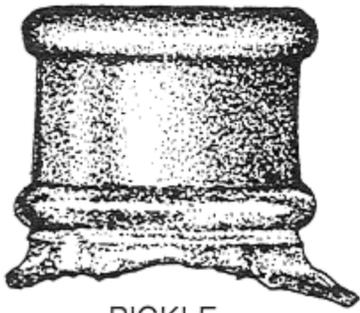


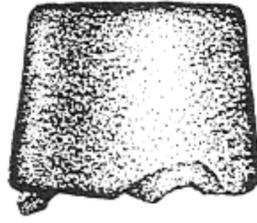
Figure 4
Component 18, Lower Goshen.



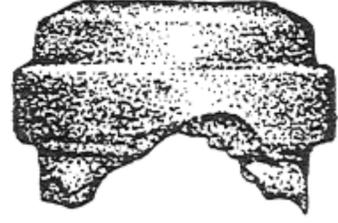
CONDIMENT BOTTLES



PICKLE



LIQUOR



CHAMPAGNE

Figure 5
Bottle finishes.

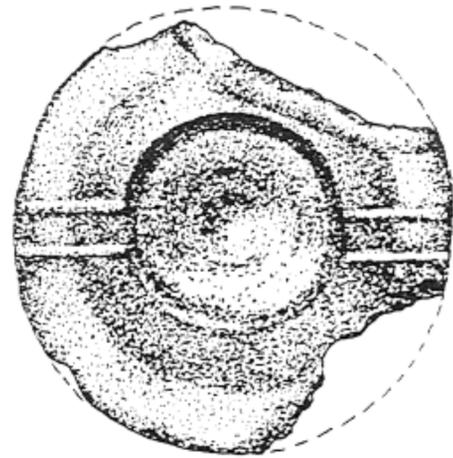
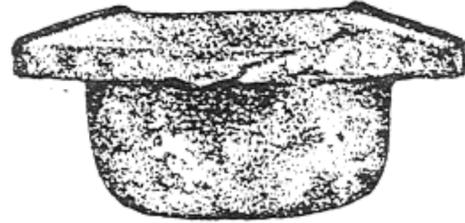
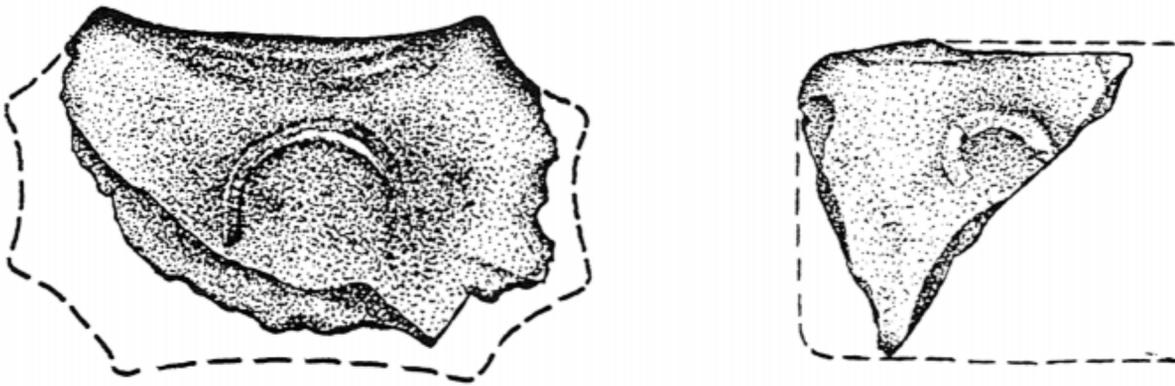


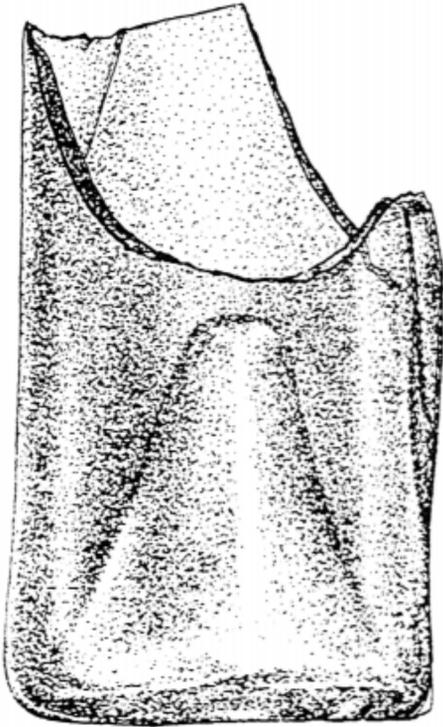
Figure 6
Bottle stoppers.



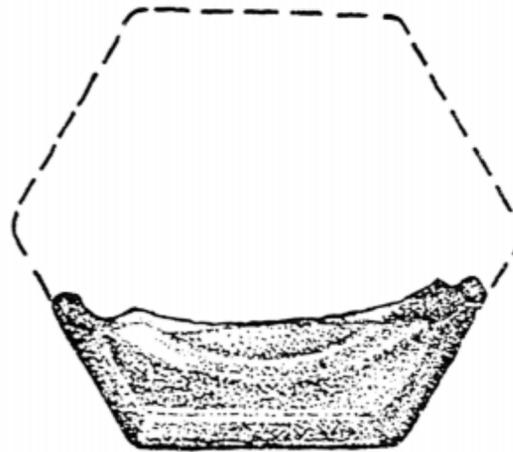
CONDIMENT BOTTLES WITH PONTIL SCARS



PATENT MEDICINE BOTTLE



WINE BOTTLE



PEPPER SAUCE BOTTLE

Figure 7
Bottle bases.

