



DAACS Cataloging Manual: Tobacco Pipes

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DAACS Cataloging Manuals document how artifacts, contexts, features, objects and images are cataloged into the DAACS database. They provide information not only about artifact identification but also about how each database field is used and how data should be entered into that field.

The DAACS database was developed by Jillian Galle and Fraser Neiman, in collaboration with members of the [DAACS Steering Committee](#). Jillian Galle and DAACS Staff, Leslie Cooper, Lynsey Bates, Jesse Sawyer, and Beatrix Arendt, led the development of cataloging protocols. In addition to DAACS staff and steering committee members, Monticello current and former Archaeology Department staff, Fraser Neiman, Jennifer Aultman, Sara Bon-Harper, Derek Wheeler, Donald Gaylord, Karen Smith, and Nick Bon-Harper also contributed to the development of cataloging protocols. Jennifer Aultman and Kate Grillo produced the initial versions of these DAACS manuals in 2003. They have been substantially revised by Cooper, Galle, and Bates in the intervening years.

1. TOBACCO PIPE MATERIAL TABLE	4
1.01 ARTIFACT COUNT	4
1.02 COMPLETENESS.....	5
1.03 MATERIAL.....	5
1.04 MANUFACTURING TECHNIQUE	5
1.05 PASTE COLOR	6
1.06 NON-PLASTIC PASTE INCLUSIONS	6
1.07 MENDED?	6
1.08 DECORATION?	6
1.09 TEXT MARK?	6
1.10 GLAZE TYPE.....	6
1.11 GLAZE COLOR	6
1.12 NOTE ABOUT BURNING	6
2. MEASUREMENTS	7
2.01 STEM LENGTH.....	7
2.02 EXTERIOR STEM DIAMETER	7
2.03 METRIC BORE DIAMETER.....	7
2.04 64THS BORE DIAMETER.....	7
2.05 BOWL HEIGHT	7
2.06 MAXIMUM BOWL DIAMETER.....	7
2.07 BOWL RIM DIAMETER	7
2.08 BOWL VOLUME.....	7
2.09 MAXIMUM SHERD MEASUREMENT.....	7
2.10 WEIGHT	7
3. BOWL/MOUTHPIECE INFORMATION	8
3.1 BOWL FORM	8
3.2 BOWL BASE TYPE	8
3.3 MOUTHPIECE FORM	8
4. DECORATION	9

4.1 DECORATIVE MOTIF*	9
4.2 MOTIF MANUFACTURING METHOD	10
4.3 MOTIF LOCATION	10
4.4 NOTES	11
5. TEXT MARK INFORMATION	11
5.1 MARK DESCRIPTION	11
5.2 MARK SPECIFICS	12
6. MANUFACTURING INFORMATION	13
6.1 PIPE MAKER	14
6.2 PRODUCTION DATES	14
6.3 MANUFACTURE LOCATION	14
7. CONDITION	14
7.1 POST-MANUFACTURING MODIFICATION?	14
7.2 CONSERVATION	14
8. SPECIFIC CATALOGING EXAMPLES	14
8.1 IMPORTED KAOLIN PIPES	14
8.2 LOCALLY MADE PIPES	14
8.3 REED/STUB STEM PIPES	15
APPENDIX 1: TOBACCO PIPE BOWL FORMS	16
APPENDIX 2: TOBACCO PIPE DECORATIVE MOTIF	19

1. TOBACCO PIPE MATERIAL TABLE

1.01 ARTIFACT COUNT

Do **not** batch diagnostic tobacco pipe fragments. This includes pipes with decoration, pipes with measurable bore diameters, and fragments with multiple completeness entries (e.g., “Base, bowl”; “Bowl, rim”; “Stem, bowl” etc.)

Please note that new batching rules for all undiagnostic tobacco pipes were implemented on February 8, 2012. Prior to implementation, all undiagnostic pipe fragments that had a maximum sherd measurement greater than 15 mm were individually recorded, measured, and weighed.

The new pipe batching rules are as follows:

Batch undiagnostic tobacco pipe fragments by completeness and size; undiagnostic fragments include split stems where no measurements other than weight can be recorded.

