CLAY TOBACCO PIPES

by

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INTRODUCTION

The clay tobacco pipes discussed in this chapter were recovered during excavations of the Golden Eagle Hotel site, Sacramento, California, during the summer of 1979. The excavations were carried out by the Cultural Resources Facility of the Sonoma State University Anthropological Studies Center, under the supervision of Adrian and Mary Praetzellis.

Forty-one clay tobacco pipe specimens (and one content sample) were recovered. The dates of deposition of the three discrete features from which pipe specimens were recovered (features 8, 15, and 20) have been determined through ceramic and glass analysis, as well as documentary sources. Details of these features, their associations, and their dates are included as table 13.1.

HISTORY

The design of the European clay tobacco pipe was most likely derived from pipes fashioned by Indians on the east coast of North America during the latter part of the 16th century (I. Noel Hume 1963:261). Smoking clay pipes became extremely popular (and probably fashionable) by the 1620s, and clay tobacco pipe manufacture rose accordingly.

Some expensive, and often elaborate, pipes were made of Meerschaum or porcelain, but the inexpensive, white, ball-clay pipes (like those in this collection) enjoyed the widest popularity. The Chamber's Encyclopedia, for example, described the style as "too well known to need description" (1890:661). The cost of manufacturing the pipes was so slight that "the commoner kinds can be retailed at a profit for a farthing each" (Encyclopaedia Britannica 1885:111). White clay pipes were fragile and, because of their low cost, were readily disposed of when chipped or worn.

The ordinary clay pipe was first solely imported from pipe-making centers in England (Brosely, Staffordshire; and Amesbury, Wiltshire), but American production began in 1820. The earliest recorded manufacturer was Thomas Smith of the city of New York in 1847. The high tariff during the Civil War stimulated further manufacturing (Encyclopedia Americana 1971:108).

By 1885, a number of machines had been devised for automatic pipe-molding. Clay pipes were so inexpensive to make by hand, however, that there was little need to mechanize the industry when other manufactories were undergoing change (Encyclopaedia Britannica 1885:111).

The first part of the operation is performed by trained children, who, with nice skill, roll out upon a board a small piece of clay into a long slender cylindrical rod, at the end of which is then attached a lump of clay, just enough to form the bowl. These rudimentary pipes are arranged by dozens on a board until they have become sufficiently hardened. Then they are handed to the pipemaker, who takes a pointed iron wire, and first dipping it
into oil, pushes it into the end of the thin column of clay, and having passed it through, forms the bowl with a folding brass mould. The wire is then withdrawn; and after a slight dressing with a knife, the pipes, now complete, are slightly curved in the stem, and are laid by to dry for a few days, when they are removed to the kiln.... When thoroughly baked, they undergo a kind of polishing or dressing, and are fit for sale (Chamber's Encyclopaedia 1890:661).

During the second half of the 19th century, the first briars and wooden pipes were introduced, but clay pipes continued to be manufactured, in increasingly modest amounts, into the 20th century.

INTERPRETIVE VALUE OF PIPES

Clay tobacco pipes share some of the characteristics that have made ceramics an important tool for dating archaeological sites: frequent changes in form and decoration, short term of use, and ability to survive over long periods of time. Because of these qualities, clay tobacco pipes are being increasingly for dating purposes wherever they occur in archaeological contexts. In fact, Ivor Noel Hume claimed that, "Of all the European objects of the colonial period that survive in the ground, the (Clay) tobacco pipe best fulfills the archaeological requirements of datable evolution and short life" (1963:261).

Throughout the 17th and 18th centuries, the clay tobacco pipe underwent stylistic changes on the bowl and the stem (I. Noel Hume 1963; Fowler 1965). The earliest European pipes, which were probably molded by hand, had small bowls and relatively short stems. According to I. Noel Hume, this small bowl most likely reflected the "scarcity and high price" of tobacco (1963:261). Later, during the late 17th and early 18th centuries, clay tobacco pipes were commonly produced in hand molds. Through time, the bowls became larger, while their stems became longer. As the stem lengthened, a thinner wire was needed to penetrate it.