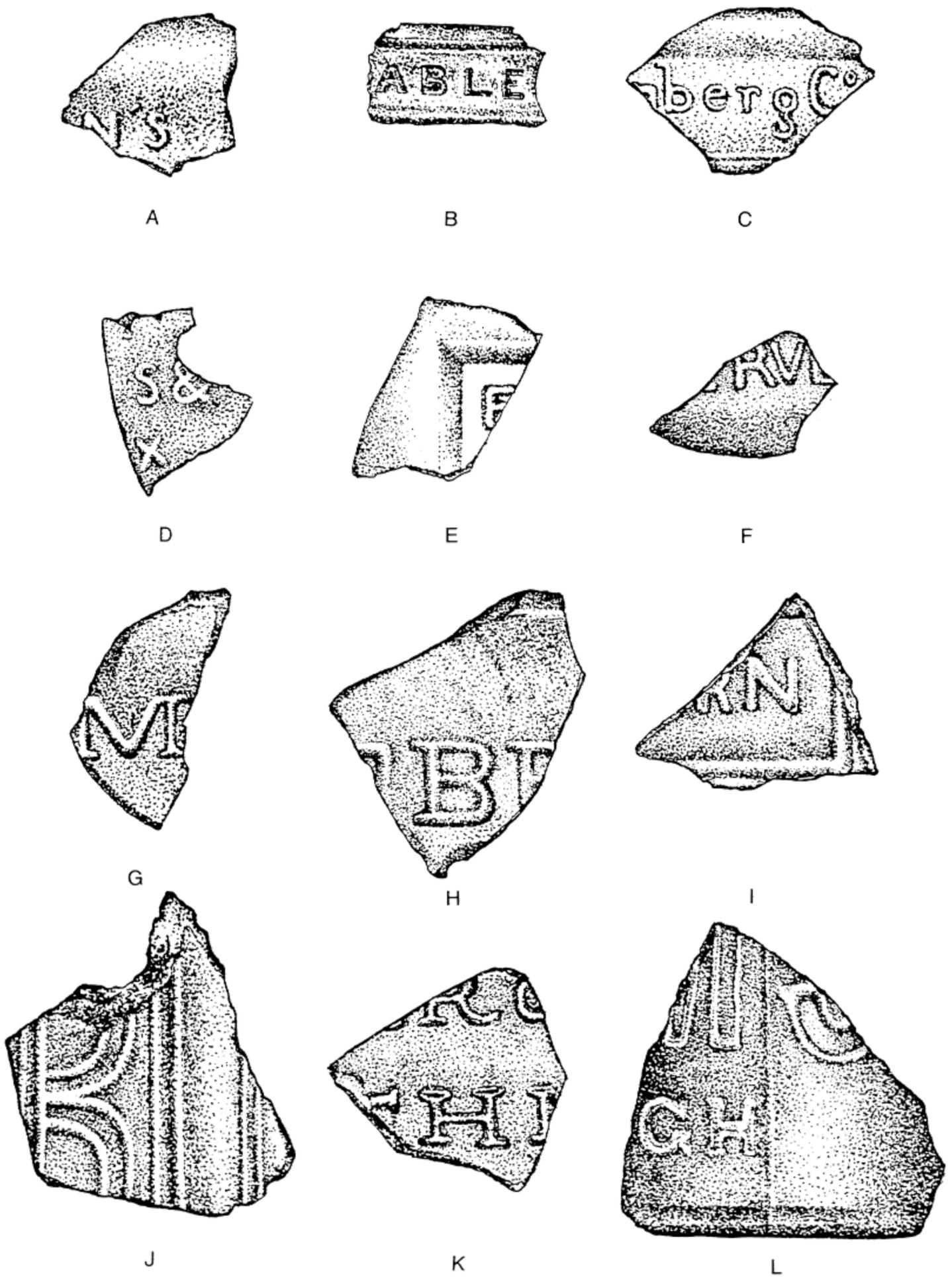
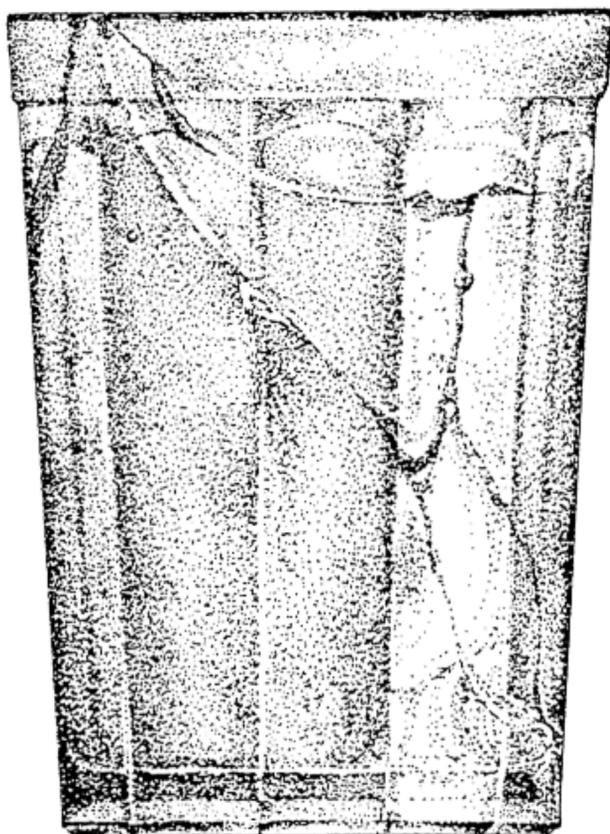
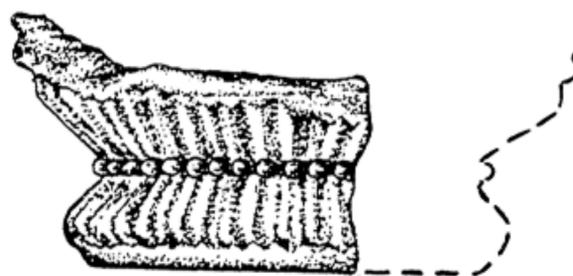


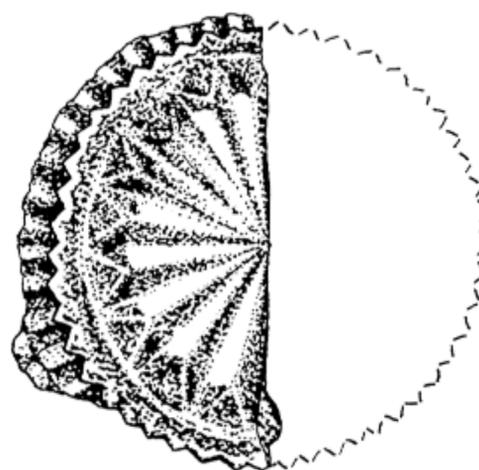
Figure 8
 Embossed bottle bodies.
 (A-F, PATENT MEDICINES, G-L BITTERS BOTTLES)



TUMBLER



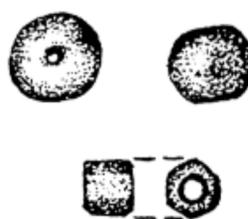
PRESSED GLASS CANDY DISH



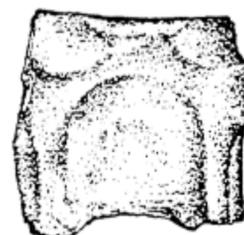
SALT SHAKER



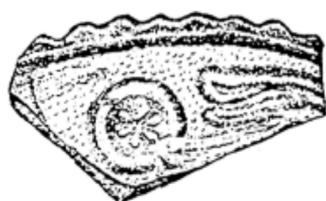
STOPPER



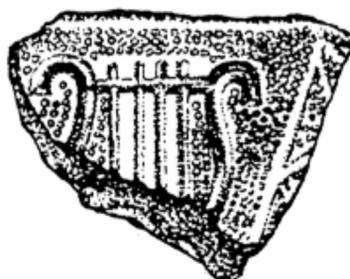
BEADS



TUMBLER



GLASS DISH



GLASS DISH

Figure 9
Miscellaneous glass objects.