Here is a batching example for bowl fragments: If you had 5 pipe bowl fragments whose max. sherd size were 35 mm:

Count: 5
Completeness: “Bowl Fragment”
Material: “Earthenware, ball clay”
Paste Color: “Not Applicable”
Inclusions: “None”
Manu Tech: “Molded”
Mended?: “No”
Decoration?: “No”
Glaze Type: “No Glaze”
Glaze Color: “Not Applicable”
Mended?: “No”
Decoration?: No
Sherd Weight: Enter weight of the batch in grams (Measurements tab)
Max. Sherd Measurement: 35 mm
Bowl Form: “Unidentifiable” (Bowl/Mouthpiece tab)

Here is a batching example for undiagnostic stems: If you had 3 split stem fragments, each with a max. sherd size of 20 mm:

Count: 3
Completeness: “Stem”
Material: “Earthenware, ball clay”

Paste Color: "Not Applicable"
Inclusions: "None"
Manu Tech: "Molded"
Glaze Type: "No Glaze"
Glaze Color: "Not Applicable"
Mended?: "No"
Decoration?: "No"
Notes: Split stems.
Sherd Weight: Enter weight of the batch in grams.
Max. Sherd Measurement: 20 mm (Measurements tab)

1.02 COMPLETENESS

This field records which part(s) of the tobacco pipe you have. For Reed/Stub stem pipes, select one of the Completeness entries with "Mouthpiece" if you have the end of the stem of the pipe intact.

1.03 MATERIAL

The default is "Earthenware, ball clay." The other options are:

"Earthenware, other"
"Ivory"
"Metal"
"Plastic"
"Porcelain"
"Steatite"
"Stone"
"Stoneware"
"Unidentifiable"

Distinguishing imported pipes from locally-made pipes is often quite difficult. For DAACS, any molded, finely made white pipe is catalogued as "Earthenware, ball clay." Earthenware pipes with darker paste colors or inclusions should be called "Earthenware, other."

1.04 MANUFACTURING TECHNIQUE

Choose either:

"Carved"
"Molded"
"Handmade"
"Unidentifiable"

The default is “Molded” – imported kaolin pipes should always be “Molded.” Locally made pipes can be “Molded” or “Handmade.” “Carved” should only be used for stone and ivory pipes.

1.05 PASTE COLOR

The default for ball clay pipes is currently “5Y 9/1, 10Y 9/1.”

For porcelain pipes, select “5Y 9/1, 10Y 9/1.”

For “Earthenware, other” pipes, use the **Paste Color Groups** section of the DAACS Color Book to identify the paste color.

For all other types of pipes (including “Stoneware”), enter “Not Applicable.” Remember to fill out Glaze Type and Glaze Color.

1.06 NON-PLASTIC PASTE INCLUSIONS

Identify any inclusions present in the clay of the pipe. Inclusions are usually only seen in locally-made pipes. For pipes without inclusions, such as imported kaolin pipes, enter “None.”

1.07 MENDED?

Choose “Yes” or “No” depending on the pipe is mended.

1.08 DECORATION?

Choose “Yes” or “No” depending on whether decoration is present.

1.09 TEXT MARK?

Choose “Yes” or “No” depending on whether a text mark is present.

1.10 GLAZE TYPE

Choose from the following list of options: “Lead Glaze,” “Non-Lead Glaze,” “No Glaze,” “Salt Glaze,” or “Unidentifiable.” Most pipes are “No Glaze.”

1.11 GLAZE COLOR

For unglazed pipes, enter “Not Applicable.” For glazed pipes, use the **Detailed Color Groups** section of the DAACS Color Book to identify the color.

1.12 NOTE ABOUT BURNING

Unlike most other artifact types, there is no specific field in DAACS to indicate whether or not a tobacco pipe has been burned. It is assumed that most tobacco pipes will be burned on their interior surfaces. If a tobacco pipe has particularly extensive or otherwise noteworthy burning, enter this information into the Notes.

2. MEASUREMENTS

2.01 STEM LENGTH

Measure the stem length (using digital calipers) of all (non-batched) stem fragments or complete pipes.

2.02 EXTERIOR STEM DIAMETER

Measure (using digital calipers) the exterior stem diameter of any stem fragments or complete pipes.

2.03 METRIC BORE DIAMETER

Measure the metric bore diameter using millimeter drill bits. Enter the size of the largest drill bit that fits through the pipe stem.

2.04 64THS BORE DIAMETER

Measure the 64ths bore diameter using 64ths/inch drill bits. Enter the size of the largest drill bit that fits through the pipe stem. If you have, for example, a bore diameter that measures 4/64ths, only enter in "4" (instead of "4/64").

2.05 BOWL HEIGHT

Using the digital calipers, measure bowl height from the bottom of the base to the top of the rim, if applicable. Otherwise leave blank.