J. C. Harrington, while working with a collection of clay tobacco pipe fragments from excavations at Jamestown, was the first to notice that, "the length of the stem seem[ed] to bear a very definite relationship to the period of manufacture" (1978:63). Stem lengths, however, are not suitable for dating purposes, as whole stems are rarely found on archaeological sites. Harrington then recognized that the stem-hole diameters consistently followed a trend from early, larger holes to later, smaller holes. His chart (1978:64) showing the time periods to which each measurement (from 4/64" to 9/64") applied has proven to be a useful guide to dating sites, but there are limitations to the use of this method.

First, only stem fragments of English origin are amenable to this scheme; pipes from France, Holland, Scotland, and elsewhere do not follow the consistent lessening of stem-hole diameters. Secondly, and of more concern here, the usefulness of Harrington's system breaks down after 1780. There is, after all, a minimum size to which the hole diameter can be reduced before the pipe becomes non-functional. After 1780, stems become shorter and bore diameters become larger without any consistent trend.
The usefulness of Harrington's technique on sites with English stem fragments during the period between 1620 and 1780 has encouraged attempts to elaborate upon this method (Binford 1962). A lively discussion of this technique has been carried out in the literature (Chalkey 1955; Hanson 1971; A. Noel Hume 1963; Omwake 1956; Walker 1965).

Although Harrington's technique is of limited use on 19th-century sites, the measurement of bore diameters was carried out on the sample of clay tobacco pipes from the Golden Eagle in case of future developments.

Use of pipe makers' marks can also serve as a dating technique, but again, there are limitations for 19th-century sites. Humphrey noted that the popularity of the clay tobacco pipe "neatly overlaps the Industrial Revolution with its radical social and economic changes" (1969:13). Prior to the advent of mass-produced pipes, pipemakers usually marked their products with established symbols or initials (Humphrey 1969:13). After large-scale production became the norm, however, these established marks were either discontinued or plagiarized. A good example of this copying is the widely used "TD" pipe. The "TD" mark was, most assuredly, the original maker's initials, dating perhaps to the middle of the 18th century; by the 19th century, however, this mark had become synonymous with a type of pipe. Walker noted that, "'The use of initials as marks was an entirely informal affair in England, unlike the strict registration of marks at Gouda, the centre of the Dutch pipemaking industry, where marks can be bought and sold, willed and inherited" (1966:86). Thus makers' marks are an unreliable means for dating, especially after the 18th century. Decorated, inexpensive clay pipes, which became very popular in the mid-19th century, could form a datable class if more research into their origins and more comparative archaeological data were available.

Few reports have been published on clay tobacco pipes from 19th-century sites, and most of the collections for which data are available were not recovered from reliably dated contexts. Thus, no useful chronology for 19th-century pipes has yet been formulated. Fortunately, the majority of clay tobacco pipes from the Golden Eagle site were recovered from temporally well-controlled deposits; as such, they offer a significant contribution to the development of a reliable comparative framework for this important artifact type.

The emphasis in clay-pipe analysis to date has been placed on chronology, yet the popularity of the pipes and the wide variety of pipe styles suggest potential for behavioral interpretations of archaeological deposits. Demography is one obvious variable: where clay pipes are found, men were certainly present. Insight into 19th-century manners can also be revealed: In what contexts did smoking occur, and where is evidence of smoking absent? There is insufficient information at present on the relative cost of different pipe types; further research on this subject might allow interpretations of the socioeconomic status of smokers represented in a site, as well as the value an individual may have placed on different pipe types. Changes in pipe styles through time may give a picture of changing attitudes, including, in the interesting case of patriotic pipes described here, political sentiments. Some marked specimens in the Golden Eagle collection indicate broad trade networks. Further correlation of pipe styles with place of origin can yield considerable information regarding 19th-century trade, as clay pipes were apparently imported in quantity from a variety of manufacturers.
DESCRIPTIONS

The specimens within this small collection represent a wide variety of pipe types. No complete all-clay pipes were recovered from the site, and only one complete detachable-stem bowl was found. Twenty-five specimens, representing about 60 percent of the total sample, were recovered from contexts to which fairly reliable dates have been assigned (see table 13.1). All pipe specimens are described below; only those specimens from datable deposits are considered in the discussion.

