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Material Culture Associated with *Frolic*'s Crew

Based on historical evidence, it is known that provisions for the *Frolic*'s trip from Canton to San Francisco included rice, potatoes, bread, sugar, honey, vinegar, pork, dried fish, flour, eggs, capons, fowls, geese, pigeons and pigs. None of these items have survived in the marine environment, but there is some evidence for how these items would have been cooked and served through the tablewares recovered from the shipwreck site. Faucon also purchased "a barrel of wine, twelve dozen bottles of porter, eight dozen bottles of beer, four boxes of cider, several dozen bottles of brandy, and an unspecified number of bottles of gin" (see Chapter 6) (Layton 1997:137). Finding a corollary between the artifacts we know from historical evidence and those uncovered archaeologically is a challenge for maritime archaeology (see Chapter 4). More difficult are attempts to distinguish between personal objects belonging to the crew and items of the cargo. Despite this difficulty, however, artifacts' character as personal effects and cargo can help archaeologists understand the ship and its crew, as well as its place within wider social dynamics.

Consumption of Food and Drink

A number of artifacts were associated with the consumption of food and drink aboard the *Frolic*. Although most of these artifacts consisted of tablewares and utilitarian ceramic vessels, there were also a variety of glassware, containers, and cutlery.

Ceramics

The ceramics associated with *Frolic*'s crew included earthenware, both coarse and refined, porcelain and stoneware in a variety of decorations and forms (see Tables 10 and 11). Earthenware was low-fired (600-1200 Celsius) ware that was opaque and porous, meaning it must be glazed in order to contain liquids (Brooks 2005:30). Earthenware was a broad category, and for clarification, was divided into coarse earthenware (redware and yellowware) and refined earthenware (ironstone and whiteware). This division was deemed important analytically for illustrating how different types of earthenware were used at the table versus in the kitchen, or in this case the galley.

Table 10. Ceramics associated with *Frolic*'s crew by ware, type of ware, decoration, pattern of decoration, MNV and percentage of MNV.

Ware	Type	Decoration	Pattern	MNV	Percentage of MNV
Coarse Earthenware	Redware	Lead-glazed	Undecorated	1	4.17
		Slipware	Linear	1	4.17
	Yellowware	Rockingham-type	Moulded	1	4.17
	Unidentified	Glazed	Unknown	3	12.5
		Unglazed	Undecorated	1	4.17
Porcelain	French	Undecorated	Undecorated	1	4.17
Refined Earthenware	Ironstone	Transfer printed	Unidentified	4	16.67
	Whiteware	Transfer printed	Unidentified	5	20.83
	Unidentified	Unidentified	Unidentified	3	12.5
Stoneware		Glazed	Undecorated	2	8.33
		Salt-glazed	Undecorated	2	8.33
Total				**24**	**100**

Table 11. Ceramics associated with *Frolic*'s crew by form and ware type.

	French	Redware	Yellowware	Unidentified	Ironstone	Unidentified	Whiteware		
Bowl							1		
Plate	1				1	1	1		
Platter					1				
Saucer							1		
Sugar Pot					1				
Teacup						1			
Teapot						1			
Jug		1							
Storage Vessel		1		2				3	
Serving/preparation vessel			1						
Mug								1	
Holloware							1		
Pitcher/Ewer					1				
Handle				2					
Unidentified							1		
Total	**1**	**2**	**1**	**4**	**4**	**3**	**5**	**4**	**24**

Earthenware

Redware is a generic term used to describe a large variety of red, coarse bodied earthenware that was typically used for utilitarian storage vessels, but was sometimes manufactured into tablewares and teawares (Brooks 2005:32). *Frolic*'s redware, shown in Figure 49, included one lead glazed rim fragment from a jug and three black slipware sherds, including a rim fragment, from a storage vessel. Regarding the jug/jar Smith (2006:56) believes that the rim fragment of the jug was actually an amphoretta-shaped jar used to hold liquids such as oil.