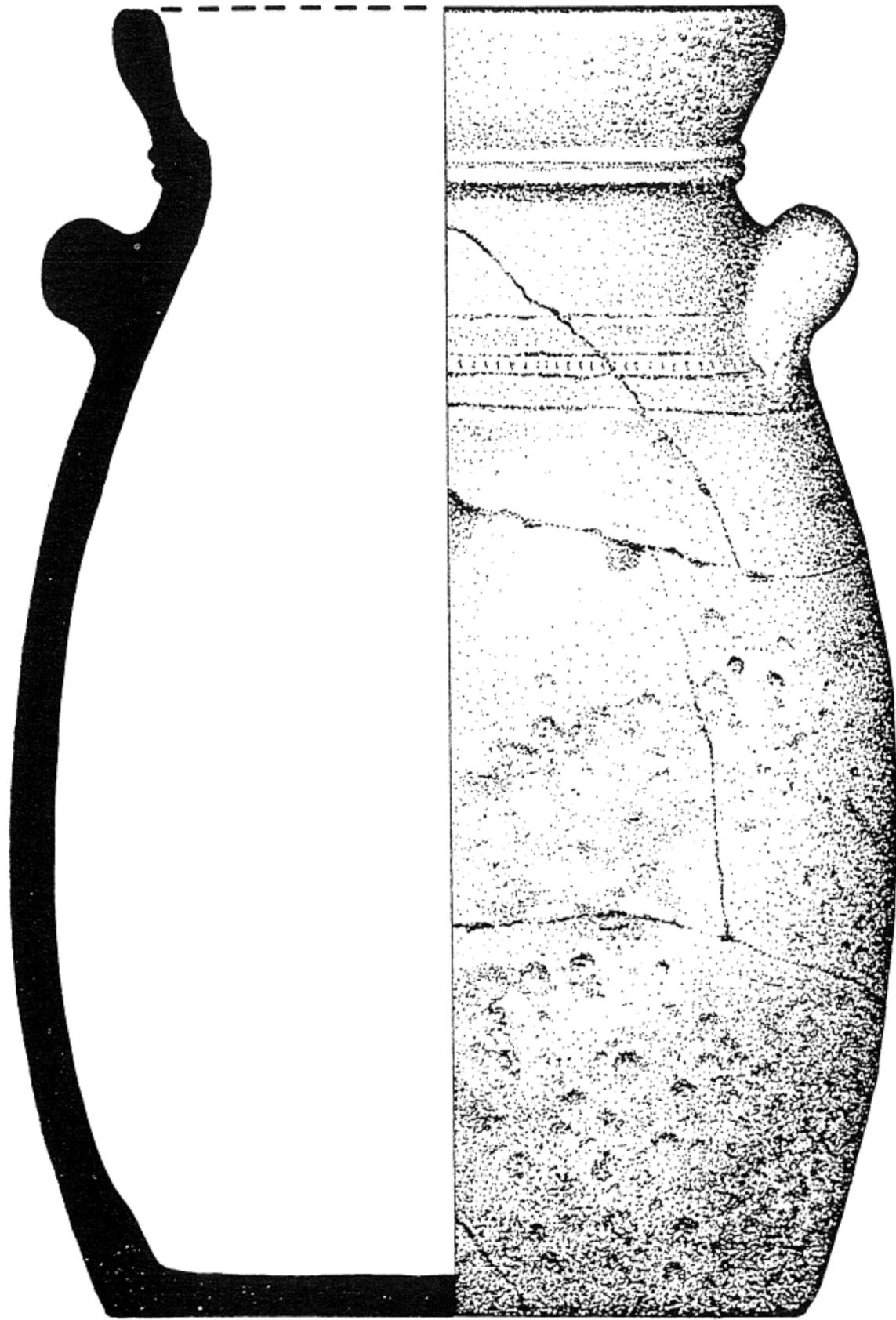


Figure 10
Earthenware butter churn.