Pipes in the collection were classified into two distinct groups: (1) dark clay pipe bowls, also known as "elbow bowls," designed for use with detachable stems, usually of reed; and (2) all-white ball-clay pipes. Bowls and stems were measured (tables 13.2 and 13.3).

DETACHABLE-STEM PIPES

The three bowls in this group each represent a different pipe style. One partial bowl and three related fragments (79-17-21-50) were found in Area I (pl. 13.1c). They were made of reddish clay and the bowl has no mark or heel. No date of manufacture has been determined for this specimen; it may have been manufactured in France (Pfeiffer personal communication 1980). A complete bowl (79-17-74-31) was found in Feature 15 (pl. 13.1a). It was made of a medium-brown clay, exhibits no marks or special features, and is of a type that was manufactured in the Ohio River Valley (Pfeiffer personal communication 1980).

A partial bowl in this group (79-17-53-167), recovered from Feature 15, is smaller than the other two bowls and has a thick, brown glaze inside and out (pl. 13.1b). There is a rather prominent spur on the heel of this bowl and a small nodule on the base near the point at which the stem would have been inserted. This nodule may have served as a catch. Although its origin is uncertain, this pipe also may have been manufactured in the Ohio River Valley (Pfeiffer personal communication 1980).

ALL WHITE BALL-CLAY PIPES

Fifteen bowls or bowl fragments of this group were recovered. The group is represented by four distinct types: (1) plain-bowl pipes, (2) fluted pipes, (3) "TD" pipes, and (4) the roulette pipe. In addition, 23 stem fragments, several of which bear makers' marks, were recovered.

Plain-Bowl Pipes

One nearly complete plain-bowl pipe (79-17-59-113) was found in Feature 15 (pl. 13.1e). The bowl is oval, with vertical burnishing marks culminating at the heel; on the heel is a small and somewhat streamlined spur. The bowl and the stem meet at a slightly obtuse angle. The mark "Gisclon/M.E./a Paris" is impressed at a right angle into the stem. The Gisclon company was in operation before 1859 until 1895 (Walker 1971:31). Also, on the stem is a section of horizontal ribbing, banded at each end.

A plain fragment (79-17-82-123), also recovered from Feature 20, represents the rear (away from the smoker) portion of the bowl. It is entirely
<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Preeminent Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>c.1867-1870</td>
<td>Blacksmith Shop; Golden Eagle Hotel</td>
<td>Feature 8</td>
</tr>
<tr>
<td>c.1874-1878</td>
<td>Saloon; Oyster Bootmaker</td>
<td>Feature 15</td>
</tr>
<tr>
<td>c.1868-1873</td>
<td>W. Cromin; Hotel</td>
<td>Feature 20</td>
</tr>
<tr>
<td>c.1858-1870</td>
<td>Barber Shop</td>
<td>Brick-timber pit</td>
</tr>
<tr>
<td>c.1857-1860</td>
<td>Restaurant; Golden Eagle Hotel</td>
<td>Brick-timber pit</td>
</tr>
</tbody>
</table>

Summary of Dated Features

TABLE 13.1
<table>
<thead>
<tr>
<th>Volume</th>
<th>Width</th>
<th>Length</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.2cc</td>
<td>2.07cm</td>
<td>2.06cm</td>
<td>2.45cm</td>
</tr>
<tr>
<td>7.0cc</td>
<td>2.27cm</td>
<td>2.36cm</td>
<td>2.00cm</td>
</tr>
<tr>
<td>6.0cc</td>
<td>1.8cm</td>
<td>2.01cm</td>
<td>2.70cm</td>
</tr>
<tr>
<td>8.5cc</td>
<td>0.3cm</td>
<td>2.62cm</td>
<td>4.16cm</td>
</tr>
<tr>
<td>9.5cc</td>
<td>2.1cm</td>
<td>2.90cm</td>
<td>3.90cm</td>
</tr>
<tr>
<td>7.1cc</td>
<td>3.25cm</td>
<td>2.0cm</td>
<td>3.70cm</td>
</tr>
<tr>
<td>8.8cc</td>
<td>1.5cm</td>
<td>2.50cm</td>
<td>3.8cm</td>
</tr>
</tbody>
</table>