2.06 MAXIMUM BOWL DIAMETER

Using calipers, measure the widest part of the bowl. This measurement can only be taken with complete or nearly complete bowls.

2.07 BOWL RIM DIAMETER

Using calipers, measure the exterior diameter of the rim. This measurement can only be taken with complete or nearly complete bowls.

2.08 BOWL VOLUME

Only measure bowl volume for complete bowls. Fill the bowl with sand, level off the top, and pour the sand from the bowl into a graduated cylinder. Record the volume in milliliters.

2.09 MAXIMUM SHERD MEASUREMENT

Record the maximum size of bowl fragments or batched and split stems using the DAACS cataloging mat.

2.10 WEIGHT

Record weight in grams.

3. BOWL/MOUTHPIECE INFORMATION

3.1 BOWL FORM

The numbers in this field are based on a tobacco pipe classifying system developed by Atkinson and Oswald. See Appendix 1 for the complete list of figures and numbers. If you have a complete or nearly complete pipe bowl, try to find a matching figure in Atkinson and Oswald, and record the corresponding number. If you have a bowl fragment that is only similar to one of the figures, list the Bowl Form as “Variant,” and record in the Notes the corresponding figure.

For every unidentifiable bowl fragment, Bowl Form should be recorded as “Unidentifiable” (not “Missing Information”).

3.2 BOWL BASE TYPE

Record base type for any fragment which includes the pipe’s base.

“Spur”: Thin, pointed “spur” to rest the bowl on. See Bowl Type 6 as an example.

“Heel”: Raised, flattened pedestal to rest the bowl on. See Bowl Types 5, 7, and 13 as examples.

“Flat”: Flattened surface to rest the bowl on. These can be similar to Heeled pipes, but Flat-based pipes do not have the same raised, pronounced heels as Heeled pipes. See Bowl Types 2, 3, 11, and 12 as examples.

“Heel-less”: The pipe has no spur, heel, or flattened surface to rest the bowl on. See Bowl Types 24 and 30 as examples.

“Unidentifiable”: For every unidentifiable base fragment, Bowl Type should be recorded as “Unidentifiable” (not “Missing Information”).

3.3 MOUTHPIECE FORM

Record mouthpiece form for any fragment which includes the pipe’s mouthpiece (Higgins 2000:488).

“Cut”: The mouthpiece is formed by cutting the end of the stem off. The end is left unfinished and no other molded shape is present.

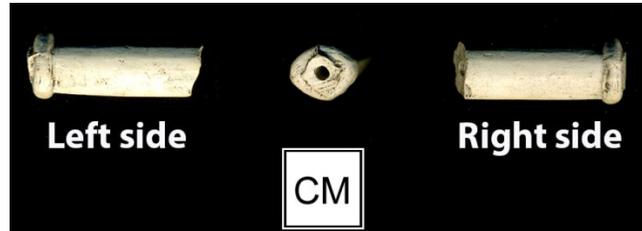
“Rounded”: The mouthpiece is formed in the mold as a simple rounded end.

“Nipple”: A circular sectioned stem that terminates with a molded nipple.

“Diamond Shape”: The stem ends with a diamond-shaped cross section but

without a nipple.

“Diamond Nipple”: Where the stem takes on a lozenge or sharply oval section in shape directly before the nipple.



DIAMOND NIPPLE MOUTHPIECE FROM MORNE PATATE SITE IN DOMINICA

“Flattened Oval”: The stem takes on a flat, oval, section at the tip, without a nipple.

“Reed/Stub Stem”: A stem that ends very near the bowl, with an opening for a long reed to be inserted and used as the pipe stem. See Section 8.3 for a cataloging example of this Form.

“Unidentifiable”: For every unidentifiable mouthpiece fragment, Mouthpiece Type should be recorded as “Unidentifiable” (not “Missing Information”).

4. DECORATION

4.1 DECORATIVE MOTIF*

Choose from the following list. If you have a molded flower, for instance, choose “Botanical” as the Decorative Motif. An incised decoration on a locally-made pipe might be “Geometric.” All decoration should also be thoroughly described in the Decoration Notes field.

Note: Any decorative motif that is a component of a maker’s mark (such as a crown or floral cartouche) should be cataloged in the Text Mark tab, not the Decoration tab.

*See Appendix 2 for example images of decorative motifs.

Decorative Motif	Description
“Anthropomorphic”	Any image showing a human figure or any part of the human body. Examples include a hand/gauntlet, bust, and arm/leg.
“Botanical”	Any botanical, floral, or plant element or elements.
“Coat of Arms”	Includes personal, city, or royal coat of arms.

