

The Elizabeth Powell Site (41FB269)

Fort Bend County, Texas



**Houston Archeological Society
Report No. 25, Part 2
December, 2007**



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Part 2 Authors:
Elizabeth K. Aucoin
Richard L. Gregg
Melissa May
Johnney Pollan
Sandra D. Pollan
Robert T. Shelby

Editors:
Elizabeth K. Aucoin
Linda L. Swift



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Cover Illustration: Obverse and reverse of 1808 ½ Real colonial Mexican coin. Photo by Richard L. Gregg.

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This publication is Part 2 in a 3-part report on excavations at the Elizabeth Powell Site (41FB269). Additional copies of Parts 1 and 2 can be obtained by contacting the Houston Archeological Society, PO Box 6751, Houston, TX 77265-6751. Cost is \$7.00 (\$5.00 plus \$2.00 postage and handling).

Dedication

This document, HAS Report No. 25, including all its parts, is dedicated to the memory of those members of the Houston Archeological Society who are no longer with us who contributed their time, talent and resources, in varying degrees, to help make the Elizabeth Powell project possible. These individuals include Frank Brezik Jr., Richey Ebersole, Bill McClure, Don McReynolds, Mary K Merriman, Bernard Naman, David Pettus, Dudgeon Walker, and, sadly, our most recent loss, Father Edward Bader, CSB.

Acknowledgements

HAS acknowledges Lise Darst, landowner extraordinaire, who allowed access to the site over a 6-year period, as well as Joe Hudgins, who maintained landowner communication and arranged for access when needed, and last but certainly not least, Sheldon Kindall, who served as field site supervisor.

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Chapter 1

Historic Beads from Mrs. Powell's Place

By Melissa May

Manufacturing Techniques

Four beads were found during excavations at the historic Powell site, 41FB269, in Fort Bend County, Texas. Prior to discussing these artifacts, it would be useful to review their methods of manufacture. A report by Kidd and Kidd (1983) is utilized here for identification of the bead types and a synopsis of bead manufacturing.

Although there are several ways to manufacture glass beads, "drawn" and "wound" are the two types used to create the four beads found at the site. If a bead is "drawn," a hollow metal tube is dipped into a vat of molten glass, and a glob (called a "gather") is extracted adhering to the tube tip. The primary vat can contain either clear or colored glass. For a "simple" style of bead, a bubble of air is blown into the primary gather, another metal rod affixed to the opposite end of the gather and the rods moved apart, stretching the glass out to form a very thin elongated hollow glass rod (called a "cane"). When cooled, the cane is chopped into like-sized beads, which are generally then heat-treated and/or tumbled to yield smooth edges.

If the primary gather is a color but is then dipped into a secondary vat of clear glass, it produces a clear casing on the evolving bead. In most classifications, this process still keeps the bead in the "simple" mode of manufacture. However, if the secondary or subsequent vats are of different colors, if the cane is twisted while being drawn, or if paddles are used to facet the cane, then the bead moves into the "complex" category of manufacture. When a bead is drawn one can often spot elongated air bubbles within the matrix of the glass, which helps to identify this method of manufacture. If flat implements (such as paddles) are used to create facets on the gather prior to drawing, when elongated these facets will appear as planed surfaces on the resulting beads. Facets also can be created by grinding planes into the bead, which leaves relict scarified marks on these surfaces.

If a bead is of wound manufacture, molten glass is drizzled around a spinning wire (called a "mandrel"), creating a series of connected beads.

When they are removed from the wire and broken apart, a little tail of glass remains at the end(s) where each bead was connected to the next. Even after heat treating, the vestigial remains of the tailings can help pin down the method of manufacture. Additionally, the air bubbles within the matrix of a wound bead will be helically oriented. The diameter of the cane determines the diameter of the bead. The thinnest diameter and shortest length beads are termed "seed" beads, while those with a longer length are "tubular" beads.

"Seed" bead refers specifically to the size. Descriptors for bead sizes, in general, range from very small, small, medium, medium large, large, and very large. There is no consensus on the exact threshold for the transition from seed to the next level, but those with a greater length/diameter graduate into the "pony," or medium-sized, category.

"Tubular" refers strictly to the shape. Shapes can be tubular, spheroid, barrel, ovoid, hexagonal, circular, round, faceted, thin disc, etc. Some of these shape descriptors, such as "circular" and "round," are synonymous and are used interchangeably in published reports.

Analysis of Beads Excavated at Site

The beads from 41FB269 evidence "corrosion", which is a compendium of corrosion, erosion and

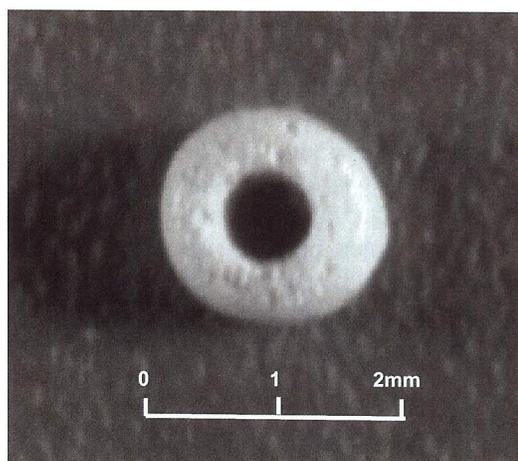


Photo by Richard L. Gregg

Figure 1.1. Bead A, type Ila 12

abrasion. These beads were exposed to all of the above, over the 100+ years since their deposition. Under 15X magnification utilizing a binocular microscope, a few beads appear to have a veneer that flecks off when scraped. This veneer could be the patina that evolves on glass that has been buried in the soil, or a secondary clear glass casing. Seeking further expertise, the beads were submitted to Karlis Karlins of Parks Canada and a regular contributor to the Society of Bead Researchers, for confirmation of, or corrections to, the initial analysis.

Pit AA, Level 3, yielded an opaque, drawn, heat-rounded, milk glass-colored (oyster white and cased with a secondary clear glass per Karlins [personal communication 2006]), simple seed bead. The bead is 2.0 mm in diameter, 1.0 mm in length and has an aperture diameter of 0.6 mm. It conforms to Kidds' type Ila 12 (Bead A, Figure 1.1).

Pit AH, Level 4, yielded an opaque, multifaceted, tubular, dark root beer-to-black-colored bead of complex manufacture (Bead B, Figure 1.2). It is 6.6 mm long and 6.5 mm in diameter

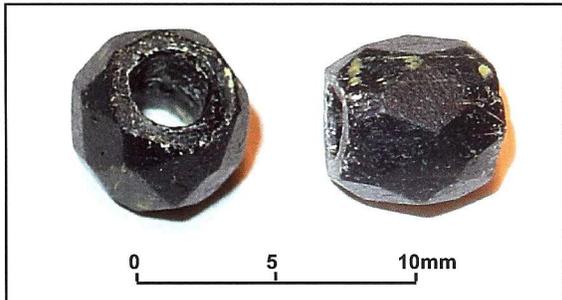


Photo by Linda Swift

Figure 1.2 Bead B, type If1 series

with an aperture diameter of 3 mm. The facets are diamond shaped, six girding the middle, six flanking them above and below with the edges beveled by partial diamonds (or snub-nosed triangles). The facets are not uniformly executed. It is a complex bead due to the faceting of the surface. The primary gather was faceted (by paddle or some other flattening implement) prior to being drawn, which yielded the planed surfaces when elongated. At this point, the bead only had the six central planes girding it.

When the secondary flanking diamond shapes were ground, they defined the edges of the central diamonds. The tertiary/last grinding refined the edges of the flanking diamonds and yielded the snub-nosed

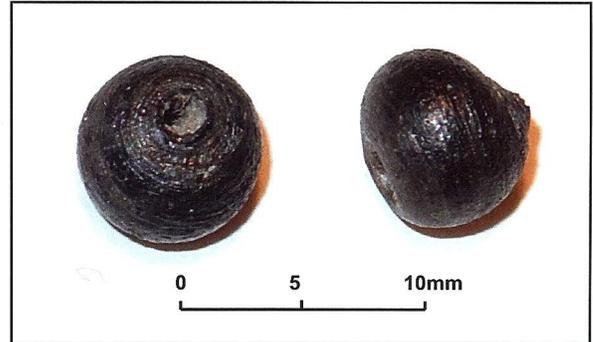


Photo by Linda Swift

Figure 1.3. Bead C, type W1b series

triangular bevels at the edges of the bead. Per Karlins, this bead is described as a black "cornerless-hexagonal, consisting of a hexagonal tube segment with triangular to pentagonal facets ground on the corners." He classifies it as Kidds' type If1.

Pit M1, Level 1, yielded an opaque, spheroid, root beer-to-black-colored, wound bead (Bead C, Figure 1.3). The method of manufacture is confirmed by the tailings left and the helical shape of the air bubbles within the matrix. The bead is 6.25 mm long,



Photo by Linda Swift

Figure 1.4. Bead D, type W1c series

7.7 mm in diameter with an aperture diameter of 1.2 mm. It conforms to Kidds' type W1b series, but since the color is not charted yet, the color designation should be higher than #16, the last one in the current chart.*

Pit M3, Level 4, yielded an opaque, elongated, ovoid-shaped, root beer-to-black-colored bead with a dull black-to-iridescent patina (Bead D, Figure 1.4). Per Karklins, it is olive-pit shaped and wound. It conforms to Kidds' type W1c* series, also having a color that is not yet charted. It is 6.4 mm long and 6.8 mm

in diameter with an aperture diameter of 2.6 mm. The ends are collapsed, probably from heat treating.

Bead B, the bead from Pit AH, Level 4, is the most diagnostic relative to time of occupation. Karlis Karklins (personal communication 2006) stated that "the If1 bead provides the tightest dating of the four. It is a form that appears on sites dating from 1680 to 1910, but the period of optimal use is from 1805 to 1860, with a mean date of 1830. This is based on data from 36 archaeological sites in North America." This dovetails nicely with the timeframe during which the Powell site was occupied.

- * Many additional bead types have been documented beyond those within the Kidds' original typology in the 1983 publication. Until such time as an update is officially published, subsequent types cannot be definitively numbered.

References Cited

Karklins, Karlis

2006 Karlis Karklins, OSC, Parks Canada
Personal Communication

Kidd, Kenneth E. and Martha Ann Kidd

1983 *A Classification System for Glass Beads for the use of Field Archaeologists*. Appendix to Proceedings of the 1982 Glass Trade Bead Conference, Research Records #16, Rochester Museum and Science Center, Rochester, New York

Chapter 2

Buttons Recovered at the Elizabeth Powell Site

By Sandra D. Pollan & Johnney Pollan

Photography by Johnney Pollan

This paper describes the buttons excavated from the Elizabeth Powell Site (41FB269) by the Houston Archeological Society between January 1999 and October 2000 (no buttons were found during the 2004-2005 excavations). Fifty-eight buttons, 40 complete and 18 partial, were studied. The buttons were made from bone, ceramic, glass, metal, shell and rubber. Individual buttons are characterized in the following tables and figures. For the most part the buttons were worn on ordinary clothes and were deposited on the site through normal activities.