**TABLE 13.2**

Measurements unavailable

**CTD Bowls:**

- 79-77-65-9114
- 70-72-59-115
- 70-77-65-9114
- 79-77-65-9114
- 70-72-59-115
- 79-77-65-9114
- 70-72-59-115
- 79-77-65-9114
- 70-72-59-115
- 79-77-65-9114
- 70-72-59-115

**All Clay Bowls**

- 79-77-65-9114
- 70-72-59-115
- 79-77-65-9114
- 70-72-59-115
- 79-77-65-9114
- 70-72-59-115

**Detachable Stem Bowls:**

- 79-77-75-115
- 79-77-75-115
- 79-77-75-115
- 79-77-75-115
- 79-77-75-115
- 79-77-75-115
<table>
<thead>
<tr>
<th>Stem Fragments:</th>
<th>Length</th>
<th>Width</th>
<th>Bore Diameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plain</td>
<td>3.56cm</td>
<td>.65cm</td>
<td>6/64&quot;</td>
</tr>
<tr>
<td>a) 79-17-5-24</td>
<td>3.02cm</td>
<td>.74cm</td>
<td>5/64&quot;</td>
</tr>
<tr>
<td>b) 79-17-19-7</td>
<td>3.00cm</td>
<td>.73cm</td>
<td>5/64&quot;</td>
</tr>
<tr>
<td>c) 79-17-53-0</td>
<td>3.92cm</td>
<td>.75cm</td>
<td>5/64&quot;</td>
</tr>
<tr>
<td>d) 79-17-53-16</td>
<td>3.75cm</td>
<td>.74cm</td>
<td>5/64&quot;</td>
</tr>
<tr>
<td>e) 79-17-53-169</td>
<td>4.00cm</td>
<td>.75cm</td>
<td>5/64&quot;</td>
</tr>
<tr>
<td>f) 79-17-81-126</td>
<td>4.35cm</td>
<td>.74cm</td>
<td>5/64&quot;</td>
</tr>
<tr>
<td>g) 79-17-82-126</td>
<td>4.25cm</td>
<td>.75cm</td>
<td>5/64&quot;</td>
</tr>
<tr>
<td>h) 79-17-86-83</td>
<td>4.25cm</td>
<td>.74cm</td>
<td>5/64&quot;</td>
</tr>
<tr>
<td>i) 79-17-86-85</td>
<td>4.25cm</td>
<td>.75cm</td>
<td>5/64&quot;</td>
</tr>
<tr>
<td>j) 79-17-91-17</td>
<td>4.34cm</td>
<td>.78cm</td>
<td>5/64&quot;</td>
</tr>
<tr>
<td>k) 79-17-91-13</td>
<td>4.32cm</td>
<td>.74cm</td>
<td>5/64&quot;</td>
</tr>
<tr>
<td>Plain w/burned area</td>
<td>4.74cm</td>
<td>.68cm</td>
<td>5/64&quot;</td>
</tr>
<tr>
<td>m) 79-17-U/S-5</td>
<td>4.74cm</td>
<td>.68cm</td>
<td>5/64&quot;</td>
</tr>
<tr>
<td>Impressed w/McDoughall (left)</td>
<td>4.11cm</td>
<td>.90cm</td>
<td>5/64&quot;</td>
</tr>
<tr>
<td>n) 79-17-22-1</td>
<td>1.05cm</td>
<td>.75cm</td>
<td>4/64&quot;</td>
</tr>
<tr>
<td>Impressed w/McDoughall (right)</td>
<td>7.44cm</td>
<td>.62cm</td>
<td>5/64&quot;</td>
</tr>
<tr>
<td>o) 79-17-29-10</td>
<td>1.07cm</td>
<td>.88cm</td>
<td>5/64&quot;</td>
</tr>
<tr>
<td>With yellow glaze (uneven)</td>
<td>1.50cm</td>
<td>.88cm</td>
<td>5/64&quot;</td>
</tr>
<tr>
<td>p) 79-17-27-208</td>
<td>2.58cm</td>
<td>.88cm</td>
<td>5/64&quot;</td>
</tr>
<tr>
<td>With raised 355 on left</td>
<td>3.25cm</td>
<td>.88cm</td>
<td>5/64&quot;</td>
</tr>
<tr>
<td>q) 79-17-28-9</td>
<td>2.58cm</td>
<td>.88cm</td>
<td>5/64&quot;</td>
</tr>
<tr>
<td>Impressed w/DAVI (left)</td>
<td>3.25cm</td>
<td>.88cm</td>
<td>5/64&quot;</td>
</tr>
<tr>
<td>r) 79-17-12-109</td>
<td>3.25cm</td>
<td>.88cm</td>
<td>5/64&quot;</td>
</tr>
</tbody>
</table>