Yellowware, on the other hand, is technically considered a refined earthenware, but it is often grouped with coarse earthenware because it was typically used for storage jars and other types of utilitarian vessels, although other forms like bowls, teapots and chamber pots did occur (Brooks 2005:34). Yellowware is usually characterised by a yellow or buff body with a clear glaze. However, all of the yellowware in the *Frolic* collection (see Figure 50) was of the Rockingham-type, which is noted by its reddish-brown, mottled glaze that often appears as though it has been dripped onto a vessel (Brooks 2005:41). *Frolic*'s yellowware included three body sherds with a moulded feather and leaf pattern and three handle fragments, one of which exhibits the butt end of a crouching dog. Based on colour and glaze similarities, however, it is believed that all of the yellowware fragments came from a single serving/food preparation vessel. This sort of vessel was pragmatic because it was a dual use ceramic vessel, used both for preparing food in the kitchen, in this case the galley, and for serving food at the table (Robert Mazrim pers. comm., 25 November 2008)

Frolic's refined earthenware, on the other hand, consisted of both whiteware and ironstone, and according to Smith (2006:56), during the 2004 artifact collection on the shipwreck site, all of the Staffordshire whiteware and ironstone ceramics were found in the stern and were probably part of the officers' mess. Whiteware is a general term traditionally used to refer to a white bodied, clear glazed earthenware that was not a single product or ware type, but rather the end product of the gradual reduction of cream and blue tinted glazes, such as that found on creamware and pearlware (see Chapter 4) (Brooks 2005:34; Mazrim 2008b). The term 'whiteware' is problematic because, as an archaeological construct, it is used to refer not to a single ware type, but to an important development in ceramic manufacture: the production of ceramics with a clear glaze that by the 1830s were mass-produced in a full range of primary colours and forms, including tablewares, teawares and toiletwares (Brooks 2005:34; Mazrim 2008b).

Figure 49. Lead-glazed redware and linear slip redware from the *Frolic* shipwreck (Artifact Numbers CA.MEN.1947.H.05.20041.003 [right] and CA.MEN.1947.H.03.063 [left]; courtesy PAST Foundation).

Figure 50. Rockingham-type yellowware serving/food preparation vessel from the *Frolic* shipwreck (Artifact Numbers CA.MEN.1947.H.07.004 [top left], CA.MEN.1947.H.05.33 [top right], CA.MEN.1947.H.07.003 [bottom left] and CA.MEN.1947.H.05.335 [bottom right]; courtesy PAST Foundation).

Ironstone, on the other hand, is a thick-bodied, high-fired variant of whiteware that was an affordable imitation of Chinese porcelain, designed for those who could not otherwise afford Chinese porcelain (see Chapter 4) (Fisher 1970:15; Miller 1991:9-10). Charles James Mason was credited with the coining of the term 'ironstone' in 1813, even though other manufacturers did produce ironstone before and after this date (Brooks 2005:30; Hume 2001:225; Miller 1991:9). Ironstone was also referred to as 'stone china' and was manufactured in the same forms and decorations as that

of whiteware. Ironstone is only distinguishable from whiteware by its denser, more vitrified, and less porous body (Brooks 2005:31).

All of *Frolic*'s ironstone and whiteware were transfer printed (see Chapter 4) in varying shades of either green or blue, according to at least four decorative styles and a multitude of forms. The first of these decorative types included an unidentified whiteware decorated with a green transfer printed foliage design. Little can be ascertained about this ceramic piece other than it was found in the stern, and thus likely belonged to the officers' mess.

The second of these decorative types, shown in Figure 51, included an ironstone pitcher or ewer decorated in a light blue landscape scene, possibly a variation of Rhine. The second decorative type, depicted in Figure 52, consisted of a whiteware saucer and unidentified hollowware, likely a teacup, decorated in an unidentified blue floral pattern. The last decorative type, and the most intriguing, belonged to a set of whiteware and ironstone tableware decorated in a very similar pattern, albeit in three different shades of blue with varying detail in style, as shown in Figure 53. Since a manufacturer usually only produced one type of ware at a time (see Chapter 4), and because this set was composed of both ironstone and whiteware, it follows that at least two, maybe three, different manufacturers produced it. The ware type, as an archaeological construction used to track changes in refined earthenware production over time, was not important to consumers who purchased these in the past (Mazrim 2008b). Instead, consumers likely would have focused on matching decoration and form.