A button is a button, you say? Hardly. By definition a button (in clothing and fashion design) is a small disc-or knob-shaped, typically round, object usually attached to an article of clothing in order to secure an opening, or for ornamentation. Functional buttons work by slipping the button through a fabric or thread loop, or by sliding the button through a slit called a buttonhole (Wikipedia 2007).

Historically, buttons have been created from both natural and synthetic materials. Organic materials such as antler, bone, horn, ivory, shell, vegetable ivory, wood, stone, and rubber preceded the development of synthetics such as metal, glass, ceramic, celluloid, Lucite, Bakelite, and modern plastics (Hughes & Lester 1981:5). Buttons have been attached to their garments through a shank (a small metal loop) or are sew-through buttons that have two or four holes drilled through to allow for the attachment of the button with thread. Buttons are commonly measured in lignes (lines = L) (Wikipedia 2007). Forty lines = 1 inch diameter; $32L = \frac{3}{4}$ inch, $20 L = \frac{1}{2}$ inch, and $12 L = \frac{1}{4}$ inch. Historically, shirt and dress buttons are 10-20 lines; and vest, coat, and jacket buttons are 24-36 lines (Earles et al 1996:249).

No one can say with certainty when the first button was created, but archeological evidence supports up to 5000 years of button usage. Worn ornamentally for centuries, buttons did not become fasteners until around the 13th century. Primitive man used thorn and sinew to secure his apparel, advancing to bone pins and then to metal pins. Egyptians used cloth ties and brooches or buckles to secure their flowing robes. The Greeks and Romans may actually have worn buttons that fastened. Returning Crusaders are thought to have introduced

the buttonhole into Europe. Clothing began to be more form-fitting in the 13th century, and fabrics were becoming more delicate, needing gentler closures; thus the advent of buttons as fasteners. Buttons were plentiful enough as fasteners in the 15th century to establish a tradition that endures to this day. The practice of men buttoning right to left and women left to right is believed to have begun during this period (Kiplinger 2002). Men tended to dress themselves and as most were right-handed, it was faster to button right to left. Women who could afford buttons, on the other hand, were “dressed” by their maids, and as most of the maids were right-handed, it was more expedient to reverse the garment overlap. Tailors obliged; custom established.

Predominantly used on men’s clothing – women were still laced into most of their fashions – buttons became a craze and a status symbol. Men of all ages vied to have the best, most extravagant, most

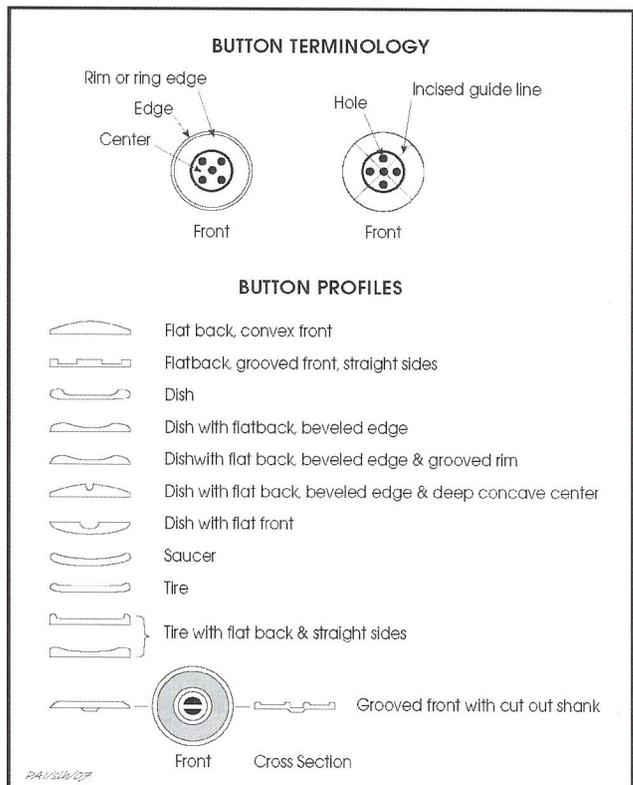


Figure 2.1. Button terminology and profiles, © Prewitt and Associates Inc. Reproduced here with permission. Originally printed in Earles et al 1996, *Testing and Data Recovery at the Townsite of Old Velasco*. (41BO125).

intricate, and most exotic buttons. Regency “dandies” sported “buttons as large as dinner plates on their jackets and waistcoats” (White 1997). Although women’s clothing sported decorative buttons during the 18th century, men’s fashions monopolized the button supplies through the mid 19th century when mass production became possible, thus increasing availability and reducing prices. Out of necessity, buttons became functional as well as decorative. Still, buttons were expensive enough that they were salvaged from old garments to use on new items of clothing; hence Grandmother’s button box (White 1997; Here 2003).

Fifty-eight buttons were recovered at the Powell site, of which 40 are complete and 18 are fragments. Of the complete buttons, four are in pieces or are slightly damaged, and five of the fragmentary buttons are nearly complete. They sort into six broad types, i.e., bone, ceramic, glass, metal, pearl/shell, and rubber and reflect various body shapes, constructions, and compositions. In addition, four metal objects collected during the excavations turned out to be non-button items.

Button shapes are shown in Figure 2.1, reproduced here with permission from Prewitt & Associates, Inc., Austin, Texas. Our measurements are

BUTTON STANDARDIZATION		
Standard Conversions		
40 Lignes	=	1 inch (25.4 mm)
32 Lignes	=	¾ inch (19.05 mm)
20 Lignes	=	½ inch (12.7 mm)
12 Lignes	=	¼ inch (6.35 mm)
Applications		
Shirts	}	10 – 20 Lignes
Dress		
Vest	}	24 – 36 Lignes
Jacket		
Coat		

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Figure 2.2. Button diameter conversion standards and applications.

expressed in millimeters, but buttons are universally sized in lignes (lines) by their manufacturers. Figure 2.2 illustrates both the metric measurements and their line conversions with historical information regarding which sizes appeared on which garments.

Bone

Bone buttons are manufactured in the same way, whether by an individual or mass produced by a commercial manufacturer. When nothing else was available, either for a rural family who seldom saw a traveling peddler or for a hard-pressed soldier trying to keep his clothes from falling off, a leg bone, a carpenter’s brace and bit, and a little elbow grease could solve the problem. Readily available and a by-product of butchering, bone is as near as one’s dinner plate. Ideally, the long bones of cattle would be boiled until soft, then sawn lengthwise and flattened into a slab. The spongy material adjacent to the marrow would be scraped out, as would the marrow, leaving the more compact outer bone that most resembles ivory. A lathe was then used to cut the blanks, and the prick (the part that held the blank in place in the lathe) would create a simple ring design in the surface, imparting minimal decoration. The blank, possibly sporting a central scar (diemark) from the prick, would then be drilled with one, two, four, or five holes. One-hole blanks could be finished in one of several ways: with a nailhead or pin shank or a metal loop shank; covered with fabric or employed as support for needle-woven fabric buttons or stamped metal caps; or drilled with more holes for sewing to fabric. Although rarely decorated, some examples exist of detailed carving and painted and dyed surfaces (Hughes & Lester 1981:8). For the most part, due to their plainness these utilitarian buttons are used on undergarments (Pool 1987:283).

There are 11 complete bone buttons and 7 broken buttons from Mrs. Powell’s. One of the complete buttons is in two pieces, and two of the fragmentary buttons are nearly complete. All are of the sew-through style that would be sewn flat against the garment or with a thread shank created by the sewer to allow for thicker fabric. The 18 bone buttons consist of nine four-hole, six five-hole, a single one-hole (blank?), and two buttons with indeterminate indications of attachment. The five-hole buttons date from the 1750-1830 period. (Earles et al 1996:246).



Figure 2.3. Bone buttons. Note the only one-hole blank, top row.



Figure 2.4. China buttons. All but two are sew-through style with 2, 3, or 4 holes. The two exceptions both had metal shanks.

In some cases it is hard to tell if the concentric grooves on the fronts of some of the buttons have been put there intentionally as decoration or if they are merely marks left by tools during the manufacturing process. If, as with ceramics, their shapes are considered their primary decoration and identifiers, this assemblage of bone buttons evidences no secondary decorations such as carving, painting, or dyeing. Four of them exhibit saw marks on their backs, and five exhibit various die marks front and center. Naturally, five-hole buttons will have no die marks. Button shapes recovered in the bone category include dish (n = 12), tire (n = 5), and flat (n = 1). For specific shape descriptions, see Figure 2.1. The single one-hole specimen is the flat shape, a simple disc. It may indeed be a blank (the holes to be drilled at a later date), or it may have been intended as shape support in a fabric-covered button or two-piece metal button.

With few exceptions, the bone buttons are of a size and plainness to have been used predominantly on undergarments, but the frugal nature of the early settlers and the relative simplicity of manufacture, as well as ready availability of the materials, does not preclude their having been used on everyday pants and shirts if a button was needed or garments were made at home. One exception: Catalog #2073 measures 26 lines and is made from a very fine-grained dense bone with a lovely ivory color. It possibly served as a jacket or coat button.



Figure 2.5. Porcelain clue. The back of this plain white china shows the dimpling that is a characteristic of porcelain buttons.

China

By the 1830s the Industrial Revolution, a time of intense change, was well under way, especially for women. They were now working outside the home and dressing themselves rather than depending on their maidservants. That meant their clothing had to be easier to put on and remove with accessible buttons in the front, and preferably those buttons had to complement the dress (Kohrs 1998).



Figure 2.6. Decorated China buttons: a. grey-white dome-shaped pin-shanked bisque shoe or smock button; b. brown dome-shaped, metal loop on plate shank, gaiter button; c. white hobnail vest, jacket, or coat button; d. white piecrust button; e. diminutive (less than 3/8") white 3-hole baby or child's button with red stripe around edge.

Seeing a need for inexpensive buttons for women's clothing, Richard Prosser devised a way to mold dry clay, then fire it to make sturdy ceramic buttons that could be decorated in a multitude of different ways. He patented this method in England in 1840, and in effect invented porcelain buttons, known as chinas. His brother Thomas, contending that it was actually his design, patented the process in America in 1841. By 1848, Charles Cartledge of Long Island was manufacturing plain white china buttons as well as other styles, and by the 1850s china buttons were being made by several Americans (Hughes & Lester 1981:31). Up to the Civil War, England had been the source of most of the china buttons sold in the United States. After that point the majority of china buttons was imported from France. Very, very few are marked though, so point of origin is nearly impossible to determine. The utilitarian plain white china buttons were most often used on underwear, inexpensive dresses, and men's shirts (Pool 1987:281).

Fourteen white china buttons, one grey-white and one ivory-colored, and one milky brown button surfaced in the excavations at Elizabeth Powell's place. Eleven are complete, one being in two pieces, and five are fragmentary, one nearly complete. Most (10) are four-hole sew-through, with one two-hole, and one three-hole. The remaining two were metal shank style chinas.

All ceramic buttons evidenced the typical pitting or dimples on the reverse that are diagnostic of porcelain buttons (see Figure 2.6). With but two exceptions, the two dome-shaped gaiter/shoe buttons, all the chinas were made in the dish shape with some profile variations (see Figure 2.4). No maker's marks were present.