“Geometric”	Any abstract geometric design. Examples include scallops, dogtooth band, plain band, and diamonds. Most often seen on locally made pipes.
“Other, pictorial”	Graphic representation not covered by any other category. Examples include a fleur-de-lis, heart, cross, and castle.
“Unidentifiable”	Used whenever a decoration is too small or fragmentary to identify.
“Zoomorphic”	Any image showing an animal, either real or mythological.

4.2 MOTIF MANUFACTURING METHOD

Choose one from the following list:

“Agatized”

“Carved”: Only to be used for stone tobacco pipes.

“Incised”

“Molded”

“Punctate”: Piercing that goes completely through the body of the pipe.

“Roulette”: Milled decoration on tobacco pipes should be recorded as Roulette.

“Slipped/Painted”

“Stamped”

4.3 MOTIF LOCATION

Choose one from the following list:

“BA”: On Bowl, facing away from the smoker.

“BB”: Beneath the Bowl when a pipe has neither heel nor spur.

“BC”: On Bowl, circumference of bowl rim.

“BF”: On Bowl, facing smoker.

“BI”: On Bowl, interior Note: this is a rare occurrence. See <http://scpr.co/PDFs/Resources/White%20BAR%20Appendix%204.pdf> for more information.

“BL”: On Bowl, on left hand side as smoked.

“BO”: On Bowl, covering entire bowl.

“BR”: On Bowl, on right hand side as smoked.

“BU”: On Bowl, unidentified location.

“H”: On Base of Heel.

“RS”: Rouletted stem, a continuous band or zone around the stem.

“SA”: On top of the stem, reading along the length of the stem.

“SB”: Decoration located at the juncture of the bowl and stem, most often a continuous roulette band around the stem directly at the stem’s juncture with the bowl.

“SH”: On Sides of Heel.

“SL”: Stamp or decoration along the length of stem, on left hand side as smoked.

“SM”: Multiple individual stamps tight around the stem, as a band or pattern.

“SP”: On Base of Spur.

“SR”: Stamp or decoration along the length of stem, on right hand side as smoked.

“SS”: On Sides of Spur.

“ST”: Stem twist, a specific form of roll stamp forming a spiral of shallow grooves around the stem.

“SX”: On top of the stem, reading across the stem (text encircling the stem).

4.4 NOTES

Describe the decoration.

5. TEXT MARK INFORMATION

Any lettering or marker’s mark on a tobacco pipe should be recorded in the Text Mark Information Tab.

5.1 MARK DESCRIPTION

This field should be used to describe the spatial relationship between multiple marks on a single pipe, or to record the spatial relationship between marks and decoration. Any other information that does not fall into Name, Place Name, or Slogan (see 5.2 below) should be noted in Mark Description. For example, any specific description of frame motif, particularly associated with the maker's mark (such as a crown or floral design) should be included here, rather than in the Decoration tab. Any references to specific designs or manufacturers should be included here.

5.2 MARK SPECIFICS

This is a related table which requires that each part of the text mark is recorded separately if there are multiple types of marks, and/or if the marks or motif occur in different locations on the same pipe.

5.2.1 TYPE OF MARKS

This is the Manufacturing Technique of the text mark. Choose one from the following list:

“Incised”

“Ink/Rubber Stamped”

“Molded”

“Stamped”: Impressed rather than Ink/Rubber Stamped

“Transfer Printed”

5.2.2 TEXT LOCATION

See the Motif Location description (Section 4.2) for the complete listing of abbreviations used in this field. Again, if marks or motifs have different text locations, create separate mark entries.

5.2.3 TEXT FRAME MOTIF

This is the border surrounding the lettering. If there is no border, enter as “Un-Bordered lettering (any arrangement).” Choose others from the following list:

“Circular or sub-circular”

“Crescent”

“Four Lobes”

“Heart-shaped”

“Irregular Border”

“Octagonal”

“Rectangular”

“Shield”

“Square”

5.2.4 FIRST NAME

Enter any lettering on the tobacco pipe exactly as it appears, including partial lettering. If the pipe only has the maker’s initials, enter into First or Last Name field as appropriate. If the cataloger is unsure of a letter or word, a question mark in brackets should be used to denote this uncertainty [?]. This symbol can follow a letter or word, or stand on its own if entirely illegible. If the full name based on an initial or partial letter is known, enter into Mark Notes.

5.2.4 LAST NAME

See above.