Figure 51. Ironstone pitcher or ewer decorated in a light blue variation of Rhine from the *Frolic* shipwreck (Artifact Number CA.MEN.1947.H. 03.067; courtesy PAST Foundation).

Figure 52. Unidentified whiteware hollowware decorated in a blue transfer floral pattern from the *Frolic* shipwreck (Artifact Number CA.MEN.1947.H. 05.128; courtesy PAST Foundation).

Figure 53. Various Ironstone and whiteware tableware decorated in a similar *Chinoiserie* pattern in varying shades of blue from the *Frolic* shipwreck (Artifact Numbers CA.MEN.1947.H.03.072, CA.MEN.1947.H.05.134, CA.MEN.1947.H.05.135, CA.MEN.1947.H.05.723, CA.MEN.1947.H.01/047 [top left to top right], CA.MEN.1947.H.05.133, CA.MEN.1947.H.03.065, CA.MEN.1947.H.12.001 [middle left to middle right], CA.MEN.1947.H.01.007, CA.MEN.1947.H.05.338, CA.MEN.1947.H.10.129, CA.MEN.1947.H.05.132 [bottom left to bottom right]; courtesy PAST Foundation).

Although the name of the decorative style was not identified (see Coysh and Henrywood 1982), it is generally consistent with that of a *Chinoiserie* pattern, which is characterised by design elements commonly found in Chinese porcelain designs but tailored to suit Western tastes (Williams 2008; Mudge 1986). The three shades of blue varied from a blue, a dark blue and a purplish blue.[4] Because the appeal of

[4] It was first thought that the colour differences between the ceramics

transfer printing derived from being uniform in colour and design across pieces in a set, the colour and detail differences suggest that some of these ceramics were produced in different factories. *Frolic*'s ironstone and whiteware assemblage is interesting because it exemplifies how manufacturers often copied each other's designs, albeit sometimes with slight variation, in this case of colour and detail. A lack of copyright laws protecting ceramic decorations before the late 1840s ensured that ceramic manufactures could copy the designs of their peers with impunity, and even after the 1840s copying remained commonplace for some time (Brooks 2005:44; Coysh and Henrywood 1982: 10-11).

As for form, this whiteware and ironstone set consisted of a minimum of one ironstone plate, a sided platter, and a sugar pot, as well as one whiteware bowl, a plate, a saucer and unidentified hollowware item (see Table 4)[5]. It is possible that a set of either ironstone or whiteware was initially purchased and that additional pieces were purchased to replace broken ones. It is also possible that more tableware pieces were purchased as different forms became available in the consumer market. In either case, it is clear that despite having slight variations in transfer printing colour and detail (i.e. produced by different manufacturers), they are the remains of a nearly matching formal dinner service, illustrative of the availability of similar patterns and choice in form available to consumers at the time. Overall, the ironstone and whiteware associated with *Frolic*'s crew was not particularly unusual for the time because transfer printed ceramics like these were popular, affordable and readily

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might relate to the fact that these ceramics were photographed with two different cameras, but because there were three different shades of blue, the two cameras could not account for the differences in three colours. In order to test this, a sample of the bright and dark blue ceramics were imported into *Adobe Photoshop*, and working on the assumption that the white background would have been a constant between cameras and artifacts, I tried to adjust the color on one or the other. One ceramic could not look like the other without significantly altering the background color.

[5] The distinction of whiteware versus ironstone in this assemblage was difficult because I only had access to photographs. In order to assist with this distinction I contact historical archaeologist Robert Mazrim of the Sangamo Archaeological Center in Illinois, who has extensive experience in ceramic identification. We determined that those ceramics with a denser and thicker body were ironstone.

available to American consumers (see Chapter 4) (e.g. Brighton 2001; Brooks 2005; Yamin 2001; Wall 1994).