Utilitarian white chinas dominate this assemblage, but five of the porcelain buttons were further enhanced with decoration(s) (see Figure 2.5). The diminutive three-hole button (10 lines), probably a baby's or child's button, showed vestiges of a painted red stripe around its edge. Two white



Figure 2.8. China gaiter button. Three views of button **b** of Figure 2.4 illustrate the unique body color and distinctive metal loop shank on the shank plate imbedded in the body of this porcelain button.

chinas were decoratively molded, one with a piecrust border, and one with a hobnail border causing the buttons to resemble milk glass.

The two dome-shaped examples, either gaiter or shoe buttons, were of different body colors. Although appearing in many decorative styles and colors, china gaiter buttons are easily distinguished from the other china buttons by their metal loop shank set into a metal plate (Stewart 2002). The milky brown gaiter button had an intact brass loop shank on a shank plate cemented into the backside of the button. The grey-white unglazed shoe button (Kohrs 1998) had concentric grooves around the circumference of the dome's vertical sides but no further embellishment, and its pin shank is missing.

Judging by their line diameters, the majority of the china buttons appeared on shirts and dresses, and three may have adorned jackets or coats. None of the china buttons appear, to our novice eyes, to date earlier than the 1840 Prosser patent date (Hughes & Lester 1981:31), nor can we establish an accurate *terminus post quem* past which they could not have been manufactured. It is fairly safe, though, to

assume that the advent of plastics in the late 19th century, which really boomed in the late 1920s (Hughes & Lester 1981:66), put an end to mass production of porcelain buttons for everyday use.

Glass

It is difficult to determine the age of a glass button. Manufacturing processes have remained basically the same since the 15th century. Patination may indicate age, but luster finishes were applied to many buttons during manufacture that could be confused with a patina of age if the observer is not alert. Glass buttons are handblown or moldblown; metal shanked, self-shanked, or sew-through; and come in all shapes and sizes. A myriad of decorative techniques lends endless variety to the finished products, and that combined with the style of attachment probably is the most helpful in attributing a button's general age.

A very small collection of glass buttons, totaling four, were recovered during the excavations (Figure 2.9). All were press molded and all are complete, although one is slightly damaged. Three are patinated opaque black glass, and one is commonly called clambroth glass for its semi-translucent grayish white appearance (Hughes & Lester 1981:107). No maker marks appear. Two are sew-through style with two holes each, and two were fitted with metal shanks, one of which is missing. All their shapes are different and include disc, flat back with convex front, pudding, and body mound.

Where the glass buttons differ from the utilitarian bone and china buttons is in their decoration. In fact, all but one are decorated. The single undecorated black button is a simple disc with slightly beveled edge and has a brass loop "push-in" metal loop shank inserted into the back. This style shank dates to 1840 – 1870s (Hughes & Lester 1981:109). Most black press-molded glass buttons date to the Victorian period. When her husband, Prince Albert, died in 1861, Queen Victoria went into mourning from which she never emerged, and in so doing established a fashion craze. Her expensive jet buttons and jewelry were copied throughout England in the less expensive glass that was available to virtually everyone. These accessories were so popular and affordable that millions were manufactured between 1870 and 1914 (Hughes & Lester 1981:6).

41FB269 BUTTONS

TYPE	CAT #	ITEM	UNIT	LEVEL	DEPTH	Profile	Back Marks	Dia. mm	Dia. lignes	
Bone	118	1/2	A	3	10>15 cm	Tire with beveled edge		24.9	39	
	223	1/1	AF	3	10>15 cm	Dish with flat front		16.1	25	
	560	1/1	D	2	5>10 cm	tire		12.3	19	
	776	1/1	Y	4	15>20 cm	Dish with flat back		15.3	24	
	959	1/1	BH	7	30>35 cm	Dish		13.8	22	
	1366	1/1	T	5	20>25 cm	Dish		16.6	26	
	1383	1/1	T	10	45>50 cm	Dish with flat back & beveled edge		14.2	22	
	1645	1/1	Z	6	25>30 cm	Disc		16.6	26	
	1657	1/1	AK	4	15>20 cm	Dish with flat front		14.5	23	
	1728	1/3	BC	2	5>10 cm	Dish with flat front		17.0	27	
	1728	3/3	BC	2	5>10 cm	Tire		30.0	47	
	1937	1/1	CA	7	30>35 cm	Dish with flat front		14.1	22	
	1953	1/1	CA	3	10>15 cm	Dish with flat back		14.5	23	
	2073	1/1	M6	2	5>10 cm	Dish with flat front		16.8	26	
	2206	1/2	M5	3	10>15 cm	Dish with flat back & beveled edge		16.6	26	
	2206	2/2	M5	3	10>15 cm	Tire with grooved rim		17.0	27	
	2225	1/1	M5	6	25>30 cm	Tire with flat back		16.3	26	
	2569	1/1	AY	1	0>5 cm	Dish with flat front		16.8	26	
	China	185	1/1	BA	2	5>10 cm	Dish		10.1	16
		206	1/1	B	1	0>5 cm	Dish		12.3	19
247		1/1	F	5	20>25 cm	Dish		6.5	10	
313		1/2	E	1	0>5 cm	Dome		11.3	18	
324		1/1	E	4	15>20 cm	Dish		10.3	16	
577		1/1	M5	2	5>10 cm	Dish		19.0	30	
592		1/1	N	1	0>5 cm	Dish		12.9	20	
601		1/2	O	2	5>10 cm	Dish		12.5	20	
601		2/2	O	2	5>10 cm	Dish		10.4	16	
810		1/1	V	5	20>25 cm	Dish		10.8	17	
827		1/1	V	3	10>15 cm	Dish		15.5	0	
1037		2/2	BH	5	10>25 cm	Dome		11.0	17	
1945		1/1	CA	8	35>40 cm	Dish		10.9	17	
1981		2/2	Surface & Test Trench			dish		17.0	27	
2483		1/1	AE	4	15>20 cm	Dish		10.0	16	
2714		1/1	AZ	1	0>5 cm	Dish		12.3	19	
428		1/1	AG	3	10>15 cm	flat back, convex front, oval-eye ctr		11.0	17	

Figure 2.7, Page 1. Table of Elizabeth Powell Site (41FB269) Buttons. Sorted by type.

41FB269 BUTTONS

TYPE	CAT #	ITEM	UNIT	LEVEL	DEPTH	PROFILE	BACK MARKS	DIA, mm	DIA, Lignes
Glass	673	1/1	G	4	15>20 cm	Disc with beveled edge		13.9	22
	1981	1/2	Surface &	Test Trench		"Body Mound" with oval-eye center		15.8	25
	2005	1/2		2	5>10 cm	pudding		13.0	20
Metal	262	1/1	BC	1	0>5 cm	Pressed solid self shank		13.9	22
	313	2/2	E	1	0>5 cm	Pressed solid self shank		14.1	22
	340	1/1	AE	3	10>15 cm	Pressed 2 part grooved front with cutout shank		13.3	21
	348	2/1	AE	3	10>15 cm	convex 1pc metal with wire loop shank	"TREBLE STANDARD EXTRA RICH"	22.0	35
	510	1/1	BC	3	10>15 cm	disc with wire loop shank; gilt		28.5	45
	653	1/1	P	2	5>10 cm	flat back, convex front with metal shank		14.4	23
	975	1/1	BH	2	5>10 cm	disc with unknown shank		18.1	29
	1037	1/2	BH	5	10>25 cm	Dish		13.4	21
	1117	1/1	BH	8	35>40 cm	flat back, convex front with loop shank	"SCOVILLS EXTRA"	11.0	17
	1728	2/3	BC	2	5>10 cm	disc with drilled peg-shaped shank		16.2	26
	1908	2/2	CB	5		dish		17.6	28
	2005	2/2		2	5>10 cm	Staff/muffin with unknown shank		18.0	28
	2270	1/2	CB	4	15>20 cm	Pressed solid self shank		20.0	31
Rubber	107	1/1	A	2	5>10 cm	Tire		25.0	39
	2046	1/1	CA		15>20 cm	Disc	"GOODYEARS P=T N.R.C ^o "	14.8	23
Shell	352	1/1	AC	4	15>20 cm	Dish with flat back & beveled front		9.0	14
	941	1/1	BH	1	0>5 cm	Saucer		20.0	31
	1164	1/1	AA	3	10>15 cm	Dish		7.1	11
	1857	1/1	Cistern	15	70>75 cm	Flat with round center		13.4	21
	2270	2/2	CB	4	15>20 cm	Dish with flat back, beveled edge & deep concave ctr		8.5	13

Figure 2.7, Page 2. Table of Elizabeth Powell Site (41FB269) Buttons. Sorted by type.

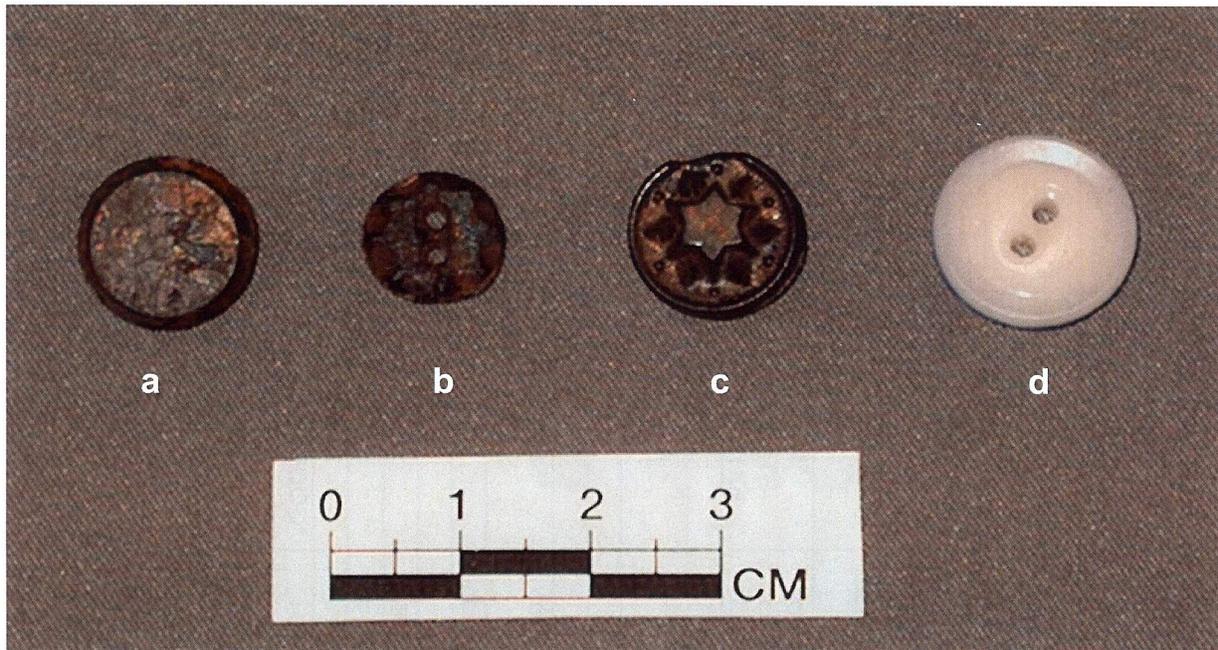


Figure 2.9. Glass buttons. All are mold-blown. All but one are decorated. **a.** plain patinated black disc shape with beveled rim and metal shank **b.** black two-hole fish-eye sew-through with inverted scallops around rim **c.** black pudding-shape six-pointed star design with metal shank **d.** clambroth glass two-hole oval-eye sew-through with blue stripe around edge.

