

REPORT FOR SMITHSONIAN MUSEUM OF NATURAL HISTORY

# Jamestown Coif Project

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## Documentation to Support Design & Construction

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This document contains information about the historical embroidery patterns used for the coifs, data for coif sizes, and historical notes about the purposes of coifs.

## What is a coif?

A coif is a linen head covering, sometimes heavily embroidered with silk and metal threads. Coifs were a ubiquitous part of late 16<sup>th</sup> - early 17<sup>th</sup> century English fashion. The embroidered head coverings were worn by high-status women and also women of the burgeoning upper middle class.

Coifs were worn by themselves and also under hats. Sometimes coifs were paired with matching forehead cloths: rectangular pieces of cloth that were often embroidered with the same pattern as the coif to make a matching set.



Figure 1: A blackwork coif made and worn by the author.

For high-status women who did not work, coifs were a fashion statement. Heavily-embroidered coifs were expensive and not washable, therefore, the wearer would not be performing any tasks that might stain the coif. For other women in society who had to perform work, coifs were a practical head-covering to keep their long hair free from dirt and lice.

I created the coif above based on a photo documented in [Domestic Needlework: Its Origins and Customs throughout the Centuries](#) published in 1925. Because the photo was a poor quality black

and white image, I did not realize that the coif was white work. The coif was subsequently published in color in English Embroidery from the Metropolitan Museum of Art, 1580-1700 Twixt Art & Nature and my mistake of using black silk embroidery was uncovered. Such is the nature of historic reproduction!

### **Jamestown Coif Description**

These Jamestown project coifs are recreations of 17th c. Elizabethan coifs made in London. The fabric is white linen. The embroidery thread is black silk. The embroidery was done by hand in a split stitch in a style known as blackwork. Blackwork is a form of embroidery using black thread. Traditionally blackwork is stitched in silk thread on white or off-white linen.

### **Source Material for Coifs**

There are many images for high-status coifs, though hardly any for blackworked coifs. I have used the two coif images on the next page as references for how the young Jamestown lady might have worn her coif.



Figure 2: The Lacemaker by Caspar Netscher, 1662



Figure 3: Girl Chopping Onions by Gerrit Dou, 1646

Some images of polychrome coifs are:

- Joan Alleyn, 1596, Artist Unknown (photo 55B in Janet Arnold's Patterns of Fashion)
- Lady Catherine Constable, 1590, Robert Peake the Elder. Shown wearing a matching forehead cloth. (photo 5 1A *ibid.*)
- Daughter of Sir Thomas Hoby, c. 1610. (Photos 51H & 51G *ibid.*)

There are many surviving coifs available for study in museum collections. I recommend viewing the textile collections of the Victoria & Albert Museum and The Burrell Collection.

I believe that the Jamestown coif represents a step between undecorated coifs worn by servants and heavily-decorated coifs made from polychrome silk and precious metal threads worn by the upper classes. Blackwork embroidery would have made the coifs pretty, but they still would have been washable if handled gently.

### Size Estimates

I did a quick analysis of extant coifs for which I could find measurements. Out of 32 coifs, the average coif size is 17.20" x 8.7". When I compared extant coif sizes with the artwork showing blackworked coifs as worn by the two young ladies, it is evident that coif sized in the 1610 timeframe were larger than what is shown in the 1646-1662 timeframe. I chose to pull the coif forward on the Jamestown girl and make a bigger bag in the back to cover her hair.

I did test fittings on my friend Donna before I made the final coifs. The Smithsonian staff asked me how the hair was arranged under the coif. Since there are no "how-to" hairdo diagrams from the 16th century for this process, I experimented and received sign-off from the museum.



Test photos with Donna to figure out hair arrangement and coif size. February 2, 2013

Historical Sidebar: In conversations with forensic anthropologist Dr. Doug Owsley from the Smithsonian, I learned that skulls from England in the early 17th century were shaped slightly differently than modern skulls. They had lower foreheads and flatter skulls. This is something we should all keep in mind when we're trying to reproduce extant headwear. On average, headwear that fit someone 400 years ago would not fit modern heads. Our foreheads and the overall dome of our skulls are much higher.

## Spangles

The historic term for sequins is “spangles.” Spangles were made from gold or silver and used as another decorative element on coifs. Spangles were smaller than modern sequins, but the shape is relatively the same. Spangles are to be painted on the coif on display at the Smithsonian. There was no point in sewing real spangles on the coif as they would have been covered by the resin.

## Making the Pattern

For both coifs, I copied images from the Folger Library website and sized them to fit the coif outline, approximately 8.5” high x 16.5” wide. I printed the image and transferred the pattern to the linen using a lightbox as well, using a black .01 Pigma pen. This method of transfer is not far from the original method. I have seen a 16<sup>th</sup> century image of a woman transferring an image onto cloth by doing so over a candle placed on the floor for illumination.