Porcelain

Porcelain identifiable as belonging to the crew was not of Chinese manufacture, but French, and consisted of a minimum of one undecorated plate (see Figure 54). Porcelain, unlike earthenware, was fired at a very high temperature resulting in vitrification of the body. French Porcelain, however, was considered soft-paste porcelain, not a true porcelain like Chinese porcelain, and as such it was only partly vitrified (Mudge 1962:47; Fisher 1970:7). French porcelain was developed as an alternative to Chinese porcelain as the demand for European porcelain production increased during the late eighteenth and nineteenth centuries. As an alternative to, rather than an imitation of, Chinese porcelain, French porcelain was considered high quality and was correspondingly quite expensive. Most French porcelain produced during the nineteenth century was decorated with a band of gold gilding, but because the gold gilding was not sealed under the glaze, the band quickly deteriorated. (Robert Mazrim, pers. comm., 25 November 2008). In this way, most French porcelain wares that have been recovered from nineteenth century contexts and appearing undecorated were most likely decorated with an original band of gold gilding, despite the tendency not to see this archaeologically (Robert Mazrim, pers. comm., 25 November 2008).

Stoneware

Stoneware was also a highly fired ware (1200-1250 Celsius) that was vitrified but opaque, usually having a grey, buff or brown glazed coloured body, although other colours like white, black, buff and red did occur (Brooks 2005:33). *Frolic*'s stoneware was of the commonest type – salt-glazed stoneware. Salt-glazed stoneware was made by throwing salt onto ceramic vessels in a hot kiln, where it vaporises and combines with silica in the ceramic body to form a shiny finish. When finished baking, salt-glazed stoneware is characterised by its orange peel pitted appearance (see Figure 55) (Fisher 1970:19). *Frolic*'s stoneware consisted of a minimum of three storage vessels and one grey, salt-glazed mug with a cordoning treatment on its base.

Figure 54. French porcelain plate fragment from the *Frolic* shipwreck (artifact Number CA.MEN.1947.H.05.356; courtesy PAST Foundation).

Figure 55. Utilitarian stoneware vessel fragments from the *Frolic* shipwreck (Artifact Numbers CA.MEN.1947.H.16.046 [right], CA.MEN.1947.H.07.001 [centre] CA.MEN.1947.H.05.222 [left]; courtesy PAST Foundation).

Glassware and Containers

A number of glassware and containers have been found that are associated with the consumption of food and drink by *Frolic*'s crew. Historical documents indicate that Captain Faucon purchased "a barrel of wine, twelve dozen bottles of porter, eight dozen bottles of beer, four boxes of cider, several dozen bottles of brandy, and an

unspecified number of bottles of gin" (Layton 1997:137). As many of these alcoholic beverages would have been packaged in glass bottles, it is expected that the containers would have been found archaeologically. At the same time, however, owing to the common practice of reusing bottles (see Chapter 4), it is difficult to determine whether the glass bottles that have been recovered archaeologically belonged to the crew or to the cargo (see Chapter 7). It is similarly difficult to ascertain the specific contents of reused bottles that are recovered archaeologically because shape and colour was not always indicative as to contents. Based on historical evidence showing the purchase of several alcoholic beverages packaged in bottles by Captain Faucon, it seems reasonable to expect that some of the archaeologically recovered bottles belonged to the crew. Based on a low frequency of occurrence, at least one type of bottle base and bottle finish can be associated with *Frolic*'s crew, however, it is unclear whether the bases and finish were of the same bottle type. Two base fragments were characterised by a flat bottom (see Figure 56), while one finish had a rounded lip and rounded string rim. Historical evidence does indicate that Faucon purchased a variety of bottled alcoholic beverages for the voyage (see Chapter 6), and according to Smith (2006:58), at least the rounded lip fragment was part of a wine bottle.

Other glassware associated with the crew included one nearly complete flint glass cruet-style bottle, as shown in Figure 57, with an accompanying finial closure and pewter frame. Cruet bottles were used at the table for condiments like oil or vinegar, and they were often presented on the table in some sort of decorative frame (Newman 1977:82-83; Jones and Sullivan 1989:133). Because the upper lines of the cruet bottle are not symmetrical but rather have a free-flowing form, it was most likely free blown by its manufacturer (see Jones and Sullivan 1989:22). The bottle has a large rounded string rim and a straight finished, fire polished lip that is slightly chipped. The frame consists of three circular bands encased in one larger band with an incised line, forming the shape of a triangle with rounded corners. The interior circular bands would have fit three bottles. The cruet-style stopper was made of clear flint glass, like the cruet bottle, and has a ground, round shank with a finial top. The finial has five points radiating outwards from the centre, four to the sides and one upwards.