The remaining black buttons are decorated to reflect light and shapes. Another “push-in” shank style button (shank missing) takes what is called a pudding shape, so called for its resemblance to pudding or jello molds (yes, folks have been congealing sweets for centuries, and in England at least, puddings are more like a moist dense cake, often with charms baked in). Looking directly down upon it, this design takes the shape of a three-dimensional six-pointed star resting upon another, larger three dimensional six-pointed star in such a way that all 12 points are visible, all resting on a field of fine grooves on the flat circular surface of the disc-shaped button.

The only sew-through black button has inverted scallops around the circumference of the rim that leaves a stylistic eight-pointed star shape on the surface. Centered in this “star” shape is a two-hole fish-eye center (a pointed-oval depression in which the holes are located). No doubt, these three buttons were used on women’s clothing, probably dresses.

The clambroth button (25 line, two-hole sew-through) was molded in a “body mound” shape and has a soft, medium blue stripe painted around its edge. Its two holes are located in an oval-eye center. It is of a size that lent itself for use on a vest, jacket or

coat. Clambroth dates to the 19th century for the most part (Hughes & Lester 1981:33).

Metal

From 1520 when France’s King Francis I sported 13,400 gold buttons on one black velvet suit; to the First Duke of Buckingham’s diamond buttons in the 1600s, to the late 1700s, men’s buttons were large, flashy, and mostly made of metal. Beau Brummel, who advised the Prince of Wales on fashion, is credited with changing that trend by choosing sober dark coats with small plain gilt buttons (Hughes & Lester 1981:178). The prince, later George IV, thus set the tone for men’s fashions for the future and essentially reversed the natural order in which males of most all species have the most vibrant coloring.

Metal buttons were made from copper, steel, brass, tombac (a pale yellowish-white type of brass containing a higher ratio of copper), silver, gold, pewter, and combinations thereof, or were partnered with bone, wood, or fabric. They could be solid or plated; engraved, stamped, or molded; and shanked or sew-through. In England the brass button industry peaked between 1820 and 1850



Figure 2.10. Metal buttons: Cuprous, ferrous and white metals and combinations of two or more. **a.** two-piece pressed cuprous metal sew-through **b.** Golden Age Gilt **c.** U.S. Navy button **d.** Mexican Army button **e.** Eagle button – probably Mexican Army **f.** fabric-covered two-piece button; **g, h, i, j, & l.** one-piece pressed metal two- and four-hole sew-through buttons **k.** Staff officer button– “muffin”– three-piece construction **m.** plain gilt cuprous metal two-piece civilian button.

(Here 2003), in America between 1830 and 1850 (Hughes & Lester 1981:217). From 1800 to 1830 brass buttons were completely plain; by the 1830s, patterns would be engraved or stamped onto the fronts. Origin marks appeared on the backs of the buttons, if at all.

Earlier gilt buttons were solid or one-piece. Mechanization of the process having been developed in the 1790s, by 1820 they were uniformly made in two pieces, a method having been patented in 1813 by Benjamin Sanders who wished to be able to cover metal buttons securely with fabric. Typically from that time the fronts were either plain or sported a design or insignia, and the separate back piece carried the maker’s mark or designated the amount or quality of the button’s gilding. Some few were constructed in a three-piece design that was less durable. The attachment is not counted in the number of pieces referred to in the type. Military buttons of these styles followed the same sequence of construction as civilian gilt buttons (Hughes & Lester 1981:217). Dating must be very general when no maker’s mark is present.

A total of 13 metal buttons was recovered (Figure 2.10). Ten are complete and three are fragmented, although one of those is nearly complete. Six are sew-through style: three two-hole and three four-hole. The remaining seven metal buttons all had shank attachments of various types. Nine were classified as cuprous metal, three of heavily corroded ferrous metal, and one a white metal, zinc. Due to their corroded conditions it is difficult to accurately assign shapes, but general shapes were disc, dish, and convex front.

The three ferrous buttons were all solid pressed steel two- and four-hole sew-through. These date to post-1870 (Pool 1987:279) as do two others: a pressed brass four-hole sew-through and the zinc button, which has a two-hole sew-through pushed into a self shank. The zinc button also has wire through the holes as if still mounted on its button card at the store. The remaining pressed metal button is a cuprous two-hole sew-through that was constructed of two parts. Its shape matches the grooved front with cutout shank shape in Figure 2.1.



Figure 2.11. Golden Age Gilt button. A one-piece cuprous button with convex molded front, flat back, and metal loop shank brazed to the back. Maker's mark, "SCOVILLS EXTRA" dates to 1840-1850. Remnants of the gilding remain.

Six of the nine cuprous buttons had remnants of gilt showing. Two of these were backmarked. The first is a decorative Golden Age Gilt (Figure 2.11); the second, a U.S. Navy button (Figure 2.12).

The Golden Age Gilt, dating to 1830-1850 (Hughes & Lester 1981:217), is of one-piece struck construction, a type of button with the design struck or stamped on a disk of metal and having a wire "eye" or loop shank usually fastened by brazing (Albert 1977:7). The convex front features a design resembling a three-dimensional propeller with four blades and a bead/dot between each pair, all on a



Figure 2.12. U.S. Navy button. A convex one-piece cuprous button with wire loop shank brazed to the back. Back mark, "TREBLE STANDARD EXTRA" denotes the gilding process used, but without knowing the maker cannot be dated. This style of Navy button was produced from 1830-1852, but details of the design can probably date its manufacture closer to ca.1834-1848. Mere traces of gilt remain.

grainy field. The backplate is marked "Scovills Extra", which according to McGuinn & Bazelon (1984: 90) dates to 1840-1850, thus nicely narrowing that manufacture period to ten years.

The Navy button, nominally dating to 1830-1852, is another one-piece struck metal button with brazed wire loop shank. The front is convex and shows an eagle facing its left, perched upon the stock of an upright anchor and encircled by a ring of 13 stars, all on a lined field. Hughes & Lester (1981:716-18, #43) identify this button as a "U.S. NAVY, VARIANT OF: Navy, 1830-1852." "Earlier buttons are flat, one piece, with the head of the eagle to the left; later buttons become convex, and eventually two piece, with the head of the eagle to the right." Depending upon (1) how long use of the "earlier" flat buttons lasted, and (2) when the two-piece type was adopted, we may be able to refine its manufacture dates to an even shorter span than the 22 years represented by this particular frontal motif. Its backplate is marked "Treble Standard Extra Rich", but that pertains to its quality of manufacture (specifically the plating) rather than identifying its maker. A similar button can be seen in A.H. Albert's *Record of American Uniform and Historical Buttons Bicentennial Edition*, pg. 99, #91.

Two other gilded buttons were clearly military buttons, and most likely Mexican military buttons. Additionally, both were recovered from pit BC,



Figure 2.13. Mexican Army buttons. a. A cuprous modified coin button with wire loop shank brazed to the back; lots of gilding evident. Front contains an eagle looking to its left with snake in mouth, perched upon a cactus and surrounded by "REPUBLICA MEXICANA"; b. Back is engraved with "LA LIBERTAD EN LA LEY" (translates to "liberty in the law") and the date 1828 encircling the engraving of a Phrygian cap raised on a stick or sword. This sort of cap was the type adopted by freed slaves in Roman times, and subsequently was identified as the cap of Liberty. c. A cuprous disc-shaped button with drilled shank. Front features a stamped "6" or "9". Greg Dimmick attributes this style button to the Mexican Sixth Battalion, so numbered only from circa 1823-1832; d. The solid one-piece construction created its own shank that was then drilled for attachment purposes.

levels 2 & 3. One, a modified Mexican coin (45 L), is dated 1828; the other is a smaller (26 L) cast one-piece disc with drilled peg-shape shank. The front was stamped with the numeral "6" or "9". Dimmick (2004:105) states that the Mexican army had numbered their battalions between 1823 and 1832 and again after 1839, but that due to the Sixth becoming the Aldama Battalion circa 1832, this button's manufacture likely dates to 1823-1832 unless it had been recycled to another group at the time of the name change.

The coin button (Figure 2.13, a & b), called an eagle button by Dimmick, features on its front an eagle facing its left, perched on a cactus pad with "Republica Mexicana" circling the perimeter, and on its backside a Phrygian cap on a stick encircled by "La Libertad en la Ley" (Liberty in Law), a star, "1828", and another star. A wire loop shank had been soldered or brazed to the back. Vestiges of gilt remain, but this is not a solid gold coin. The reader can see another example of the eagle button in *Sea of Mud* (Dimmick 2004:109, Figure 4-7).

The three remaining gilt buttons are all shanked and made of cuprous metal. One shows no decoration except its gilt plating. It is a two-piece Sanders type, a style of button invented by Benjamin Sanders of England around 1813. It is made of two pieces, a gilded plain front shell and a back plate to which a wire "eye" or loop shank was fastened (very corroded). The two parts were fastened together by turning the edge of the front shell over the back plate (Albert 1977:7).

The last gilt button is of three-piece construction, a type first produced in the 1830s for army staff officers. It is similar to the Sanders type except that the front shell is attached to the back plate with a third piece, a separate narrow flat rim (Albert 1977:7). Traditionally known as a staff button, the convex frontal shell is exaggeratedly domed, which led to this shape being nicknamed a "muffin" button by collectors. The shape of the front is supported within by a wad of paper and held in place by its back plate. The staff button, with its characteristic three-piece construction, has given its name to all three-piece buttons constructed in this manner. Remnants of the paper pad can be seen in ours, but the front is too damaged to discern any design, insignia or device, and thus cannot be dated closer than 1832-1902 (Hughes & Lester 1981:715).

Our final cuprous button is another two-piece but is missing its shank. The front has the clear imprint of woven fabric on the flat front, which then wrapped

around to secure it to its back plate. The original design for fabric-covered buttons was patented in 1813 and improved upon in 1825 by the next generation of the Sanders family. This improvement consisted of the original two-piece design with the addition of a central hole in the back plate that allowed the fabric to be pulled through and used as the shank. This style is called a flexible shank button (Kiplinger 2002).



Figure 2.14. Fabric-covered button. The impression of a woven fabric covering remains on this much-deteriorated metal button with indeterminate shank connection.

Rubber

Fortunes were lost investing in or manufacturing rubber products in the 1830s. The stuff froze hard as rock in the winter and turned gooey in the summer.

From life preservers to galoshes, retailers were burying their melted goods to get the odor out of their buildings. Charles Goodyear, though, felt sure that he could solve the problem. Several attempts using various ingredients such as magnesium talc or nitric acid failed colossally, and he and his family suffered through years of hunger and debt before he invented vulcanization to make hard rubber using pressurized steam and sulfur. Goodyear's gratification was such that he had his portrait painted in rubber, his calling cards engraved on it, his autobiography printed and bound on it, and every conceivable item of his apparel made of it. Nevertheless, he died destitute. His resources had been exhausted in trying to protect his patent rights from piracy virtually from its first introduction. His

family did finally receive enough accrued royalties from his many patents to make their lives comfortable. Charles Goodyear never actually made a button or a tire, but his name will always be associated with those objects through his discoveries about rubber (Cienna 2005).