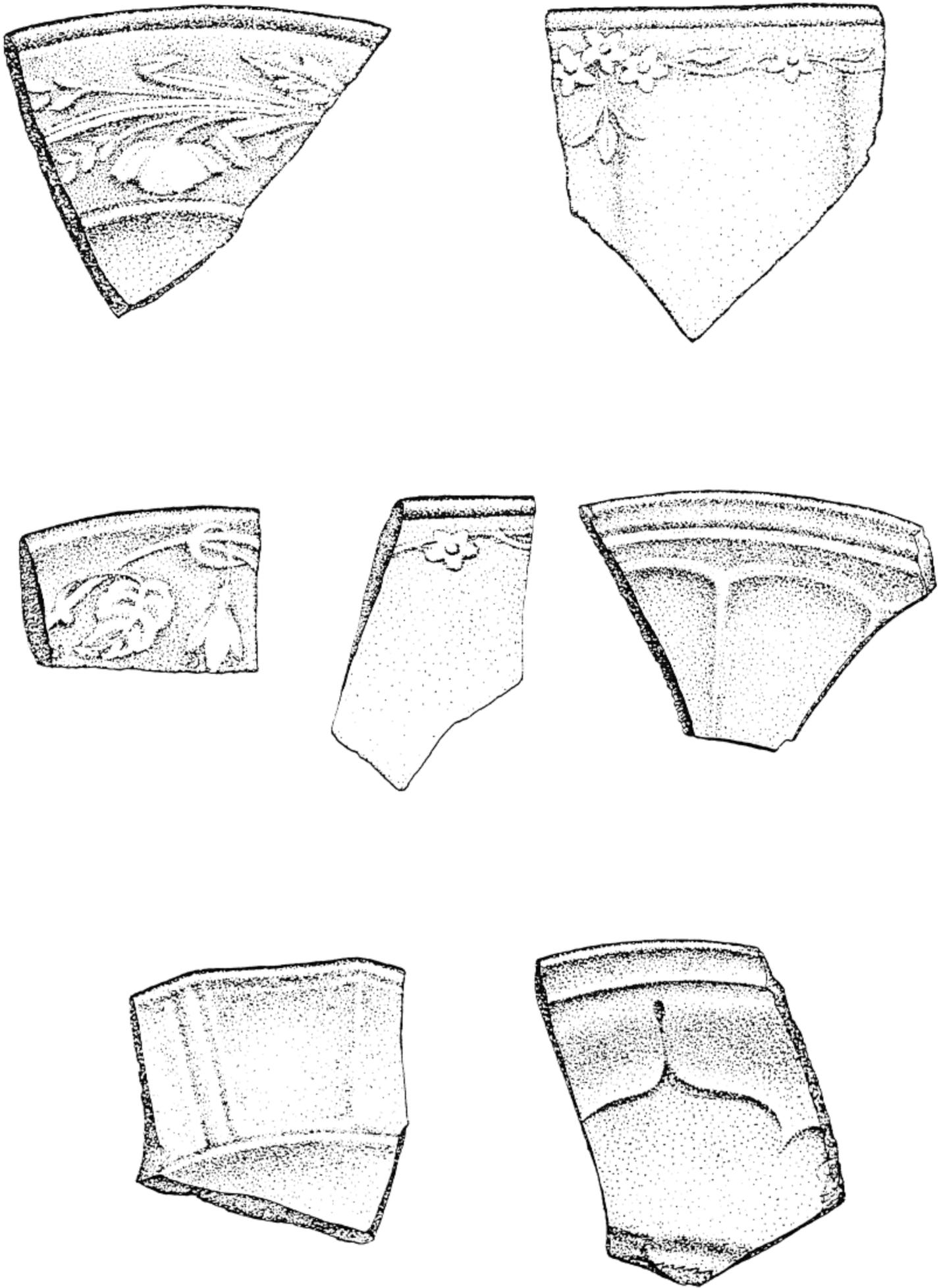


Figure 11
Whiteware plate sherds with relief designs.

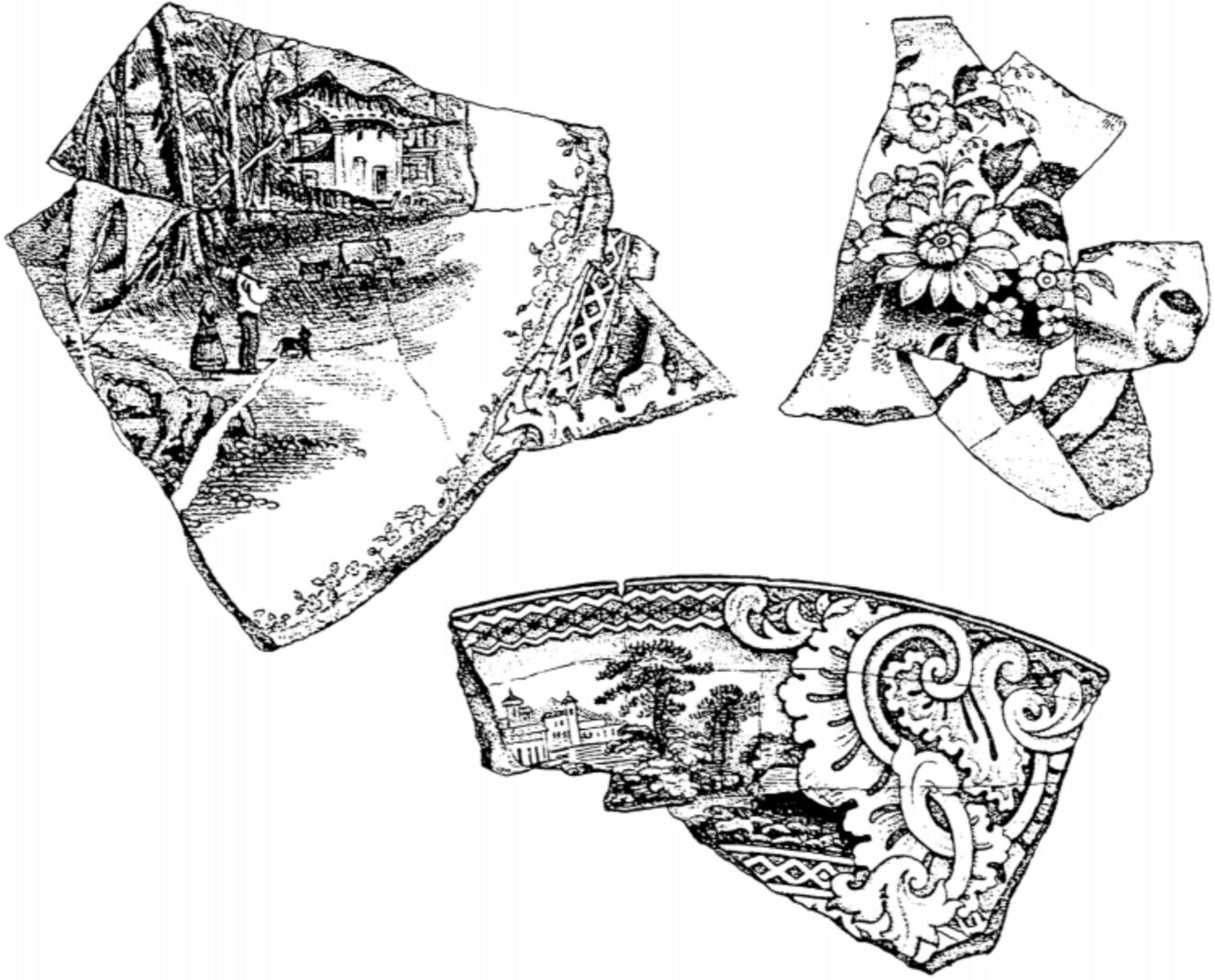


Figure 12
Transferprinted plate sherds.