5.2.5 PLACE NAME

Enter any lettering on the tobacco pipe exactly as it appears, including partial lettering. Add other information to the **Mark Notes** field (e.g., Glasgow as Place Name on the pipe, with Scotland in Mark Notes).

5.2.6 SLOGAN/OTHER

Any additional text that is not a manufacturer or place name. Enter exactly as it appears.

5.2.7 MARK NOTES

If the full name based on an initial is known, this information should be recorded in the Mark Notes field (e.g., “W stands for William” or “LON was likely LONDON”). If Maker or Manufacturer Location is included in the pipe mark, also record this information in the Manufacturing tab (see below).

6. MANUFACTURING INFORMATION

Record detailed manufacturing information in this tab. In some cases, the details about a pipe's manufacture may be identified from a symbolic mark or decorative motif. If this is the case, record the Manufacturing information available in this tab.

6.1 PIPE MAKER

Record the name of the pipe maker if known.

6.2 PRODUCTION DATES

Record the date range that the manufacturer was producing pipes.

6.3 MANUFACTURE LOCATION

Record the location or locations in which the manufacturer worked.

7. CONDITION

7.1 POST-MANUFACTURING MODIFICATION?

Choose "Yes" or "No." Disregard the "N/A" option.

Post-Manufacturing Modification should be "Yes" when an artifact appears to have been physically modified in order to change its original function. Catalog the object as it would be cataloged in its original form. Enter "Yes" under Post-Manufacturing Modification, and describe in the notes how the object has been modified.

7.2 CONSERVATION

The default is "No Conservation." If the tobacco pipe has been conserved, enter "Yes" into this field and describe the conservation in the Notes (Main tab).

8. SPECIFIC CATALOGING EXAMPLES

8.1 IMPORTED KAOLIN PIPES

Material: "Earthenware, ball clay"

Paste Color: "5Y 9/1, 10Y 9/1"

Inclusions: "None"

Manu Tech: "Molded"

Glaze Type: Usually "No Glaze"

Glaze Color: For unglazed pipes, enter "Not Applicable." For glazed pipes, identify the glaze color using the **Detailed Color Groups** section.

8.2 LOCALLY MADE PIPES

Material: "Earthenware, other"
Paste Color: Identify the paste color according to the **Paste Color Groups**.
Inclusions: Identify the primary inclusion; any other significant inclusions can be recorded in the Notes field.
Manu Tech: Usually "Molded," but can be "Handmade."
Glaze Type: No Glaze
Glaze Color: Not Applicable

8.3 REED/STUB STEM PIPES

Completeness: Choose appropriate completeness for artifact. Reed pipes are not listed as "Complete Pipe" unless the reed stem is intact.
Material: Usually "Earthenware, other"
Paste Color: Identify the paste color using the **Paste Color Groups** if material is Earthenware. Stone pipes should be "Not Applicable."
Inclusions: Identify the primary inclusion; any other significant inclusions can be recorded in the Notes field.
Manu Tech: Usually "Molded"
Glaze Type: "Lead Glaze," "Non-Lead Glaze," "No Glaze," "Unidentifiable." Most reed pipes are either "No Glaze" or "Lead Glaze."
Glaze Color: "Not Applicable" or, if present, identify the glaze color using the **Detailed Color Groups** section.

Measurements Tab

Stem Length: As appropriate for the pipe
Exterior Stem Diameter: As appropriate for the pipe
Metric Bore Diameter: Do not record
64ths Bore Diameter: Do not record
Record all applicable bowl measurements.
Always record weight.