Only two hard rubber buttons surfaced during excavation (Figure 2.15). They are both black in color. One is complete; one is broken. One is a tire shape; one is a disc shape. One is decorated; one is not. One is a sew-through; one has a metal shank. One has a maker's mark; one does not. They both are datable.

The unmarked, undecorated four-hole sew-through rubber button fragment has no patent number, thus dating it to after the 1851 patent expired in 1872 (Flis 1999). Its finish is dull, and it was probably sewn to a jacket or coat.



Figure 2.15. Rubber buttons. a. A fragment of a tire-shaped four-hole rubber sew-through button datable to post 1872 by its lack of any mark; b. a disc-shaped button with a wire loop shank and shank plate cemented into the back. Front has a raised square diaper pattern of beads. Back marked "N.R.C° GOODYEARS P=T" can be dated to 1851-1872.

The marked button can be dated to 1851-1870 due to the wording on the back: "N.R. Co. GOODYEARS P=T" (Novelty Rubber Company Goodyears patent) (Pool 1987:286). Its back has a wire loop shank mounted on a shank plate for attachment and is a disc shape with small raised beads side by side in rows forming a square pattern on its circular front. The front surface is dull while the square of beading is shiny. Its 23 Line diameter falls into a no-man's land between dress/shirt size and vest/jacket/coat size.

Shell

Known as pearls or shell buttons depending on their source, either salt- or freshwater, shell buttons have been around for many centuries. They are not truly pearls, but the linings of shells called "mother-of-pearl." A tubular saw (think hole saw) cuts the shell blanks prior to their being worked on a lathe like bone buttons. Lots of handwork was involved in producing shell buttons even when using power driven tools. The simplest geometric designs required the worker to move each individual button under the cutting wheel. Holes were then drilled or a metal shank was applied to attach to garments. It's no wonder shell button production declined at the introduction of plastics.

Suitable shells for button making are found in warm waters. Brine waters produce shells with colorful iridescent nacreous (pearly) linings that are then cut into buttons. As many blanks as possible were cut from the finest portion of the shell, then the remnants were salvaged to use for smaller buttons or mother-of-pearl cutlery handles including pocket knives. Ocean pearl was the favored material for better quality fancy buttons. Most pearl buttons were decorated with simple turned or pierced designs from around 1800 to 1860. Fresh waters produce shells with white linings without any, or very little, iridescence and none of the wavy effect of the saltwater variety. Freshwater shell was denser and more difficult to manipulate. It was mostly used for utilitarian shirt, underwear and baby clothes buttons. (Hughes & Lester 1981:230-233).



Figure 2.16. Shell buttons. Top left is the only freshwater shell button recovered. The remaining four are "pearls" made from highly iridescent marine shells.

Three complete shell buttons and two fragmentary shell buttons were collected from the site (Figure 2.16). All are white or ivory sew-through buttons. Three have four holes, and two have two holes. Four are pearl, meaning they're made from iridescent marine shells; and one is simply shell with no iridescence, making it likely to have been made from a freshwater shell. Shapes include three dish shapes, one saucer shape, and one flat shell button. Only one, a pearl, is decorated. It has incised radiating lines similar to the china piecrust border. No maker marks are apparent.

Conclusions

For the period of 1828 to 1836, Elizabeth Powell's occupation, only three button types were collected. They are the six five-hole bone buttons and the four-hole bone button exhibiting the prick mark, some of the Golden Age buttons, especially the Mexican military buttons; and some of the marine shell buttons.

The remaining buttons in the assemblage were manufactured from the 1840s through the 1870s, and may have been deposited by people traveling the nearby roads (HAS 2007:16-17) or by a later owner.

There is no concentration of older buttons versus newer buttons dispersed over the site, either vertically or horizontally, nor any correlation of depth versus older or newer buttons. This might mean that rodent activity or plowing have redistributed the buttons around the site or that natural percolation occurred such as in pastures. Little intact stratigraphy exists to help separate the older buttons from the newer buttons.

One interesting fact about the china buttons collected is the total lack of calico decorated chinas. Calicoes are common to many contemporaneous historic sites in Brazoria County dating from the 1830s - 1880s and represent a significant percentage of button recovery. They were in vogue from the mid-1840s to the mid-1850s. White china buttons were decorated with calico-like patterns in different colors to complement the many calico print fabrics exported from Calcutta, India. The designs were transfer-printed onto the white chinas which were then glazed to protect the designs. A small percentage of calico buttons were the reverse, a colored body with a white design (China Calico Buttons Site 2001). Due to their extreme popularity, the absence of any calico buttons at the Powell site might suggest that little or no occupation of the site dates to this time period.

References Cited

Albert, Alphaeus H.

1977 *Record of American Uniform and Historical Buttons Bicentennial Edition 1775-1976*. Boyertown Publishing Company, Boyertown, Pennsylvania.

Aucoin, Elizabeth K., Pablo R. Castro, Sheldon M. Kindall, and Robert T. Shelby

2007 *The Elizabeth Powell Site (41FB269) Fort Bend County, Texas, Houston Archeological Society Report No. 25, Part 1*. edited by Elizabeth K Aucoin and Linda L. Swift. Houston Archeological Society, Houston, Texas.

China Calico Buttons Web Site

2001 Identifications, China Calico Buttons Web Site. <<http://www.;home.pon.netr/behribaum/ident.html>>.

Cienna, Carol

2005 Hard Rubber Buttons & Some Look-Alikes, Vintagebuttons.net, CC's Buttons. <http://www.vintagebuttons.net/rubber.html>.

Dimmick, Gregg J.

2004 *Sea of Mud: The Retreat of the Mexican Army After San Jacinto, an Archeological Investigation*. Texas State Historical Association, Austin, Texas.

Earles, Amy C., Terri L. Myers, Brian S. Shaffer, Karl W. Kibler, Karen M. Gardner, Laurie S. Zimmerman, Elton R. and Sandra L. Hannum

1996 *Testing and Data Recovery at the Townsite of Old Velasco (41BO125), Brazoria County, Texas*. Prewitt and Associates, Inc., Austin, Texas.

Flis, Ginny

1999 Buttons that Have Charm Goodyear Rubber, Vintagebutton.net, CC's Buttons.
<http://www.vintagebuttons.net/rubber3html>> (Accessed 9/2/2007).

Goodyear Tire and Rubber Company

1958 "Charles Goodyear and the Strange Story of Rubber," *Reader's Digest*, January. Reader's Digest Association, Pleasantville, New York.

Here, Liz

2003 Button, Button Who's Got the Button, Sisters Vintage Button Accessories, Bridgewater, New Jersey.
http://www.kk-design.com/scti/in103/students/buttons/button_project/home/home.htm.

Hughes, Elizabeth and Marion Lester

1981 *The Big Book of Buttons*. Boyertown Publishing Company, Pennsylvania.

Kiplinger, Joan

2001 Hooked on Buttons, Fabrics.net, Spokane, Washington. <<http://www.fabrics.net/joan902.asp>>.

Kohrs, Cecile T.

1998 Plain Jane Buttons? No, Not Really! Button Bytes Light – Articles, Cecile T. Kohrs and Jeff Wright. <http://www.tias.com/articles/buttons>

McGuinn, William F. and Bruce S. Bazelon

1990 *American Military Button Makers and Dealers: Their Backmarks & Dates*. BookCrafters, Inc., Chelsea, Michigan.

Pool, Juliann C

1987 Fanthorp Inn: A Study of Nineteenth and Twentieth Century Buttons. Appendix V in *Archeological Excavations at Fanthorp Inn State Historic Site (41GM79), Grimes County, Texas, Spring and Fall 1982*, by J. David Ing and John Hart, pp.277-293. Texas Parks and Wildlife Department, Historic Sites and Restoration Branch, Austin.

Stewart, Judy

2002 Gaiters, Bull's-Eyes, and Bird Cage Buttons, Collectible China Buttons, Geocities.
<http://www.geocities.com/heartland/cottage/5399/gaiter.html>.

White, Donnamaie E.

1997 Welcome to a History Lesson Buttons-History of, White Enterprises.
<http://www.white-enterprises.org/educate/buttons.html>.

Wikipedia contributors

2007 Button, *Wikipedia, the Free Encyclopedia*.
<http://en.wikipedia.org/w/index.php?title=Button&oldid=1539831>.

Chapter 3

Coins Recovered at the Elizabeth Powell Site

By Elizabeth K. Aucoin and Richard L. Gregg

Five coins were found at the site: a U.S. 1927-S penny, an 1808 ½ Real Colonial Mexican coin, a U.S. half dime of undetermined date and mint mark, and two U.S. dimes dated 1856-O and 1841-O. The obverse (front) and reverse (back) views of these coins are shown in Figures 3.1 and 3.2 respectively. Descriptions of the coins will correspond to the layout of coins in these figures.

Coinage of the United States

“The Articles of Confederation, adopted March 1, 1781, provided that Congress should have the sole right to regulate the alloy and value of coin struck by its own authority or by that of the respective states. Each state, therefore, had the right to coin money, but Congress served as a regulating authority” (Yeoman 1982: 6). Those articles provided the groundwork for the establishment of a mint and the regulation of coins later spelled out in the Mint Act of April 2, 1792 (United States Congress 1792). Twenty sections within the Mint Act provided the specific duties of a director, an assayer, a chief coiner, an engraver, and a treasurer as well as details regarding the denominations and types and weights of each metal contained within each coin.

In addition to domestic US coinage, “Spanish colonial and Mexican coinage was the most common medium of exchange of the pioneers of America, and in the U.S.A. these coins were officially acknowledged as legal tender until the year 1857. Even after 1857 they continued to circulate with public acceptance” (Utberg n.d.: 35).

U.S. 1927-S Penny

The Lincoln-type penny with wheat ears on the reverse side was minted from 1909-1958. This one-cent coin was designed by Victor D. Brenner to “commemorate the hundredth anniversary of Lincoln’s birth” and is “the first to have the motto IN GOD WE TRUST.” From 1909-1942, the metal content of the coins was 95% copper and 5% tin and zinc. The coins were produced at mints located in Philadelphia, Denver, and San Francisco. A total of 14.2 million of these 1927 coins were struck at the San Francisco mint (Yeoman 1982: 83-85). No provenience was recorded for this coin.

Mexican Colonial Coin

There were two types of Colonial coins for 1808 because of the change of the Spanish ruler. The coin from the Powell site is a ½ Real dated 1808 and bearing the likeness (bust) of the later

king, King Ferdinand VII. The front of the coin bears the inscription FERDIN VII and DEI GRATIA. The back of the coin is inscribed HISPAN ET IND R M T H with a crown placed above a coat of arms flanked by ribbon-wrapped vertical pillars. The translation is roughly, “Ferdinand VII, by the Grace of God, King (R) of Spain and the Indies”; the M has a small O above it, the mint mark for Mexico City, and T H are the assayer’s initials. This type ½ Real was coined from 1808-1814. (Utberg n.d.:21-23).