Figure 56. Flat bottle base fragment (Artifact number CA.MEN.1947.H.05.238; courtesy PAST Foundation).

Figure 57. Cruet bottle from the *Frolic* shipwreck (Artifact Number CA.MEN.1947.H.05.394; courtesy PAST Foundation).

At least two wine glasses were also associated with the crew: one represented by a complete wine glass and another represented by a partial six-sided stem (no photograph available in the *Frolic* artifact database). The stem was mould blown and attached to a free-formed flat foot and ovoid or cup-like bowl (see Jones and Sullivan 1989:27).

Closures

The assemblage contained three closures belonging to an unidentified type of bottle and one decanter stopper. Two of the unidentified bottle closures were made of clear glass with an unidentified finial top and shank (no photograph provided). Another stopper made of leather and pewter also had an unidentified function. Its finial top has a brass handle for ease of pulling the stopper out of a bottle. The closure associated with the decanter was made of clear glass (no photograph or description available for further identification). Furthermore, although a complete decanter was not found on the shipwreck, the presence of a decanter stopper suggests that it was on board the ship.

Miscellaneous

Other miscellaneous artifacts associated with food and drink consumption included at least three crushed metal cans (likely for some sort of canned foodstuff), one pastry crimper, two pewter plates, one pewter saltshaker lid, several spigots for barrels and a variety of cutlery. Of particular note, Layton has indicated the cutlery marked with the Western makers' marks "Yates" and "PMFa" (see Figure 58) (referred by Layton as "BMFa") as belonging to the crew, not the cargo. If this is the case then there were at least three spoons and four forks identified as crew cutlery. The forks, however, were questionable, because they were marked with an unidentified maker's mark – "1Y&SQ." According to Crossman's (1991) discussion of Chinese silversmiths working in Canton during the mid-nineteenth century, this was not a known Chinese silversmith's mark, and probably represents an unidentified Western manufacturer.

Also of note are two pewter plates (Figure 59), at least one of which had a thin incised line around its outer rim, were recovered from the *Frolic* shipwreck. Pewter tablewares are considered a "missing artifact" in archaeology because they were durable and, as such, were not often discarded (Martin 1989:1). If they were discarded because they undergo varying degrees of decomposition in the ground, little archaeological trace remains (Martin 1989:2).

Figure 58. Detail of spoon with maker's mark "PMFa" from the *Frolic* shipwreck (Artifact Number CA.MEN.1947.H.07.092; courtesy PAST Foundation).

Figure 59. Pewter plate from the *Frolic* shipwreck (Artifact Number CA.MEN.1947.H.16.032; courtesy PAST Foundation).

By the 1770s the popularity of pewter tablewares had declined, partly as a result of the emergence of ceramics that were fashionable, but also because pewter was durable and its use continued until the early nineteenth century, sometimes being used alongside more fashionable ceramics (Martin 1991:1-27). By the mid-nineteenth century, however, pewter continued to decline in the face of more affordable and fashionable ceramic tablewares (Martin 1991:1-27). In consideration of pewter tablewares' relative unpopularity, their presence aboard *Frolic* may be partly explained by their durability and corresponding usefulness on a working ship. Another possible explanation for the pewter plates aboard the *Frolic* relates to their relative unfashionability compared to ceramics in Victorian society. As officers and seamen came from different socio-economic classes, and, as fashion would have

played a role in this status-conscious socialisation, the crew would have considered fine ceramics to be less important at sea than the officers, instead opting for the more durable pewter wares (see Cembrola 1984:89).

Clothing and Personal Belongings

Personal belongings, such as clothing (buttons, buckles and fabric), are often difficult to positively attribute to either the cargo or the crew, and in many cases they may actually have been a combination of the two (Staniforth 2006:36; Stanbury 2003:167-177). An unidentified iron buckle fragment (Figure 60) and nine buttons (six brass, two silver and one ceramic) have been attributed to *Frolic*'s crew based on their low frequency of occurrence. Three of the brass buttons had an eye fastener attachment, while another three brass buttons were characterised by a 4-hole attachment. Two plain silver buttons also had an eye fastener attachment. The ceramic button, on the other hand, had a 4-hole attachment. Though it cannot be ascertained what type of clothing these buttons adorned, it seems that the silver button probably adorned the clothing of someone of means, most likely an officer.