**TABLE 13.3**

Stem Measurements:

- **Length**: Measured from the base to the tip of the stem.
- **Width**: At the widest part of the stem.
- **Bore Diameters**: Measured at various points along the stem (e.g., at the mouth, halfway up, etc.).
<table>
<thead>
<tr>
<th>Stem Fragments</th>
<th>Length</th>
<th>Width</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impressed w/Dumortil s</td>
<td>2.34 cm</td>
<td>.81 cm</td>
<td></td>
</tr>
<tr>
<td>Depose a St. Omer t</td>
<td>3.45 cm</td>
<td>.78 cm</td>
<td></td>
</tr>
<tr>
<td>Impressed w/Gambier paris u</td>
<td>3.35 cm</td>
<td>.61 cm</td>
<td></td>
</tr>
<tr>
<td>Raised w/GQUD v</td>
<td>4.81 cm</td>
<td>.58 cm to .54 cm (top)</td>
<td></td>
</tr>
<tr>
<td>79-17-82-120 w</td>
<td>3.99 cm</td>
<td>.60 cm</td>
<td></td>
</tr>
<tr>
<td>79-17-22-31 x</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 13.3, continued
without markings. Another plain fragment (79-17-53-166) consisted of a small portion of the bowl and a fragment of the stem. The spur, which is completely broken off, appears from the evidence remaining to have been rather prominent. There are no marks on this fragment, which was recovered from Feature 15.

**Fluted Pipes**

One oval-shaped bowl and partial stem (79-17-53-165) from Feature 15 is covered with a brown glaze inside and out (pl. 13.1d). Twelve fluted panels decorate the bowl, extending from the top and narrowing until they meet on the stem. The bowl is set at a very slight, obtuse angle to the stem; the stem bears the impressed mark, "Gisclon/M.E./a Paris."

Two very small, fluted bowl fragments (79-17-48-42 and -49-12) were recovered from Area VI, an undated context. Between the flutes on each specimen is a thin, raised line.

**Roulette Pipe**

This collection has only one specimen (79-17-82-120) of this pipe type, reconstructed from several fragments recovered from Feature 20. The plain bowl fragment has very crude rouletting impressed along the rim. On the base of one fragment, a *fleur-de-lis* is found in the area where the spur is usually placed (pl. 13.2e). Its matching stem is impressed with the mark "Gambier/Paris/*/M" at a right angle (pl. 13.2h). The Gambier firm had branches in Paris and Givet, France (Walker 1971:30).

**"TD" All-White Ball-Clay Pipes**

Two sub-types of the TD pipe appear in the collection. The first is the plain TD, represented by three specimens which vary slightly in the size and shape of the mark and in their overall dimensions (see table 13.2). The second type is more elaborate; in addition to the TD mark, specimens bear decorations of stars and, in some cases, leaves. The type belongs to that class which Humphrey (1969:25) termed, "The 13-Star Patriotic Pipe."

Plain TD Pipes. One bowl (79-17-34-24) is plain except for a crude "TD" impressed on the front, facing the smoker (pl. 13.1g). The mark appears to have been stamped on, and a circular impression encloses it. The height of the "TD" mark is .61cm. The mold line has been burnished off the bowl, but it reappears along the large spur. This specimen was recovered from Area VI.

Another specimen (79-17-53-164), recovered from Feature 15, is similar to the one above, with the same burnishing of the mold line (pl. 13.1f). The mark, although crude, is larger (.81cm in height) and more distinct than that described above.

A TD bowl (79-17-83-72) was recovered from Feature 8 (pl. 13.1h). Unlike the specimens above, the "TD" mark on the front of this specimen is raised, and the two letters are of unequal size: the "T" measures
.62cm in height and .66cm in width, while the "D" measures .70cm in height and .54cm in width. The mold lines have been crudely flattened along the bowl but are burnished more completely along the stem. The bowl is narrow and tall, sitting at a slightly obtuse angle to the stem; a very small spur is located on the heel. The top of the bowl is broken. The bowl contained what is assumed to have been its original contents, although this material was not analyzed.