Bowl/Mouthpiece Tab

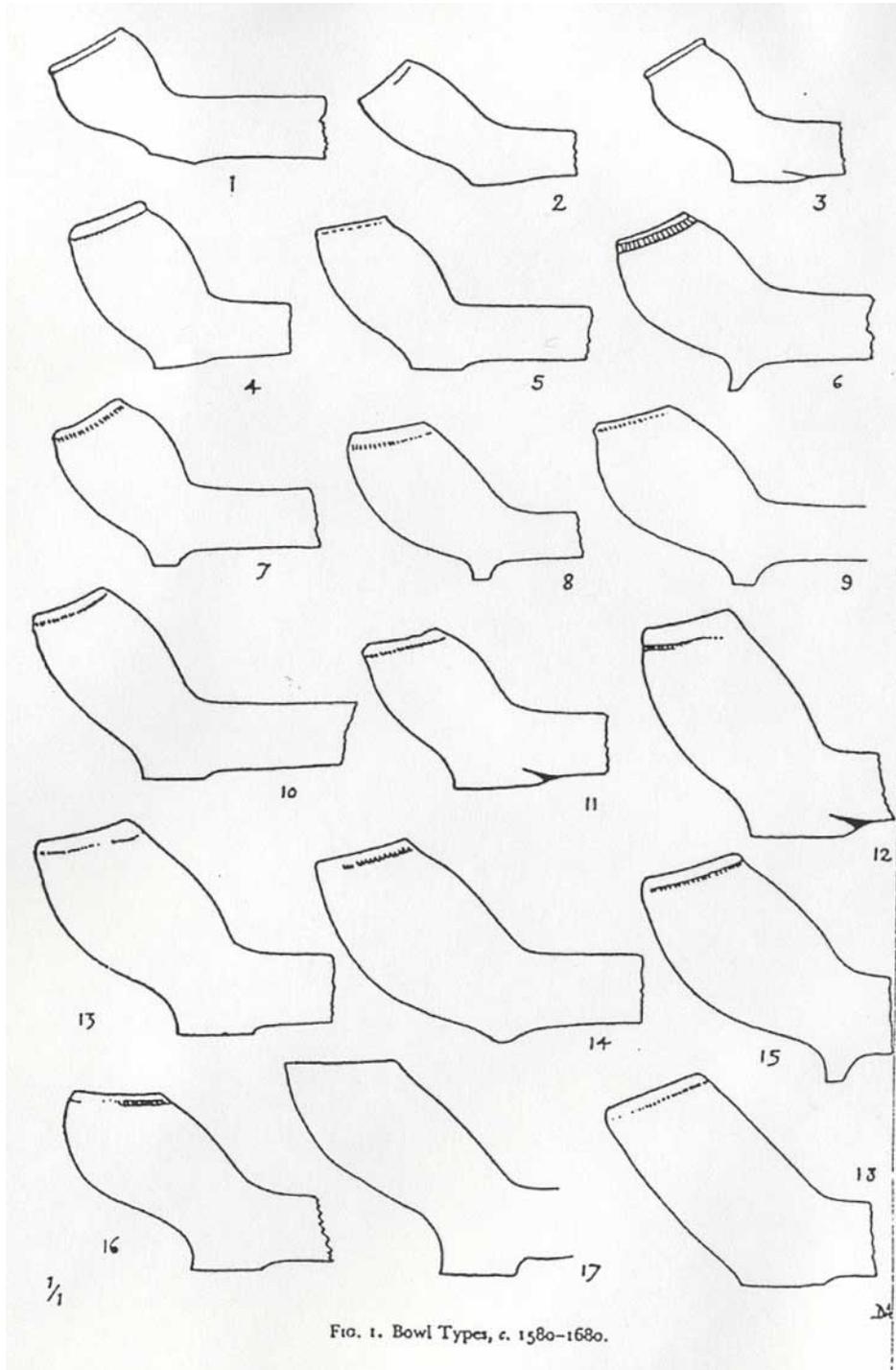
Bowl Form: "Not Applicable"
Bowl Base Type: Usually "Heel-less." Also "Unidentifiable," Only fill out if base is present.
Mouthpiece Form: "Reed/Stub Stem." This should be recorded even when the reed stem is not present.

APPENDIX 1: TOBACCO PIPE BOWL FORMS

Figures have been reprinted from:

Atkinson, David and Adrian Oswald.

1969 "London Clay Tobacco Pipes." *Journal of the Archaeological Association*. Third Series vol. XXXII.