The coin was recovered from Pit O, level 3, located north of the 1936 centennial marker. The



Photo by Richard L. Gregg

Figure 3.1. Obverse of 5 coins found at the site. The coin at left is a U.S. 1927-S penny. The remaining four, from left to right, top to bottom, are a 1/2 Real 1808 Colonial Mexican coin (Utberg n.d.), a U.S. half dime of undetermined date and mint mark, and two U.S. dimes of years 1856-O and 1841-O.

marker reads, in part, "This point marks the most eastern advance of Urrea's army and the most southern advance of Santa Anna, who turned east from here to the Brazos and San Jacinto" (Aucoin 2007:2). The recovery of this coin raises the possibility that it was dropped by a member of the Mexican Army. Another possibility is that Elizabeth Powell acquired the coin, even though it was minted over 20 years prior to her arrival.

U.S. Half Dimes 1794-1873

A half dime of undetermined date and mint mark was recovered from Pit M2, level 3. Half dimes were produced from 1794-1873. Three types of dimes, Flowing Hair (1794-1795), Draped Bust with Small Eagle Reverse (1796-1797), and Draped Bust with Heraldic Eagle Reverse (1800-1805) were designed by Robert Scot. The Capped Bust type (1829-1837) was designed by William Kneass. The coins designed by Scot and Kneass were all coined at the Philadelphia Mint. A variety of Liberty Seated half dimes designed by Christian Gobrecht were coined at the Philadelphia, New Orleans, and San Francisco mints from 1837-1873. The law of 1873 abolished the minting of silver three-cent pieces, half dimes, and two-cent pieces (Yeoman 1982: 98-102; 2007:18, 137-139). Unfortunately, the half dime



Photo by Richard L. Gregg

Figure 3.2. Reverse of 5 coins found at the site. The coin at left is a U.S. 1927-S penny. The remaining four, from left to right, top to bottom, are a 1/2 Real 1808 Colonial Mexican coin (Utberg n.d.), a U.S. half dime of undetermined date and mint mark, and two U.S. dimes of years 1856-O and 1841-O.

recovered at the Powell site was too mutilated to determine a date.

U.S. Seated Liberty Dimes 1856 and 1841

Two U.S. dimes, dated 1856 and 1841, were recovered from the site. The 1856-O coin shows drapery below the elbow on the obverse (front) side. An upright shield, with a banner bearing the inscription LIBERTY, is shown on the lower left of the coin above the date. The New Orleans mint, signified by the mint mark O on the reverse side of the coin, produced 1.1 million coins.

The 1841-O dime also shows drapery below the elbow and bears the same upright shield with the LIBERTY inscription. This New Orleans mint mark is a small O on the reverse side; slightly more than 2.0 million of these coins were produced. The designer of these dimes was Christian Gobrecht; their metal composition was 90% silver and 10% copper (Yeoman 1982: 105-106). These two dimes were recovered from Pit M2, level 3.

Summary

The 1/2 Real came from Pit O, level 5, while the dimes and half dime all came from Pit M2, level 3. Pits M1-M6 were excavated as part of a Girl Scout exercise and were mistakenly not tied into the site coordinate system. It is thought that they were from the same area as Pit O. Thus, all four older coins were probably from the area just north of the centennial marker. It is possible that the Mexican coin was dropped by a member of the Mexican Army while at the Powell site in April 1836; it is also possible that the coin was in Elizabeth Powell's possession during her occupation of the site since this type of coin was "coin of the realm" at the time. What is surprising, however, is that the coins were still at the site, and especially near the marker, considering the number of treasure hunters who are said to have searched the site over the years.

References Cited

- Aucoin, Elizabeth K., Pablo R. Castro, Sheldon M. Kindall, and Robert T. Shelby
2007 *The Elizabeth Powell Site (41FB269) Fort Bend County, Texas*, Houston Archeological Society Report No. 25, Part 1. Edited by Elizabeth K. Aucoin and Linda L. Swift. Houston Archeological Society, Houston, Texas.
- United States Congress
1792 *The Mint Act of April 2, 1792*
<http://www.usmint.gov/historianscorner/index>
- Utberg, Neil S.
(n.d) *Coins of Mexico 1536-1963*. An illustrated catalog; no publisher listed.
- Yeoman, R.S.
1982 *A Guide Book of United States Coins*, Western Publishing Company, Inc. Racine, Wisconsin
2007 *A Guide Book of United States Coins*, Whitman Publishing, LLC, Atlanta, Georgia

Chapter 4 Nails Recovered from the Elizabeth Powell Site

By Robert T. Shelby

Background

Near the banks of Turkey Creek, a small tributary of the San Bernard River in Fort Bend County, Texas, the State of Texas erected a historical marker in 1936 on the assumption that this was the site of the Elizabeth Powell home, although no remains of a house were visible. The primary focus of the investigations of the Houston Archeological Society in 1999–2000 and 2004–2005 was to find evidence of the Powell home and what could be learned of the people who lived there.

Historical research aided the archeological work and determined the original log home of Elizabeth Powell was built sometime between 1828 and 1831. The house was subsequently burned on April 26, 1836 (Shelby 2007: 11–21). As excavations progressed, the recovery of a large number of nails was puzzling. A log structure during this period on the frontier would have been built with few nails, if any.

Fortunately, during the first season at the site, a 1943 magazine article by the then-owner of the property was brought to the investigators' attention, and the presence of nails could be explained. The author, Homer Darst, described a two-story frame house that had been on the site (Darst 1943: 35–36). This account suggests that after the Mexican army burned the log home of Elizabeth Powell, apparently a frame house was built on or near the same location. A frame house would have been constructed with nails.

In his article Darst called the frame building Mrs. Powell's house. It is not known whether he ever saw the house he described or simply heard of a house of that description at that location and that it was called Mrs. Powell's home. Thus, his article raises certain questions: Did she have the frame house built to replace her destroyed home, or was it built for someone else, perhaps Robert Hodge, Darst's grandfather, who Darst said once lived on the property? Could it have been built by a carpenter named Samuel Damon? Mrs. Powell had sold to Damon the timber from her property along the San Bernard River and Turkey Creek. She also sold him a small portion of her land where he was

to build a saw mill. Mrs. Powell wrote into the deed that she was signing it in the house of Samuel Damon on the land she sold to him (Powell 1839).

Nails in Archeological Context

One significant expectation of artifacts recovered from an archeological site is their ability to help date the site. On historical sites where old buildings no longer stand, nails are often the most prevalent class of artifacts found. It is not surprising, then, that some archeologists have relied on nails as "the most reliable and accurate tool for the dating of undocumented buildings of the late eighteenth and nineteenth centuries" (Edwards and Wells 1993: 1). Such was the wish for the nails recovered from the Elizabeth Powell site—that the many nails found through excavation or metal detector survey might help date the site, and in doing so, might help answer some of the questions posed in the preceding paragraph.

A nail is pin-shaped, with one end sharp for penetration into an object and the opposite end flattened to receive a blow from a hammer. These useful items are made of metal and have been in existence since at least Roman times. Until sometime in the late 17th century, nails were crafted at the forge by hand. Nails made of iron were machine-made in large quantities in the middle of the 19th century and in various styles and appearances. Steel wire nails made their appearance near the beginning of the 20th century.

Before starting the research on the recovered nails, the investigators were aware of certain caveats about using nails as the only dating criteria of old and undocumented buildings—the problems of curation and conservation. Curation is the circumstance whereby builders retain older types of nails left over from previous jobs and use them on later projects. Conservation occurs when builders refuse to use new products or prefer the older nails for special applications. Thus, an older type of nail might be found at the site, mixed in with newer models.

The house was in an agricultural setting, probably with other structures such as barns, stables, animal pens and fences. Some of the recovered nails could

be from these structures as well as from the house. The presence of a few nails younger than the majority of the recovered nails brings up an additional issue: Does the presence of these newer nails mean the structures had repair later in their existence? All these factors had to be considered during the evaluation of the artifacts.

The work at the site included 65 1 x 1-meter test pits, from which 357 five-centimeter levels contained nails. Among the test pits, the cistern—the only feature at the site—was excavated in five-centimeter levels, and 14 of its levels contained nails. Also there were 33 artifact bags containing nails from 81 metal detector finds.

In the lab at Rice University it was discovered that the nails included two possibly hand-forged nails and three steel wire nails. Machine-manufactured cut nails made of iron were by far the most abundant type recovered. Other hand-forged nails or steel wire nails that might be at the site either were not found, did not survive the depositional process, or were not recognized in the lab because of their poor condition. Thus, it remained only to distinguish which type or types of cut nails were used to build the structures at the site since different cut nail types were made over time. Spikes (nails over 20d), staples, and tacks were not included in this study of nails and will be included in another part of the report since they are different classes of artifacts.

Lab Processes

Before the nails were evaluated, it was observed that not all the nails could be analyzed because of their condition. Some of the items from the pit-level bags were probably nails but were so rusted that they were mere lumps, and others became red dust upon handling. Thus, the only nails that could be used in this study had to be reasonably intact, i.e., not overly mangled or rusted to the degree that the major attributes couldn't be recognized. A bias of the selection process was that larger nails (common nails used in framing) were selected over smaller ones (less than 3d) for close scrutiny since more metal remains on larger nails, allowing more accurate identification. What could have been small finish nails or sprigs, having deteriorated beyond recognition, could not be studied.

To obtain a wide distribution across the site, nails were chosen from as many different pit levels and metal detector finds as possible. A typical nail selected for study was very rusty, to the point of being scaly, and often several nails were stuck together, necessitating that they be gently separated when possible.

The next step in the process was the following routine. The nail was washed in tap water and lightly scrubbed with a fine bristle brass brush. The nail was then placed in an electrolysis bath (electrolyte) with 12 amps of electricity passed through from a

Figure 4.1. Nail sizes

Nail sizes in the United States are designated by *penny* size. The term *penny* in relation to nail size is based on an old custom in England of selling nails by the hundred. A hundred nails that sold for sixpence were *six-penny* nails. The larger the nail, the more a hundred nails would cost and the *penny* designation would be larger. It is estimated that the medieval penny would be comparable in worth in modern U.S. currency to about \$7.88. The word *penny* is written as the abbreviation "d." The Roman *denarius* was a coin similar to the penny and thus "d" was used in England from very early times as an abbreviation for *penny* until the decimalization of coinage in the late 20th century and the adoption of the metric system of weights and measures. The United States has kept this old term for nail sizes, just as it has kept the weight system of pounds and ounces and lengths such as feet and inches that now have been largely abandoned by the rest of the English-speaking world. The *penny* system was used for hand-forged nails, cut nails and wire nails. Modern power-activated nail drivers use a different system.

Nails by penny size and equivalent length in inches:

3d – 1-1/4"	12d – 3-1/4"
4d – 1-1/2"	16d – 3-1/2"
6d – 2"	20d – 4"
8d – 2-1/2"	40d – 5"
10d – 3"	60d – 6"

cathode for two to four hours, depending on the density of the rust. This process usually removed a large amount of rust. However, no nail was completely freed of all rust due to a concern that trying to remove all the rust could harm the artifact.