Patriotic TD Pipes. One bowl recovered from Area VI (79-17-48-41) has a raised "TD" mark facing the smoker with 13 six-pointed, raised stars encircling it; seven stars are on the right, and six are on the left of the mold line (pl. 13.2b). The diameter of the star circle is 2.17 cm. A ring of 13 raised stars encircles the rim of the bowl. No attempt to burnish the mold lines appears to have been made. Some extremely crude representations of leaves join the rear mold line, extending from the spur to the rim. The spur is small and flat.

Another patriotic pipe bowl (79-17-59-115), recovered from Feature 15, bears a slightly larger star circle (2.27cm) (pl. 13.2a). The mold line on the front of this specimen has been flattened, and a crude leaf motif has been added to the rear line. The stars are extremely worn but appear to have had five points. On a bowl fragment (79-17-82-122), the stars are also quite worn, and the number of stars points cannot be determined. This fragment was found in Feature 15.

A striking variation of the patriotic bowl was recovered from Feature 15 (79-17-59-114). The front of the bowl had broken off, but the missing fragment was recovered nearby (pl. 13.2c). The bowl is cross-hatched, except for the raised leaves along the rear mold line and the ring of stars along the rim of the bowl. The TD mark is encircled by 13 six-pointed stars and both the mark and the stars are set off from the cross-hatching by a raised circle with a diameter of 2.00cm. A prominent mold line runs through the center of the mark.

A front bowl fragment (79-17-82-121) was recovered from Feature 20 (pl. 13.2d). It has a raised TD mark encircled by 13 six-pointed stars. Stars also encircle the rim. The mold line that runs through the TD mark is prominent. Diameter of the star circle is 2.00cm.

MARKED PIPE FRAGMENTS

Nearly half of the Golden Eagle pipe collection consists of all-clay pipe fragments that are too small to classify. Several of these bear makers' marks or decorations that may serve to identify them in the future.

On a small portion of a bowl and stem fragment (79-17-41-54), a rather large spur is still attached, with the number 4 raised on the left side. The mold line, which has been completely removed from bowl and stem, appears along the spur. This specimen was found in Area VI.

One stem fragment (79-17-12-109) has "DAV..." impressed on one side and "...ASGOW" impressed on the other (pl. 13.2i). It was most likely manufactured by the Davidson firm located in Glasgow, Scotland. This
firm was established about 1861-62, when Davidson bought out Murray, the previous owner (Walker 1971:25). The fragment was recovered from Area I.

Another stem fragment (79-17-22-31), from Area II, has the raised mark "GOUD..." on one side (pl. 13.2f). Half of the fragment is decorated with swirl lines and raised dots. This fragment may be from a pipe made in imitation of those manufactured by Peter Dorni, who worked in northern France around 1850. Pipes from this firm were so popular that "they were widely imitated by pipe-makers of Gouda, Holland..." (Oomweke 1965:130).

One very wide stem fragment (79-17-28-9) has a raised "355" on the side (pl. 13.2m). It was recovered from Area VI.

Two stem fragments (79-17-29-10, -11) recovered from Area VI, have the mark "McDougall" impressed on one side and "Glasgow" on the other (pl. 13.2j and k). The McDougall firm was in operation in Scotland from about 1846 to 1967.

A stem fragment (79-17-82-119) found in Feature 20 is impressed with "Dumeril/St. Omer/Depose" at a right angle to the stem (pl. 13.2g). The Dumeril company, located in St. Omer, France, operated from 1845 to 1895.

A very small fragment (79-17-27-208) from Area VI has a small amount of sporadic, yellow glaze.

UNMARKED FRAGMENTS

Two end stem fragments representing different types were recovered from the Golden Eagle site.

One specimen (79-17-82-124), recovered from Feature 20, is plain white and unglazed. The round stem becomes flattened toward the end, and a raised bit has been added, giving it an oar-shaped appearance (pl. 13.21). The other round fragment (79-17-82-125) does not flatten toward the end; an added, raised bit gives it the appearance of the end of a baseball bat (pl. 13.2n).