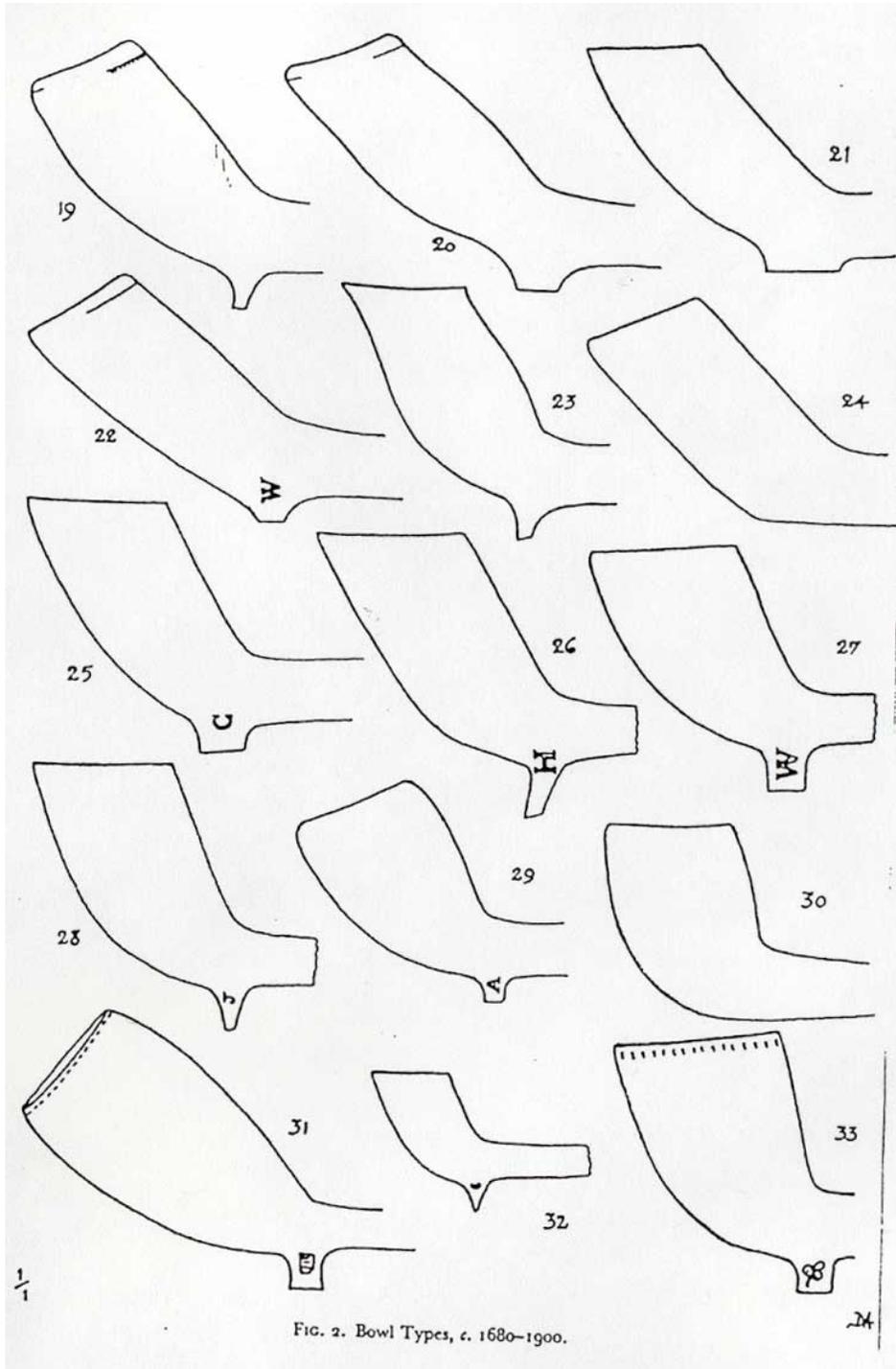


FIG. 1

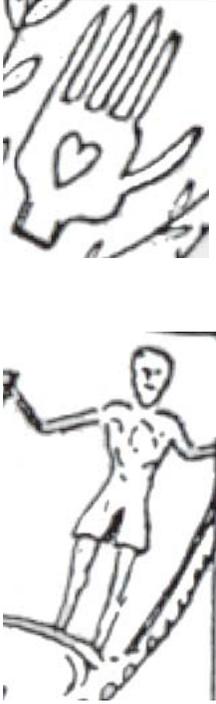
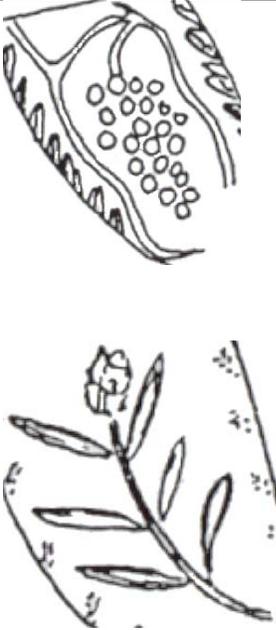
1. Handmade. c.1580-1610.
 2. c.1580-1610.
 3. c.1580-1610. Heart-shaped base.
- Milling on the rim of these early types is rare.