Figure 60. Buckle fragment from the *Frolic* shipwreck (Artifact Number CA.MEN.1947.H.03.152; courtesy PAST Foundation).

The *Frolic* artifact collection also included two shoehorns. Layton has suggested that at least one shoehorn belonged to a crew member, because it carried an inscription of a Chinese character meaning "good fortune" inside a ship's wheel. Shoehorns were known to have been made in China (see Crossman 1991:374), and if Layton's interpretation is correct, then it seems fair to say that at least one of the shoehorns was purchased in China by a member of the crew. According to Barabara Voss

(2008:46-47), it was common practice for the Chinese who lived in communities and tenement buildings to use peck markings and engravings to mark their personal ownership of objects to signify blessings or wishes. If this shoehorn did belong to a member of the crew, and since a shipboard life entails tight living quarters, then it may have been engraved with this blessing in order to signal its ownership as belonging to specific member of *Frolic*'s crew.

The *Frolic* shipwreck also yielded several coins. Because *Frolic*'s cargo did not consist of any specie, unlike the shipwreck *Rapid*, these coins likely belonged to the crew. While coins such as these are often used to date an archaeological site, in the instance of *Frolic*'s wrecking historical evidence provides greater certainty of the wrecking date than the use of such coins could offer. *Frolic*'s coins included one VOC coin dated to 1823, while a Chinese coin dated to circa 1850. A Spanish silver dollar dated to 1836. Five coins were minted by the EIC, with one dating to 1825 and two dating to 1845, one of which is a half-cent piece. The dates imprinted upon the EIC coins were illegible. All but the 1825 EIC coin have Queen Victoria on one side, with laurels and a crest on the obverse. Since Queen Victoria ascended to the throne in 1837, the coins with the illegible dates must have been minted after this time.

Several personal belongings associated with writing activities were found on the shipwreck *Frolic*. These included one crushed inkwell cap that exhibits ink staining on the interior and one wax seal made of stone. The wax seal does exhibit a stamp, although it could not be identified. Wax seals were made in China and the finest were made to order (see Crossman 1991:297). They were very popular with ships' captains and supercargoes, and it is likely that, since this was the only wax seal in the collection, it probably belonged to someone in the crew who was literate, perhaps an officer, even though it may have been purchased in Canton.

At least three brass and pewter clips were also found on the *Frolic* shipwreck. One moulded pewter clip is adorned with an unidentified decorative design. The other two clips are made of brass and moulded in the shape of a female hand adorned with a detailed lace cuff. The decoration seen all three of the clips was emblematic of a wider preference in Victorian fashion for items of intricate decor. At least the hand-shaped clip could have been mounted on a wall via a single hole on the base behind the hand. The base is inscribed "J&B Ratcliff Patentees Birmingham," though no information about this inscription could be found. The function of these clips is uncertain but likely they were used to hold paper. However, since at least one of the

decorative styles of clips could have been wall mounted, it may also have been used to hold any number of objects like hats or gloves.

A final type of personal belonging associated with *Frolic*'s crew consisted of three pocket watches. One of these watches exhibits an engraving with a series of swirls and flowers, along with an illegible cursive inscription. Another watch still retains its glass bezel and a marble or stone face. It was debatable whether these pocket watches were attributable to the crew or the cargo. Because the collection included more than one pocket watch and because silver pocket watches were relatively expensive (see Thompson 1967), they may have been part of *Frolic*'s sundries and merchandise cargo. However, *Eveline*'s invoice does not list pocket watches as part of its cargo. Moreover, no reference has been found suggesting that pocket watches were manufactured in China at this time. Thus, the presence of three pocket watches is more likely attributable to the crew. Although many people owned pocket watches by the nineteenth century (see Thompson 1967), and indeed some of the crew may have as well, these items remained prohibitively expensive. Their high price, as well as their usefulness to the officers' task of keeping track and ordering the labours of the crew (Chapter 9), makes it more plausible that these watches belonged to officers rather than to ordinary crew members. In this way the pocket watches are emblematic of a global shift from task-oriented societies to more labour-oriented forms of social organisation based on the temporal compartmentalisation of labour (Chapter 2).