Twelve plain, center stem fragments were recovered from the following contexts: Area II, unstratified (1); Area I (2); Feature 15 (3); Feature 8 (1); Feature 20 (4); and Area VI (1).

DISCUSSION

The small sample of clay pipes from the Golden Eagle Hotel features and the paucity of comparative data from 19th-century sites place severe restrictions on analysis. Some interesting patterns are revealed, however, which might be tested in future excavations.

The collection as a whole displays great variety. No two pipe fragments recovered from the datable features are alike, with the exception of the plain stem fragments. The TD all-clay pipes represent the largest type in the collection, but each specimen shows slight variation in the size of the mark and other attributes, indicating different dates of manufacture or points of origin.
PLATE 13.1

a) Complete "elbow bowl"
b) Partial "elbow bowl" with spur; brown glaze in and out
c) Partial "elbow bowl;" red clay
d) Fluted pipe with Gisclon/M.E./a Paris impressed into stem
e) Plain white pipe bowl with stem decoration and Gisclon/M.E./a Paris impressed into stem
f) Pipe bowl with impressed "TD"
g) Pipe bowl with impressed "TD"
h) Pipe bowl with raised "TD"
PLATE 13.2

a) "Thirteen-star Patriotic Pipe" bowl
b) "Thirteen-star Patriotic Pipe" bowl
c) "Thirteen-star Patriotic Pipe" bowl with cross-hatching
d) Front bowl fragment with raised stars and "TD" mark
e) "Fleur-de-lis" on base of bowl fragment
f) Stem fragment with raised lines and dots and GOUD mark
g) Stem fragment with Dumeril/a St. Omer/Depose impressed
h) Stem fragment with Gambier/Paris/®M impressed
i) Stem fragment with impressed DAVI mark
j) Stem fragment with impressed McDougall mark
k) Stem fragment with impressed GLASGOW mark
l) End fragment; oar shaped
m) Stem fragment with raised 355
n) End fragment; baseball-bat shaped
Within the total collection, pipes from France, Holland, and Scotland are represented, as well as specimens from the United States, specifically the Ohio River Valley. This variety suggests that Sacramento pipe retailers were involved in a broad trade network. It also implies that tobacco smoking was extremely popular in California at this time: a great number of men must have smoked to provide the impetus for such broad importation. Personal preferences were obviously at play as well.

The portability of pipes introduces a variable not present among other artifact types in the total Golden Eagle collection (with the exception of buttons and, possibly, leather): the hotel, and presumably the nearby oyster saloon, catered to guests from throughout the country and, possibly, foreign countries as well. A comparison of the Golden Eagle pipe collection with those from Sacramento sites which had more sedentary occupants would be valuable.

The overwhelming majority of pipes in the collection were of the all-clay group: only two detachable-stem pipe bowls were recovered from datable features (and only one additional specimen from a non-datable area). The abundance of all-clay pipes in the collection is probably related to their very low cost; they would be more readily discarded when chipped or worn. Another reason for discarding clay pipes was suggested in an encyclopedia of 1890. Referring to briar pipes, it was stated, "...although the stem is short, they partially absorb the oil produced in smoking which, however, is perhaps as much the case with the common clay pipe when it is new" (Chamber's Encyclopaedia 1890:661). All-clay pipes may have been kept only as long as they gave a clean-tasting smoke. There is some indication, however, that this type was cherished by individuals, as suggested by the following anonymous poem cited in Walker (1971:86-88):

You may take your meerschaum with amber bit,
And the briar too—for not one whit
Will I miss them after a day or two;
But without the other I could not do,
For some bond hold us, don't you see?—
I never could part with my old 'T.D.'
A bond of friendship that seems to grow
With the years that come, and the years that go:
A something mingling our lives in one—
Old tasks performed, new works begun
And sometimes musing I sit and think,
What binds us fast in this friendly link?
While then, in answer it seems to say—
'Old pal, we both have been formed from clay.'
Then I understand how it comes to me,
This love I bear for my old 'T.D.'

Certain pipes for certain people, apparently, represented extremely personal property.