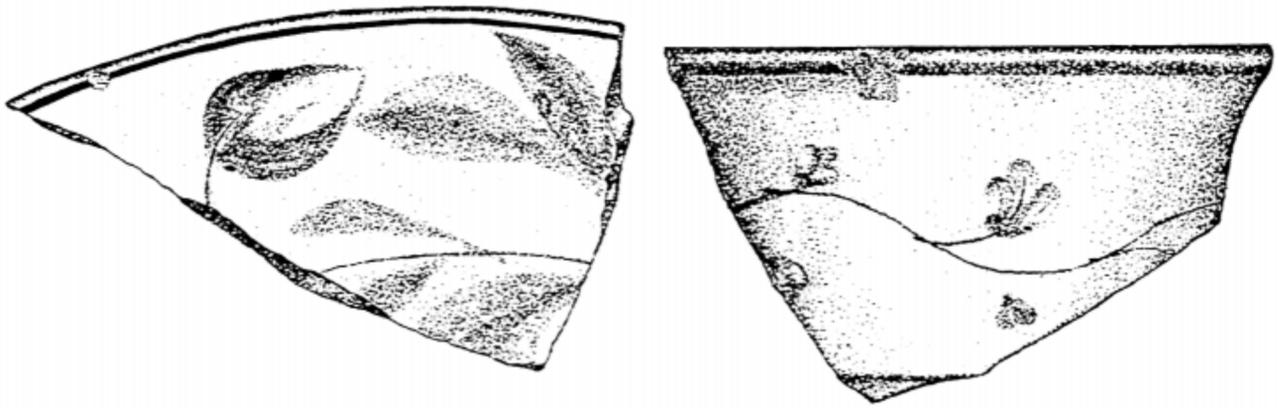
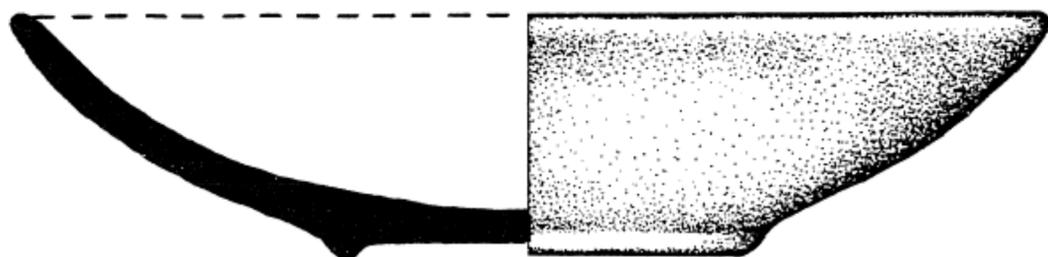
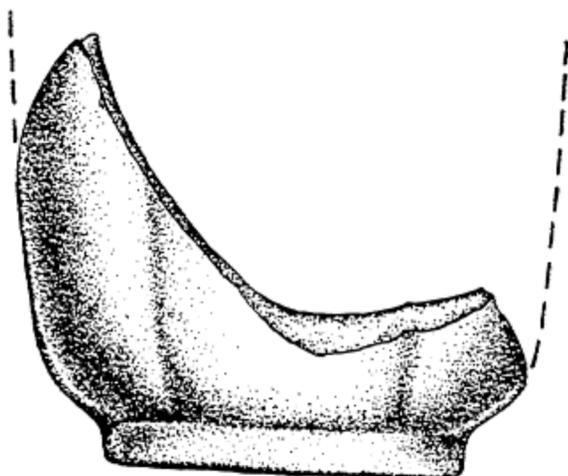


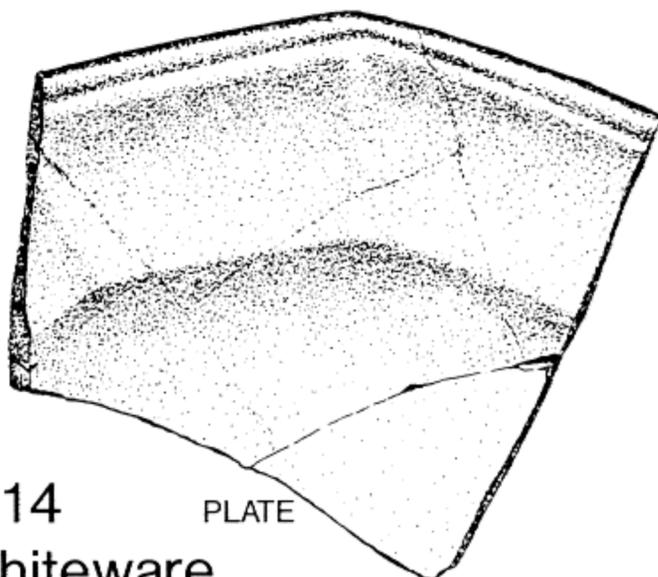
Figure 13
Hand-painted bowl sherds.



SAUCER



CUP



PLATE

Figure 14
Plain whiteware.

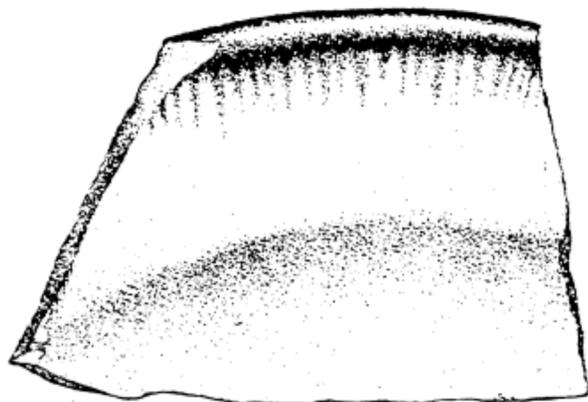


Figure 15
Featheredge plate sherd.



Figure 16
Hallmarks.