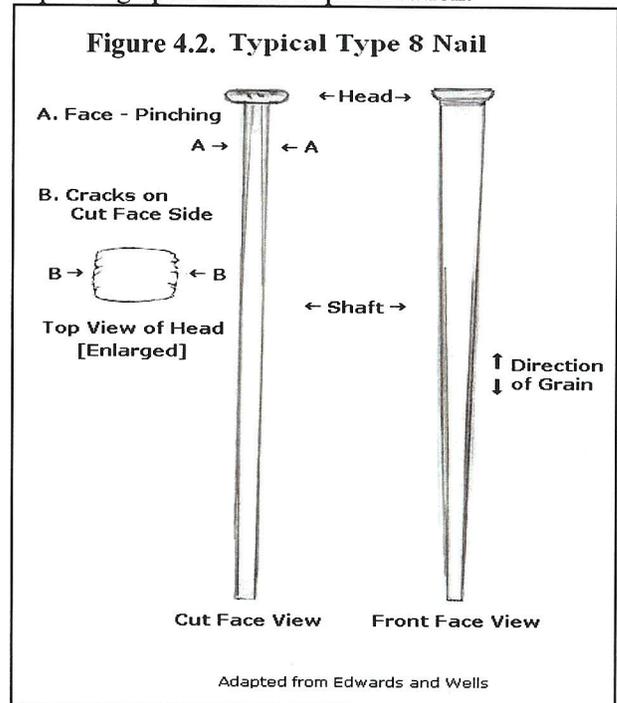
The nails were again washed and dried. Some nails were protected from further rusting by several methods. One method was to coat the nail with liquid tannic acid (closely related to metal bluing), which combined with the remaining rust on the surface of the nail to seal the metal. Another preventive method was to place the cleaned nail in a pot with paraffin (hydrocarbon wax) and to melt the wax to coat the nail. The nail was then removed and allowed to air dry. Both methods are reversible, and the nail can be returned to its natural state. In the case of the tannic acid method the electrolysis application can be repeated. Wax can be removed by applying low heat and wiping the nail clean with a mild solvent.

Classification of nails in this investigation is based on Edwards and Wells (Edwards and Wells 1993: 25–61). The authors grouped all nails from hand-forged through steel wire nails into 12 general types and used 16 criteria to distinguish between the types. This classification system encompasses all types of nails from the 18th, 19th, and early 20th centuries in Louisiana and other parts of the American South. Thus, hand-forged nails, cut nails, and wire nails were included in their study. Only 13 of the 16 diagnostic features were used for 41FB269, as some do not apply to cut nails, or some of the samples were so degraded that certain attributes could not be observed. Cut nail types were determined using the following criteria:

1. Shape of the shaft: taper
2. Shape of the shaft: cross-section
3. Neck shape
4. Shape of the point
5. Material: iron or steel
6. Cut-face cracking
7. Head shape (head forms)
8. Corner tipping
9. Cut-face head splittings
10. Front face head splittings
11. Head augmentation
12. Head buttressing
13. Head and shaft uniformity

Some of the terms are self-explanatory, such as number 5 above—whether the nail was iron or steel. However, most of the terms are specific to

nail nomenclature and need some elaboration. The diagrammatic representation of a typical Type 8 nail (an iron manufactured cut nail) in good condition demonstrates its characteristics. A nail might show one or several of the identifying attributes, depending upon its state of preservation:



Several nails were randomly chosen to test for direction of the grain of the metal. These nails were first prepared by the cleaning method described above and were not coated for rust prevention. The rust was further removed from an area of the nail by light abrasion with a hand-held brass bristle brush. This was done to the surface of the front face of most items in this sample and to the cut face of a few items where the front face did not show grain lines to a marked degree. If the grain lines were not readily apparent on either face, muriatic acid (20% hydrochloric acid) was applied with a dropper to the exposed surface and cleaned off after two minutes to see if grain lines had appeared. The acid application was repeated until the grain lines became discernable under a 10- or 20-power hand loupe. The reasoning for this procedure was that if the grain ran 90 degrees to the length of the nail, this feature would have been one indication that the nail was in circulation prior to 1830. After this date, nails were cut from plate iron whose grain direction ran along the length of the shaft. If there had been no grain apparent, then the nail was made of steel, and

steel cut nails did not appear until circa 1885. No pre-1830 cut nails or steel cut nails were found with this testing.

The selection of nails for this test was random. However, once selected and before abrading or acid bathing, the nail was checked against others in the greater sample to insure that a unique item was not being further degraded by this method. It was felt that the removal of an artifact from its archeological context is destructive and that further destructive methods, such as the grain test outlined above, should be undertaken only if enough artifacts of the same kind are recovered. The large sample of nails recovered at the site justified this method.

After the grain test on the selected samples, the nails were sorted by size by measuring the shank of the nail from just below the head to the tip. Each nail that was considered in good enough condition was then tested against the list of the remaining attributes that would help define the cut nail type.

The following tests were visual and subjective, being dependent on the experience of the investigators, and the nails were compared against photographs of archived cut nails. A nail first was viewed from the front face (wide side of shank), and it was noted the shank gradually tapered from the bottom of the head to the tip along both sides. When the nail was viewed from the cut-face side (narrow side of shank), the shank had parallel sides from just below the head to the tip, which is flat and does not come to a point.

Most heads, when viewed from the cut-face side, exhibit small cracks in the rim, called diagonal splitting. This cracking is the result of an imperfect manufacturing process. The tops of the heads are flat with no embossing as is found in some types of hand-made nails as well as some types of cut nails. Another accident of the machine heading process is the small tips at the corners of the nail heads when viewed from above. Such tips are not apparent on all the nails due to degradation from rusting. The general shape of the heads of all size nails from 41FB269, even though there is some variation, were in conformity with those pictured in Edwards and Wells. This variation probably is caused by the machinery of the era not having the tight tolerances of later machinery.

Another attribute of this general class of cut nails is the burring often found on the shaft edges caused from the cutting process when the nail was

stamped out from the metal plate at the factory. The nails in this study have generally lost this characteristic, again due to the high degree of rusting.

No one attribute alone can be a determinate of type, nor does every nail necessarily contain all the appropriate features to place it in historical context. However, the large sample of nails from 41FB269 provided hope that all taken together would present a suitable portrait of a nail type or types that would aid in dating the site.

Analysis of the nails from 41FB269 tentatively determined that the nails were Type 8 nails since the nails of all sizes met enough of the criteria for that type. A representative assemblage of these nails was then brought to Dr. Jay Edwards at Louisiana State University at Baton Rouge. The set was compared to examples in the collection at the Fred B. Kniffen Cultural Resource Laboratory where Dr. Edwards examined them and agreed they were morphologically similar to the Type 8 nails in the university's collection. (Edwards, Jay D. 2005. Interview by Robert T. Shelby.)

Nail Availability in Early Texas

A local newspaper, the *Telegraph and Texas Register*, reported that in January 1840, nails sold for 30 to 35 cents per pound and were "scarce." The price went up to 40 to 45 cents per pound in February, and nails were reported as "very scarce." However, by July of the same year the newspaper announced that there was a "fair supply" and the price had dropped to 10 to 12 ½ cents per pound. This price and supply report stayed fairly consistent during the next year. These figures may reflect several things. One would be the stability of the society following the war with Mexico. Although there were rumors of another invasion by Mexico (and there were several incursions), more people were coming into Texas from the United States, and people were going back to their normal pursuits whether it was business, farming, or selling land to the newcomers. New towns were being founded—Houston and Richmond (1836), Galveston (1838) and Austin (1839).

The old log construction was going away, and the new towns and homes were utilizing mostly frame construction. Frame construction had undergone a new development with the balloon framing technique introduced in Chicago in 1830 (Loveday

1983: 29). This new technique involved using many nails to fasten a building together rather than the older method of carefully fitting the framing members together by joinery. Saw mills were being built to accommodate the market, and nails were being imported for the local market as Texas had no nail-making machinery.

Type 8 nails were mass produced in Louisiana after 1828 and were in common use there between circa 1835 and 1886. Beginning in 1885, cut nails began to be made from steel, and in a few years steel wire nails were introduced and ended the dominance of iron cut nails. Also, during the period when Type 8 nails were in common use, New Orleans was the main port from which goods from the rest of the United States were imported into Texas. It follows that builders in Texas would use what was available to them, probably from this source.

Nails from Neighboring Sites of Similar Age

Several unpublished sites from areas near 41FB269 have recently had archeological investigations. No buildings remain on these sites, and nails were among the artifacts recovered. The Brazosport Archaeological Society and the Fort Bend Archeological Society were kind enough to allow this investigator to preview some of the nails in their collections.

Two sites in Fort Bend County were 41FB244 (Jane Long boarding house) and 41FB268 (the home of Mirabeau B. Lamar). Both are in the city of Richmond. Three sites from nearby Brazoria County were sampled: 41BO143 (Eagle Island Plantation), 41BO136 (the slave quarters at Durazno Plantation), and 41BO172 (the main house at the Jackson Plantation at Lake Jackson). Of the small sample from each of these five sites, all but the Lamar site yielded Type 8 nails exclusively. In a sample of eight nails from the Lamar site, there were four Type 8 nails and four hand-forged nails. The hand-forged nails might indicate that the carpenter who built the house had some hand-forged nails left from earlier jobs and used them along with the cut nails on this project. The prevalence of Type 8 nails at all these sites including 41FB269 perhaps reflects the flurry of rebuilding and the expansion that took place after the war with Mexico. Whereas the older structures in Austin's colony were mostly log, the new

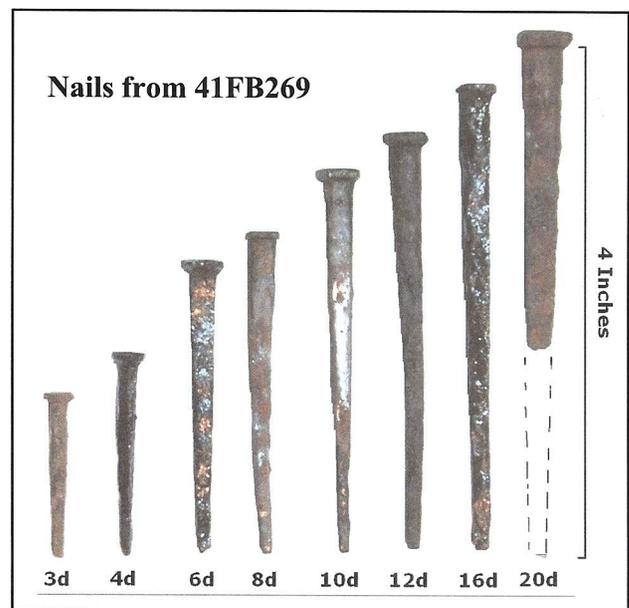
buildings built in the post-war era were increasingly frame construction as witnessed by the mass of nails at these archeological sites.

As the Nails by Size chart (Figure 4.3) shows, 614 Type 8 nails, recognizable by size, were recovered at 41FB269. Also collected were an incalculable number of nail fragments, very small nails (too badly rusted to classify), nails rusted together, and what might have been nails that are now mere red lumps mixed with earth. In one five-centimeter pit level, 641.4 grams of nails were found rusted and in pieces with no single nail in good enough shape to identify by size. It is interesting that some areas of the site had good preservation of metal objects while other areas did not.