Medicinal

A number of medicinal items were also recovered from the *Frolic* shipwreck (see Table 12). Some of these may have been carried in the ship's medicine chest, while others may have been the personal property of individual crew members. Among these items were at least eight medicine bottles. Judging by their shape and size alone, these bottles were most likely contained medicinal concoctions, though owing to the lack of legible patent markings, it is uncertain as to what type of substances these bottles contained.

Table 12. Medicinal related artifacts by count, MNA and Percentage of MNA.

Medicinal		Count	MNA	Percentage of MNA
Bottle	Clear Glass	5	3	13.64
	Green Glass	4	3	13.64
	Light Green Glass	3	2	9.09
Bottle Closures	Brass	1	1	4.55
	Clear Glass	3	3	13.64
	Cork	3	3	13.64
	Lead	2	2	9.09
	Light Green Glass	2	2	9.09
Mercury Container	Lead	3	2	9.09
Urethra Syringe	Composite	3	1	4.55
Total		**29**	**22**	**100**

Eleven closures associated with medicinal functions were also found on the wreck site. These included a small brass cap for a tube, two lead closures, three clear glass stoppers, two light green glass stoppers and three small, round medicinal or phial corks. One of the corks was stamped with two line of text, reading "IRE…S" and "…EBLANCH," respectively, but no identification could be ascertained about the meaning of this text. The lead closures were associated with the treatment of syphilis, as discussed below.

The two mercury containers, as well as one lead lid and one lead plug for a syringe hole in a lid, one nearly complete urethra syringe and two replacement dowels for the syringe, were associated with treating syphilis. The mercury container was round with a square base and had two hollow shafts on either side. The lead lid had a slanted hole by which a curved syringe could access the container without removing the lid. The plug for the hole was to prevent spillage.

Syphilis was a venereal disease commonly referred to as "the pox" (Quétel 1990:3). It first appeared in Europe during the late fifteenth century and was feared more than the plaque or leprosy, because it was something new, it was highly contagious, it had a variety of painful symptoms and it was fatal (Quétel 1990:4). According to Baker and Armelagos (1997:1-2), there are three different hypotheses regarding the origin of syphilis. The first of these states that syphilis originated in the New World and

came to Europe during Columbus's return trip to Europe in 1493. The second hypothesis argues that syphilis was present in Europe before Columbus's voyage of discovery, but its symptoms had not been differentiated from leprosy (Baker and Armelagos 1997:1). The third hypothesis covers the middle ground by advocating that syphilis was present in both the Old and New Worlds, but it did not become epidemic until contact was made between the two. Despite the debate on its origin, it is widely accepted that by the end of the fifteenth century syphilis was a major medical problem amongst all classes of people, especially sailors, and it continued to be into the twentieth century (Baker and Armelagos 1997:5). Urethra syringes are not uncommon on shipwreck sites (e.g. Sullivan 1986:87)

As early as the sixteenth century, mercury was used to treat syphilis. This treatment method was used into the nineteenth century when its effectiveness was eventually questioned (Quétel 1990:4). In 1905, it was discovered that syphilis was caused by a pathogenic agent, but syphilis was only rendered treatable after the discovery of penicillin in 1928 by Scottish scientist, Alexander Fleming (Quétel 1990:6-7).

Although *Frolic* likely carried a ship's medicine chest, which usually consisted of tubes of medicine (see Delgado 1990), the presence of more than one mercury container and at least one complete urethra syringe, along with two other dowels suggests, that these items were part of the cargo rather than belongings of the crew. Excavations at Hoff's store in San Francisco did reveal that a variety of Chinese medicine was sold to consumers; however, none of these items were part of a syphilis kit. Additionally, no medicinal items appear in *Eveline*'s invoice, suggesting that the syphilis treatment assembly must have belonged to a member of the crew or the ship's medicine chest.