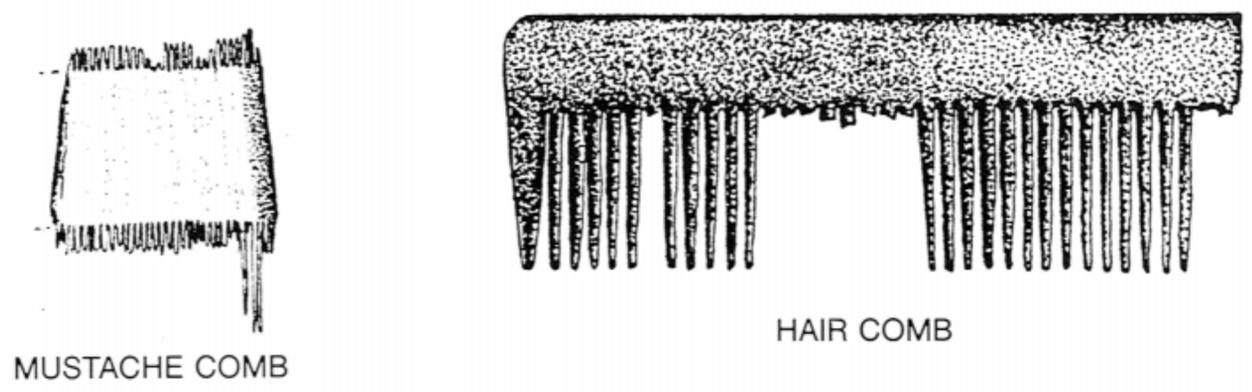
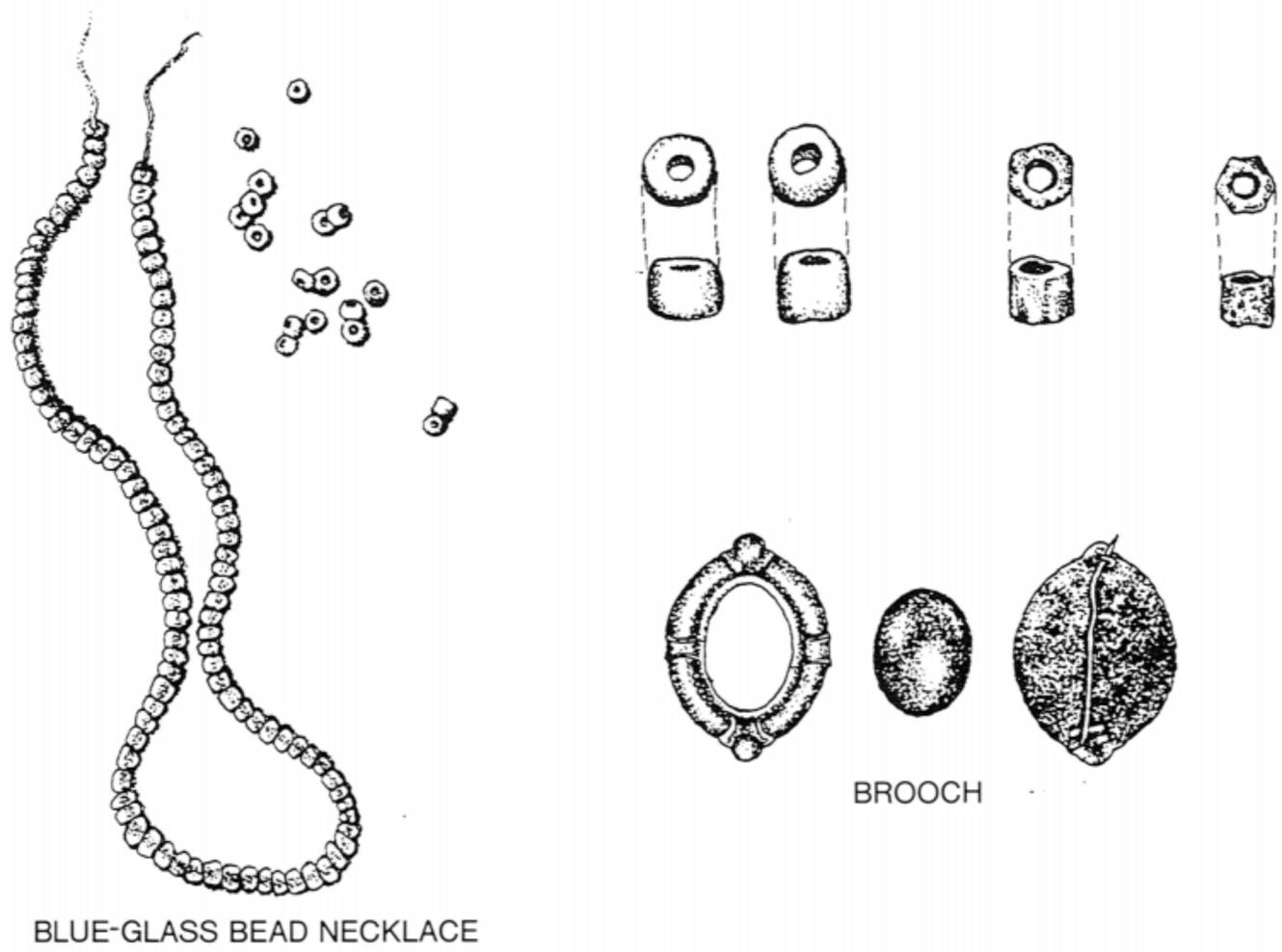
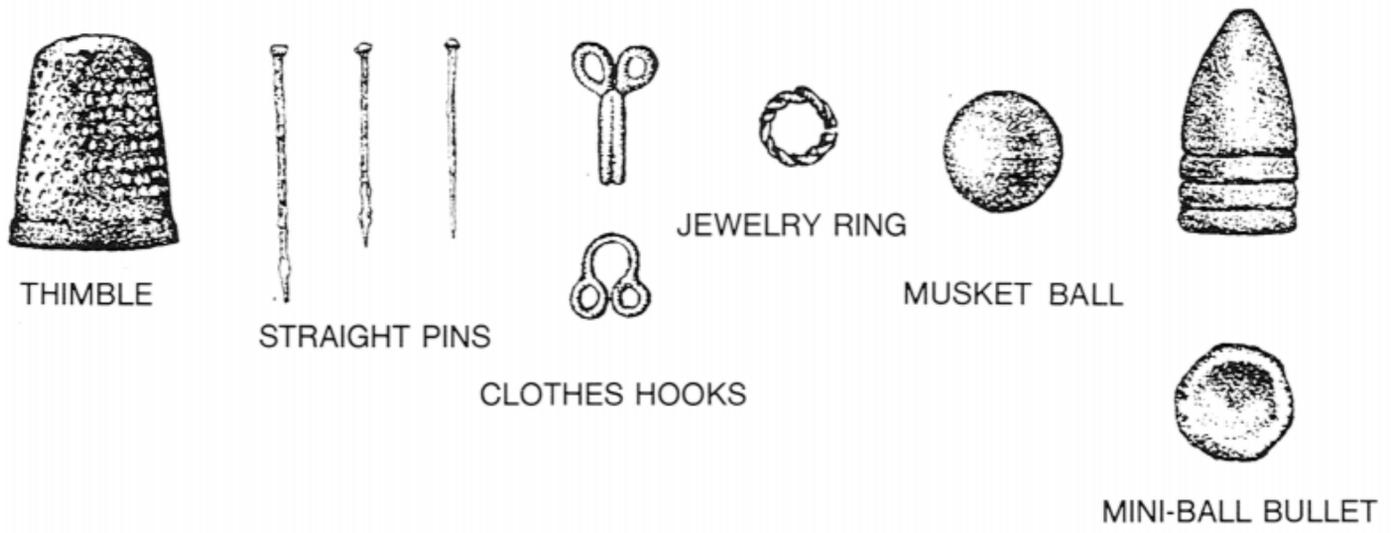
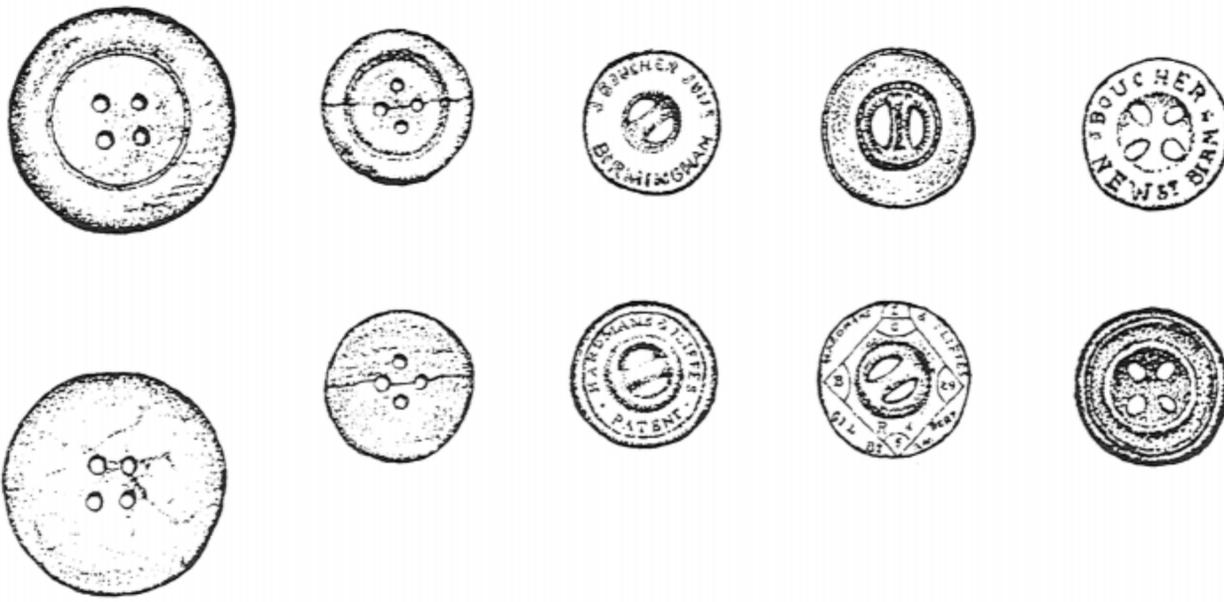