Number of Nails by Size			
Nail Size	Quantity	Nail Size	Quantity
20d	12	8d	185
16d	27	6d	138
12d	27	4d	147
10d	49	3d	29
614 total nails			

Figure 4.3. Table of Nails by Size

Pictured below is a representative grouping of Type 8 nails graded by size.



Photos by Robert T. Shelby

Figure 4.4. Representative Type 8 Nails

The larger nails, such as 20d, 16d, 12d, and 10d, could have been used to fasten large pieces of lumber together. The medium sizes, such as the numerous 8d and 6d, might have been the principal nails used to frame lighter structural members. The 4d and 3d, as the smallest of the common nails, could have been the nails the carpenter used to hang the siding on the walls, the shingles on the roof, and the trim on the house. The large number of nails and variety of sizes at 41FB269 probably reflect a professional approach to construction at the site, i.e., the use of different sizes of nails for different purposes.

Discussion

Often one can only say what a site is not. The nails were not from Mrs. Powell's historic home that was burned by the Mexican army in 1836. However, the nails were most probably used in the construction of a frame house with attendant

service structures built sometime later. This construction would have occurred after 1836, and these structures were not standing a hundred years later in 1936 when the historical marker was placed at the site.

The nails at 41FB269 were mostly Type 8 nails and could have been used in the construction of structures on this site any time after 1836. Because of limited availability of nails and sawn lumber, it is more reasonable to suggest a date no earlier than 1839 for the first frame construction at the site. Since 1885 is the date most authorities say Type 8 nails ceased to be the principal type of fastener for wood construction and newer type nails began to be used, this date might be the upper time limit for the construction of a frame house and other structures at the site. The nails, along with what history tells about the site, have suggested a time frame for structures there, but more research is needed to get all the story.

References Cited

Darst, Homer Norwood

1943 "The Elizabeth Powell Home." *Frontier Times* 21 (October): 35-36. Clayton Library for Genealogical Research, Houston, Texas

Edwards, Jay D.

2005 Interview by Robert T. Shelby, March 17. Louisiana State University, Baton Rouge, Louisiana

Edwards, Jay D. and Tom Wells

1993 *Historic Louisiana Nails: Aids to the Dating of Old Buildings*, The Fred B. Kniffen Cultural Resources Laboratory Monograph Series, No. 2. Louisiana State University, Geoscience Publications, Department of Geography and Anthropology. Baton Rouge, Louisiana

Loveday, Amos J., Jr.

1983 *The Rise and Decline of the American Cut Nail Industry*. Greenwood Press, Westport, Connecticut

Powell, Elizabeth

1839 Deed to Samuel Damon. Fort Bend County, Texas, County Clerk's Office, Richmond, Deed Book A:350

Shelby, Robert T.

2007 "Historical Summary and Biographical Information," Houston Archeological Society Report No. 25, Part 1 (11-21), Houston, Texas

Telegraph and Texas Register

1840 January 1, February 3, April 22, July 1, July 13, August 12, September 9

1841 January 13 Microfilm. Clayton Library for Genealogical Research, Houston, Texas

Chapter 5 Prehistoric Artifacts

By Elizabeth K. Aucoin

Introduction

Three types of prehistoric artifacts were recovered at the Elizabeth Powell site: lithics, Indian pottery, and fired clay balls. While most readers of archeological reports are familiar with lithics and the flintknapping process, a little background information may prove helpful to readers with less archeological experience. According to Webster's New Twentieth Century Dictionary (Simon & Schuster 1979:1056) the word *lithic* means "of or pertaining to stone" and "*flintknapping* is the most common name for the ancient craft of making flaked stone tools" (Whitaker 1997:120). Flintknapping is a reductive process; the debris or by-products left from this process is called *debitage*, consisting of angular chunks, shatter, and flakes. The major lithic (chert/flint) resource nearest the southeastern coast of Texas is the Catahoula Formation that runs in a southwest to northeast line approximately sixty miles inland from the Gulf of Mexico (Turner and Hester 1999: 14-15). Due to the absence of a local lithic resource, most stone tools in the Powell site area were probably made from river cobbles from either the Brazos or Colorado River.

Conversely, local clay was readily available for producing pottery. "The earliest pottery in Southeast Texas is from the Sabine Lake region (ca. 70 B.C.) and includes lower Mississippi Valley types and attributes, as well as sandy paste Goose Creek ware and clay tempering. Goose Creek ware became widespread in Southeast Texas after A.D. 500. Similar pottery appears in the Galveston Bay area (A.D. 100-425), while clay tempering appears in this latter area by A.D. 1000" (Handbook of Texas Online, 2001).

Archeological experiments done and reported by Hudgins (1993), and also reported by Patterson (1995b) indicate that "fired clay balls were used as heating elements for earth ovens. Earth ovens were used in Southeast Texas from the start of the Late Paleoindian period (8000-5000 BC) through the Proto - Historic period (AD 1500 - 1700). Earth

ovens in Southeast Texas may have been used mainly for processing plant foods, such as roots, on a seasonal basis."

Analysis

Using a hand-drawn template with a set of squares ranging in size from <15 millimeters square to 35-40 millimeters square, the size of each item was determined. Then, using a 10X magnification loupe, a visual inspection was made of each artifact and attributes of each were recorded. Each lithic item was then categorized as primary, secondary, or interior and counted, resulting in 11 primary, 15 secondary, and 83 interior items. Just as oranges have an outer coating called a rind, chert nodules have an outer covering called *cortex*. The percentage of cortex remaining on an artifact serves as a guide for classification: primary, >50% cortex; secondary, <50% cortex; and interior, no cortex visible.

The same hand-drawn template and inspection processes were used for determining the size of each pottery sherd recovered. Where possible, a clean break was made on each sherd, and classification was determined. Information on fired clay balls, recorded during lab sessions at Rice University and later entered in an Excel spreadsheet, was used for this report.

Lithics

One hundred and nine lithic artifacts having a total weight of 183.0 grams were recovered from the Elizabeth Powell site. Two flakes were surface finds, one of which is a utilized flake with a waxy luster that was found west of the main (upland) excavations and closer to Turkey Creek. One hundred and six chunks, shatter, flakes, and possible tools were recovered via excavations, while the final secondary flake was recovered during a metal detector associated shovel test. A fragment of a chert cobble with original cortex and weighing 57.4 grams may possibly be from a core. No projectile points were recovered from the site.

Pottery

Goose Creek pottery, commonly found at most southeast Texas sites, is un-tempered, has a sandy paste core with varying grain sizes, and crumbles easily. The pottery color "varies from black to orange and reddish hues, depending upon firing conditions and sediment source." (Aten 1983: 231). Suhm and Jelks (1962:57) state that the "method of manufacture (is) coiled." The most readily available clay resource for pottery making would have been found along the banks of Turkey Creek.

Nine shards of Indian pottery were recovered from excavations across the site. The sherds were all Goose Creek wall sherds. Each sherd measured less than 15 mm square with thicknesses ranging from 3.5-4 mm and a total weight of 4.7 grams. The absence of rim sherds and the size of the wall sherds precluded any determination of whether the original vessels were plain or might have had any decorative patterns.

Fired Clayballs

Utilizing an Excel spreadsheet of artifacts, it was determined that a total of 74 fired clayballs weighing 138.5 grams were recovered during excavations at 41FB269.

West Section Lithics, Pottery and Fired Clayballs

A total of ten lithic artifacts were recovered from the West section of the site (HAS Report No. 25, Part 1, 2007: Figure 3.1). Nine pits (AA, AI, AM, BD, BE, DA, EA, EB and EC) were excavated in this section, with five pits (AA, AK, BD, BE, and EC) yielding eight artifacts. The ninth artifact was a surface find: a utilized unifacial flake with a waxy luster weighing 5.3 grams. Another unifacial flake, weighing 10.3 grams and possibly used as a scraping tool, was recovered from a shovel test in the southwest corner of Pit EC. One pottery sherd was found in level one of Pit AI during excavations in this section. In addition to the excavated pits, 81 metal detector/shovel tests were completed in this section. While no pottery was recovered from those tests, one secondary flake weighing 3.3 grams

was recovered. A total of 38 clayballs weighing 101.8 grams was recovered during excavations in this section: seven from Pit EC weighed 72.2 grams, eight from Pit BE weighed 11.7 grams, and 22 from Pit DA weighed 17.9 grams.

East Section Lithics, Pottery, and Fired Clayballs

Ninety-nine lithic artifacts were recovered from the East section of the site (HAS Report No. 25, Part 1, 2007: Figure 3.2). Fifty-six pits were excavated in this section. A re-touched, notched tool (possibly a spoke shaver) was a surface find. A small, heavily-patinated biface, possibly a preform for a small dart point, was recovered from Pit S, and a chert cobble with cortex was found in Pit AL. The greatest concentration of lithics, consisting of six pieces weighing 20.7 grams, was recovered from Pit Q: three primary (with cortex) flakes measuring 25-30mm square, two secondary (one 20-25 and the other 25-30 mm square) and one interior flake measuring <15 mm square. In addition to lithic artifacts, eight pottery sherds were recovered from three pits in this section. Two pottery sherds were recovered from the cistern, one from Pit AS, four from Pit AU, and one from Pit BH. Thirty-six small fired clayballs weighing a total of 37.7 grams were recovered in this section.

Summary and Conclusion

A total of 192 prehistoric artifacts was recovered from the site. One hundred and nine lithic artifacts, including a utilized, waxy-luster unifacial flake, a heavily-patinated biface that may be a preform for a small dart point, a re-touched notched tool (possibly a spoke shaver), and a possible scraping tool. No projectile points were found. Nine small Goose Creek pottery wall sherds, as well as seventy-four clayballs, were also recovered. While a greater number of prehistoric artifacts were recovered from the upland (east section) area, the scarcity of prehistoric artifacts suggests only a trace of occupation across the site, while the presence of Goose Creek pottery would suggest that Indians occupied this inland southeast Texas site sometime after AD 500.

References Cited

- Aten, L.E.
1983 *Indians of the Upper Texas Coast*. Academic Press, New York.
- Aucoin, E.K., P.R. Castro, S.M. Kindall, and R.T. Shelby
2007 *The Elizabeth Powell Site (41FB269) Fort Bend County, Texas*.
Houston Archeological Society, Report 25, Part 1, Houston.
- Handbook of Texas contributors
2001 Pottery, *Handbook of Texas Online*, s.v. "."
<http://www.tsha.utexas.edu/handbook/online/articles/PP/lpp1.html> (accessed
November 1, 2007).
- Hudgins, J.D.
1993 *Cooking with Clayballs*. The Cache 1:47-52, Texas Historical Commission.
- Patterson, L.W.
1995 *Prehistoric Earth Ovens in Southeast Texas*. Houston Archeological Society
Journal 121: 1-13.
- Simon & Schuster
1979 *Webster's New Twentieth Century Dictionary*. Simon & Schuster, New York.
- Suhm, Dee Ann and Edward B. Jelks
1962 *Handbook of Texas Archeology Type Descriptions*. The Texas Archeological
Society and the Texas Memorial Museum, Austin.
- Turner, Ellen S. and Hester, Thomas H.
1999 *A Field Guide to Stone Artifacts of Texas Indians*. Gulf Publishing Company, Houston.
- Whittaker, John C.
1997 *Flintknapping: Making and Understanding Stone Tools*. University of Texas Press,
Austin.