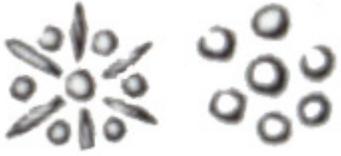
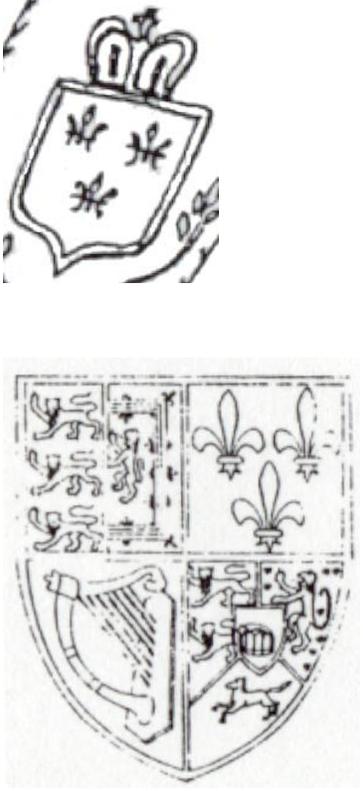
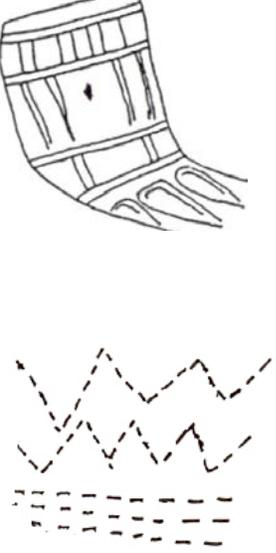
- 4-8. c. 1610-1640. In this period the two main types of the seventeenth century develop; flat bases and spurs. Milling usual.
- 9-10. c. 1640-1660. Increase in size.
- 11-12. c. 1640-70. Heart-shaped bases.
- 13-15. c. 1660-1680. No. 14 with degenerate spur occurs in large and small bowl sizes.
- 16-17. West Country style with overhanging bowl and the line of the mouth parallel or nearly so with the line of the stem. Copied by some London makers.
- 18. c. 1660-1680. A new type with straight sides, developing into types 20 and 22.

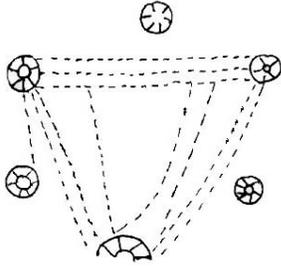
FIG. 2

- 19. c. 1690-1710. Late spur type.
- 20-22. c. 1680-1710. Long bowls some molded initials on sides of base.
- 23. c. 1690-1720. West Country style, thin brittle bowls.
- 24. c. 1700-40. American export style occasionally found in London.
- 25. c. 1700-70. Common standard southeastern type for the eighteenth century. The lip of the bowl parallel to the stem, a change that occurred about 1700. Bowl sizes vary, the earlier are longer and narrower, the thickness of stem and bowl decreases as the century wears on. No milling.
- 26. c. 1740-1800. New type with forward spur, thin bowls, sometimes decorated.
- 27. c. 1780-1820. Thin brittle bowl, flat based spur.
- 28. c. 1820-40. Pointed spur, small initials.
- 29. c. 1840-80. Forward drooping bowl, small spur.
- 30. c. 1850-1910. Copy of the briar.
- 31. c. 1850-1910. Copy of Dutch type.
- 32. c. 1840. Occasionally found in London. Miniature.
- 33. Post 1840. Irish type. Although often stamped Dublin these were made at several centers in Britain from a type mold supplied to several makers.

APPENDIX 2: TOBACCO PIPE DECORATIVE MOTIF

Decorative Motif	Description	Image
Anthropomorphic	Any image showing a human figure or any part of the human body. Examples include a hand/gauntlet, bust, and arm/leg.	
Botanical	Any botanical, floral, or plant element or elements.	

		
<p>Coat of Arms</p>	<p>Includes personal, city, or royal coat of arms.</p>	
<p>Geometric</p>	<p>Any abstract geometric design. Examples include scallops, dogtooth band, plain band, and diamonds. Most often seen on locally made pipes.</p>	

		
<p>Symbolic</p>	<p>Any design having a commonly understood symbolic function. Examples include a fleur-de-lys, heart, cross, castle, and star.</p>	
<p>Unidentifiable</p>	<p>Used whenever a decoration is</p>	

	too small or fragmentary to identify.	
Zoomorphic	Any image showing an animal, either real or mythological.	 <p>The right column of the table contains three separate line drawings of animals, stacked vertically. The top drawing is a dog, shown in profile facing left. The middle drawing is a turkey, shown from a three-quarter view facing left. The bottom drawing is a deer, shown in profile facing left.</p>