Tools and Instruments

A number of tools and instruments from the *Frolic* shipwreck were associated with the crew (see Table 13). Though many of these were fragmentary, they were identifiable due to their unique characteristics. Additionally, though similar items have been found in the Hoff's store deposit (see Delgado 1990), it is likely that these items belonged to the crew and were not intended for the San Francisco markets because tools and instruments such as these were commonly used aboard ship (see Collinder 1955).

Several of these tools and instruments were associated with navigation and some of them were necessary for the successful operation of the ship, including a bottom profiler, a chronometer, a compass, and an inclinometer. Other items were associated with tracking and charting a ship's position, such as a bevel, a chart tube, two dividers, a parallel ruler, a quadrant and fragments of a telescope. All of these items required training and knowledge in order to use them properly, and it is likely that they were used by the officers, rather than ordinary seamen, who often had little formal education. The ruler, on the other hand, was a carpenter's ruler, which also would have required specific knowledge of math and geometry for woodworking. As for the brass lamps and lantern, these likely would have been used at night, either as part of the watch or below decks, possibly when the officers and crew were served dinner.

Table 13. Tools and instruments by count, MNA and Percentage of MNA.

Type	Count	MNA	Percentage of MNA
Bevel	1	1	5.88
Bottom Profiler	1	1	5.88
Chart Tube	1	1	5.88
Chronometer	1	1	5.88
Compass	2	1	5.88
Dividers	2	2	11.76
Inclinometer	1	1	5.88
Lantern	3	1	5.88
Oil Lamp	10	3	17.65
Oil Lamp Wick	1	1	5.88
Parallel Ruler	1	1	5.88
Quadrant	1	1	5.88
Ruler	1	1	5.88
Telescope	2	1	5.88
Total	**28**	**17**	**100**

Conclusion

Frolic's crew used a wide variety of consumer goods, both as part of daily shipboard life and for the successful operation of the ship. As regards the consumption of food and drink aboard *Frolic*, a variety of coarse earthenware and stoneware utilitarian vessels, a number of refined earthenware and French porcelain, pewter plates, wine

glasses, a decanter, a salt shaker, a cruet set and a variety of cutlery were associated with the officers and crew. The redware serving/food preparation vessel would have served a dual use, both in the galley and at the table, and reflects pragmatism. The French porcelain and refined earthenware in particular reflect wider trends American in consumer society and changing fashions in ceramics. The refined earthenware in particular is an example of the appearance of a wide variety of ceramics that were both affordable and fashionable to consumer society. The ironstone and whiteware decorated in the *Chinoiserie* pattern also refect consumer choice, in that they are the remains of a nearly matching formal dinner service, illustrative of the availability of similar patterns and forms to consumers in many places. Despite the breadth of consumer choice reflected in the archaeological record, the refined earthenware was not particularly unusual for the time. The pewter plates, on the other hand, were more unusual because pewter had begun to loose its appeal by the second half of the nineteenth century (see Chapter 4). It is likely that the pewter plates were associated with the crew, rather than the officers, and their use reflects a preference for their durability and corresponding usefulness on a working ship. Food and drink consumption aboard the ship also involved a number of additional props, including wine glasses and a wine decanter, a cruet set and a salt shaker, as well as a variety of cutlery. Though it is likely that most of these additional props were used by the officers rather than the crew, the different types of dinnerwares likely reflect officers' and crew members' different socio-economic status, as well as consumer choice in durability over fashionability for the crew.

As for the personal belongings associated with *Frolic*'s crew, although it is difficult to identify any one item as belonging to a specific individual amongst the crew, a few can be identified as probably belonging to one of the officers, including a silver button the pocket watches and several stationary related.

The medicinal items associated with *Frolic*'s crew were not unusual to find aboard a ship, as most ships normally carried medicine chests. While syphilis was a common ailment during the nineteenth century, especially amongst sailors, it is not uncommon to find a syphilis syringe on an historical site. What is unusual is the presence of more than one mercury container as well as a number of replacement dowels.

The tools and instruments, on the other hand, were objects that required training and knowledge of how to use them, though not everyone on the crew knew how to use them. The officers were the most likely to know how to use navigational instruments.

Again, none of the tools and instruments were unusual to find on ships, and many of them were necessary for the successful operation of the ship.