Figure 17
Miscellaneous artifacts.



BONE BUTTONS

METAL BUTTONS



CAMEO BUTTON



PANT BUTTON



MILITARY BUTTONS

Figure 18
Buttons.

Structure 3 was a dugout. The excavated dirt side walls of the dugout were 8 1/2 feet by 10 1/2 feet and 4 feet deep. The stratigraphy of the pit (from bottom to top) consisted of 1 foot of clay and charcoal with a considerable number of artifacts — shoe soles, glass, ceramics, and animal bones. The numerous artifacts in this level represent the occupation period. The next layer was 7 inches of ash and charcoal, with fewer of the type of artifacts found in the lower level and more of other types of artifacts, plus a large cedar log (possibly a roofing beam). This layer was a postoccupation level formed by the settlers dumping ash and charcoal, possibly from stoves, into the pit. The last or upper level is a clay fill washed in over the years and containing relatively no artifacts.

In the center of the east wall are steps for entrance into the dugout; they are 2 1/2 feet long, 1 1/2 feet wide, and 8 inches high. The front of each step was faced with a plank 1/2 inch wide. These boards were held in place by two wood stakes near the outer edges or one about 4 inches from each end. Three steps remained of an original four or possibly five steps. The east wall of the dugout was 9 feet from the outside of the west stone foundation of Structure 1.

Thousands of artifacts have been recovered from the house components excavated thus far at the townsite. All the objects are fragmented and include glass, ceramics, metal, buttons, leather, and a variety of miscellaneous objects.⁹

Most of the glass found was window or flat glass, ranging from a light to a dark aqua blue in color. The glass artifacts next in quantity were bottle fragments. No whole bottles were unearthed, although there was a wide variety of glass colors: clear, aqua blue, shades of olive green (including a very dark olive green known as black glass), cobalt blue, brown, and light green. The bottle fragments, such as finishes (a finish is a bottle top, including the pouring lip and threads — fig. 5), stoppers (fig. 6), bases (fig. 7), and embossed bodies (fig. 8) suggest that round, as well as rectangular, panel bottles were commonly used. Bottle bases included both those with and without pontil scars (a pontil scar is a jagged edge of glass made by attaching a glass rod to the bottom of a bottle in order to finish the top). Other glass fragments were originally derived from drinking tumblers and pressed glass objects (fig. 9).

The primary types of ceramics found at Lower Goshen were earthenware (coarse pottery with a red paste and crude glaze), whiteware (fine pottery with a white body and usually decorated with transferprints or with hand-painted or molded relief designs and a clear glaze), and porcelain (very fine, translucent ceramics, often imported from China or Japan). Earthenware (fig. 10) includes all vessels with natural clay-colored paste: redware,

buffware, and grayware. Almost all the earthenware was of the redware type with a great variety of glaze colors, such as yellow, orange, green, brown, and combinations of these colors. Many were mottled to form intricate designs. There were also salt glazes, lead glazes, and clear glazes. Earthenware vessels were most likely locally manufactured.

In the category of whiteware are the pieces with essentially white pastes, such as pearlware (fig. 11); transferware (fig. 12); hand-painted ware (fig. 13); sponge, banded, and plain whiteware (fig. 14); and featheredge types (fig. 15). At Component 18, where extensive excavation was conducted, nearly 87 percent of the sherds belonged to the whiteware type; within this type, 60 percent were pearlware.