The relative cost of the detachable-stem pipe is not known. Whether it represents a more expensive and permanent pipe, less likely to be lost, is not certain. One possibility may be that the detachable-stem pipe was restricted for use in a context not represented by the hotel features.
The same individual might have used both types, smoking only the all-clay variety when dining out or on a voyage. Perhaps more valuable types, such as the Meerschaum and even the detachable-stem pipe, would have been left at home to prevent loss. Again, collections from differing site types within the Sacramento area might elucidate this question.

DISCUSSION OF PIPES BY FEATURE

The distribution of pipes by feature, shown in table 13.4, shows a marked contrast in the amount of pipe use for different areas of the Golden Eagle site. Most notable is the complete absence of pipes in Feature 6, a deposit built up beneath the floor of the Golden Eagle Oyster Saloon. As this feature was only partially excavated, however, no conclusions can be drawn.

Feature 8

Feature 8 is also notable for the negative information it contained. Only one TD pipe bowl and a non-diagnostic plain stem were recovered from this feature.

Feature 20

This feature, associated with the Golden Eagle Hotel restaurant, yielded a number of pipe specimens, suggesting that it may have been the fashion for men to smoke after a meal. The date of this feature, c. 1860 by glass terminus post quem, and the presence of a patriotic pipe specimen in this feature, raises the relationship of this kind of pipe with patriotic sentiments surrounding the Civil War. Patriotic pipes were found in abundance (approximately one-quarter of the pipes in stock) in a Sacramento warehouse dating to 1852 (Butler 1979:30), suggesting that the pipes might instead have related to an earlier period. Support of the American, or "Know Nothing," Party at this time in California, which derived from various patriotic, secret societies such as the Order of the Star Spangled Banner, may instead be reflected.

Feature 15

Evidence from analysis of other artifact types has suggested that Feature 15 may represent, in part, the results of a cleanup of the boot-maker's premises prior to the opening of the oyster saloon. Pipe specimens recovered from this feature could support this hypothesis. The only examples of the detachable-stem pipe were recovered from this area. One of these was a complete bowl, presumably still usable. The presence of this pipe type in Feature 15 may represent a functional difference between the two types in the collection. Early refuse from the site apparently resulted from a workshop and, earlier, a barbershop. It may be that detachable-stem pipes were smoked in a place of business or with other men at the barbershop, but not when dining out.

Several patriotic TD pipes (three of the four specimens from datable contexts) appear in Feature 15. Their co-occurrence in Feature 20, deposited 10 years earlier, supports the hypothesis that much of the material in Feature 15 represented cleanup prior to renovation.
<table>
<thead>
<tr>
<th>Feature 8</th>
<th>Feature 20</th>
<th>Feature 15</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALL CLAY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 TD bowl</td>
<td>1 bowl w/rouletting</td>
<td>1 plain bowl w/stem</td>
</tr>
<tr>
<td>1 fleur de lis bowl</td>
<td>1 Gisclon (plain)</td>
<td>1 Gisclon (fluted)</td>
</tr>
<tr>
<td>(Gambier)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 plain stem</td>
<td>1 Patriotic bowl</td>
<td>1 TD</td>
</tr>
<tr>
<td>1 Dumeril</td>
<td>2 Patriotic</td>
<td></td>
</tr>
<tr>
<td>4 plain stems</td>
<td>1 Patriotic w/cross-hatching</td>
<td></td>
</tr>
<tr>
<td>1 plain stem (oar)</td>
<td></td>
<td>3 plain stems</td>
</tr>
<tr>
<td>1 plain stem (bat)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| DETACHABLE STEM          |                                        | 1 partial bowl              |
|                          |                                        | 1 complete bowl             |

13-16
Although answers to most of the questions regarding pipes in the 19th century await further research, the data from the Golden Eagle pipe collection suggests that archaeologically recovered pipe collections have interpretive value beyond dating of deposits. The data presented here, and future reports, may also aid in developing a much-needed chronological framework in which to compare pipes uncovered from other 19th-century sites. Twenty-five specimens, representing about 60 percent of the total sample, were recovered from contexts to which fairly reliable dates—ranging from the late 1850s to the mid-1870s—have been assigned. Using this information as a starting point, tighter chronological controls for pipes uncovered from 19th-century sites may be promulgated.
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