Transferprinted sherds had patterns decorated in blue, red, green, and brown. Although not all patterns were recognizable, blue willow was by far the most common. Dark blue was the most common transfer color, followed closely by flown blue. Hand-painted sherds were usually decorated with large flowers, primarily in dark red or maroon and green. The sponge types were decorated in blue blotted on with a sponge-like object. The banded sherds had narrow lines of black and white on a wide blue band, usually of a pearlware vessel. All these ceramics were popular types used by Americans all over the country, mainly by middle-class citizens.

Porcelain was found during the surface survey in very limited quantities, less than 10 percent of the ceramics found. All the porcelain fragments are of the hard-paste type, and the majority are plain. Decorated sherds include green-painted or relief-molded types. Company hallmarks (fig. 16), when present, provide the most accurate means of dating ceramic types.

A wide variety of metal artifacts were recovered, including iron, copper, and lead (fig. 17). Iron objects included nails, bolts, rods, straps, wagon hubs, a file, and many other unidentifiable, badly oxidized pieces. Copper objects included more delicate items, such as thimbles, straight pins, clothing hooks, jewelry, coins, a purse frame, and several buttons. Lead objects were in the form of round musket balls and Minie balls (cone-shaped bullets).

Among miscellaneous items discovered were a wide range of button types (fig. 18): bone, shell, rubber, covered metal, calico glass, lead, metal with cameo, military, clear glass, white glass, solid-color glass, and wood. The metal and wood buttons were covered with cloth. Almost all the leather found was parts of shoes, primarily soles and heels, and cutting scraps. One complete shoe was also unearthed. Many sizes were represented, from children's to adults'. A brooch, a wood comb, black rubber combs, slate

pencils, and clay marbles were also found. Most beads were small, round, and dark blue glass.

An interesting pattern of artifacts and distribution is emerging. The general array and quantity of artifacts do not suggest a poor community but rather a community of middle-class Americans using objects fashionable to the entire country — from the East to the western frontier.

Excavation at Lower Goshen presents a unique opportunity to study a pioneer settlement that has not been disturbed since the day it was abandoned in 1868. Scientifically, the research goals for this project are to infer Mormon pioneer behavior from the distribution of material culture. Because accidental or intentional discard of any cultural object directly reflects human activity, the pattern of distribution presents clues about the cultural system that occupied the site. Patterns found in individual components may reflect patterns for the entire town and even other Mormon sites.

The distribution of the broad range of artifacts used by the Mormons who lived at Lower Goshen was carefully established during field excavations by horizontal and vertical stratigraphic techniques. The recovered specimens were then classified by their various physical attributes into types, varieties, and chronological context. Qualitative patterns relating to their function, origin, date of manufacture, and dispersion are interpreted for this site through analysis of house-to-house findings. In this way, patterns of room functions can be generated. For example, specific artifacts or groups of artifacts may have been used in the bedroom, others in the living room, kitchen, and so on. Room comparisons from house to house may produce intrasite and eventually intersite patterns.

Room comparisons at Lower Goshen disclose that almost all of the peach pits came from the main living area, either on the floor or outside the front door, where they may have been thrown out the door; but peach pits were not in the rooms interpreted as sleeping quarters. Bottle glass also came primarily from the main structures; window glass was concentrated around and in the main structures as well as around other rooms. Also, a high percentage of redware (utilitarian pottery) was distributed around the living area, with few sherds found in the adjoining rooms or structures. The initial distribution of these artifacts indicates that much of the food preparation, and possibly consumption, took place in the largest room at each component. This room always had a central fire hearth, such as illustrated in Component 18, Structure 1, Room 1.

By means of the intersite functional comparisons, sites can also be classified by whether they were used for domestic, commercial, military, political, religious, or other purposes. In time a

pattern reflecting pioneer Mormon cultural patterns could emerge. This pattern could then be compared with the American cultural pattern in which it participated where similarities and contrasts could be studied.

At present the key research problem is obtaining fundamental data through excavation and laboratory analysis. Detailed identification and study of the artifacts in general use as well as those uniquely Mormon will likely provide precise information of everyday Mormon pioneer life not found in historical documents.

After the quantity and types of technological items have been determined, library research will add data helpful in identifying and dating each individual item or group of artifacts. The history of technology in Utah and the United States during the 1850s and 1860s should shed considerable light on the manufactured objects excavated. Historical documents will aid in separating items made locally from those imported. The data obtained by the artifact analysis and library research will ultimately provide the basis for the interpretation of economic and social questions — the basic goal of the project.

Why archaeology in Lower Goshen? The answer is that the objects excavated — the facts from the ground — make a significant contribution to our knowledge and appreciation of a people who lived on the American frontier one hundred and twenty years ago and that the events that occurred there play a small but integral part in American history, particularly in the westward movement of our country.

NOTES

¹See Dale L. Berge, "Lower Goshen: The Unearthing of a Mormon Community in Central Utah," in *Forgotten Places and Things: Archaeological Perspectives on American History*, ed. and comp. Albert E. Ward (Albuquerque, N.Mex.: Center for Anthropological Studies, 1983), 173–84; Louie S. Jensen, *Goshen Centennial History 1857–1957* (Goshen, Utah: privately published, 1957), 3–19.

²Joseph A. Nelson, "A Short Life Sketch of Lars Nelsen and Martha Bandtsen," 4, ms., copy on file at the Museum of Peoples and Cultures, Brigham Young University, Provo, Utah.

³Emma H. Huff, comp., *Memories that Live* (Springville, Utah: Daughters of the Utah Pioneers, 1947), 485.

⁴Harold J. Bissell, "Lake Bonneville: Geology of Southern Utah Valley, Utah," *Geological Survey Professional Paper 257-B* (Washington, D.C.: U.S. Government Printing Office), 110.

⁵See Jensen, *Goshen Centennial History*, 18; Huff, *Memories that Live*, 485.

⁶Raymond Duane Steele, *Goshen Valley History* (Goshen, Utah: privately published, 1960), 13–16.

⁷Brigham Young to Franklin D. Richards, 18 October 1867, Brigham Young Collection, Library-Archives, Historical Department, The Church of Jesus Christ of Latter-day Saints.

⁸Joseph Smith, Jr., *History of The Church of Jesus Christ of Latter-day Saints*, ed. B. H. Roberts, 7 vols., 2d ed. rev. (reprint; Salt Lake City: Deseret Book Co., 1976), 1:357–59.

⁹For a detailed description of other Utah artifacts see Dale L. Berge, *1980 Simpson Springs Station: Historical Archaeology in Western Utah*, Cultural Resource Series Monographs, no. 6 (Salt Lake City: Bureau of Land Management, 1980).