Patterns in the 17th century are explained by an excerpt from the description of item T.88-1925 on Victoria & Albert Collections website (<http://collections.vam.ac.uk/item/O20024/panel/>): "In England in the early 17th century, patterns for embroidery were provided by print sellers. Many of these were designs inspired by images of birds, animals, insects and plants found in illustrated natural history and botanical books, which were very popular at the time. This was a commercial provision for the needs of the amateur embroiderer; the print sellers not only provided books and separate sheets of embroidery designs but also patterns printed or drawn directly onto a textile ground as seen here. The use by amateur embroiderers of prepared designs was known from at

least the 16th century. Mary Queen of Scots, while imprisoned in Lochleven Castle in 1568, petitioned for 'an imbroderer to drawe forthe such worke as she would be occupied about'."

For an example of a 17th century pattern on linen from the Victorian and Albert collections website, search for item# T.88-1925.

### **Jamestown Coif Design & Imagery**

The embroidery designs for the Jamestown coifs are from The Trevelyon Miscellany of 1608 found on the Folger Shakespeare Library website. The publication of this book predates the Jamestown display and is therefore acceptable source material for patterning. The book, by Thomas Trevelyon, is 594 pages and contains patterns used for embroidery as well as drawings depicting life in England around the turn of the 16<sup>th</sup> and 17<sup>th</sup> centuries. From the Folger website:

“Thomas Trevelyon, the compiler, was a skilled scribe and pattern-maker who had access to a stunning variety of English and Continental woodcuts, engravings, broadsides, almanacs, chronicles, and emblem books, which he transformed from small monochrome images into large and colorful feasts for the eyes. Ostensibly created for the entertainment, education, and edification of his friends and family, Trevelyon's miscellany is a lifetime achievement that continues to delight and mystify modern audiences, with its familiar scenes of domesticity and husbandry intertwined with epic Protestant and political epitomes: accounts of the rulers of England and the Gunpowder Plot, descriptions of local fairs, the colleges of Oxford and Cambridge and astronomy according to Ptolemy, illustrations of the nine muses and the seven deadly sins, of Old Testament history and household proverbs, and whimsical flowers, alphabets, and embroidery patterns.”

I have found examples of patterns from The Trevelyon Miscellany of 1608 in many extant embroideries, some of which predate the book.

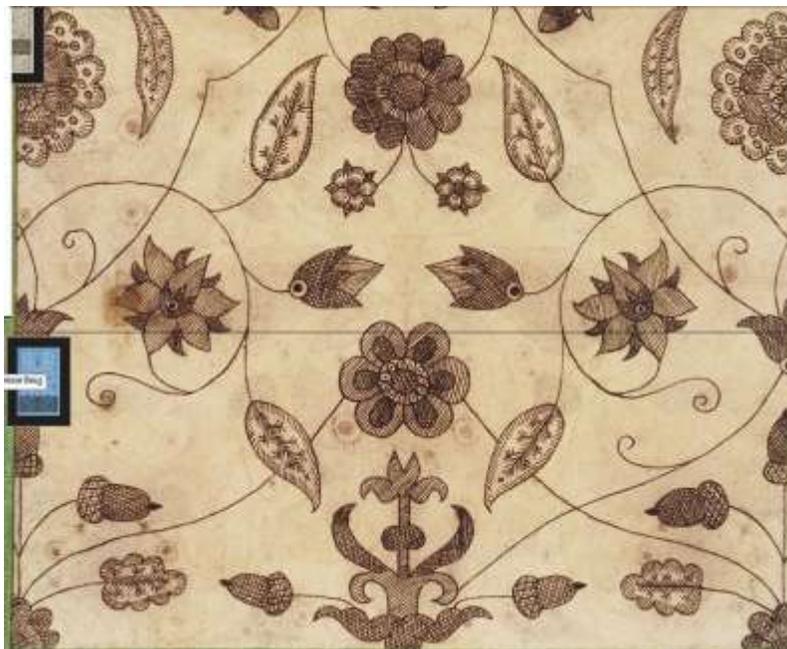


Figure 4: Coif 1 Pattern from The Trevelyon Miscellany of 1608

The photo above shows the original pattern from the Miscellany for the first Jamestown coif. The imagery on this coif contains acorns, abstract flowers, borage, carnations, and roses.

Given the short timeframe involved, I had to simplify the pattern. I sized the flowers based on the size of the flowers of an extant whitework coif in English Embroidery from the Metropolitan Museum of Art, 1580-1700 Twixt Art & Nature. When the image from the book is printed at full size 8.5" x 16", the flowers are:

- carnation 2.5" high 2" wide
- honeysuckle 2.25" high 2.5" wide
- pansy 2" high x 2" wide
- unknown 2" high x 2.25 wide

So while the flowers on the Jamestown coifs are larger than average, they're certainly smaller than the large flowers found on the whitework coif, which makes them historically accurate.

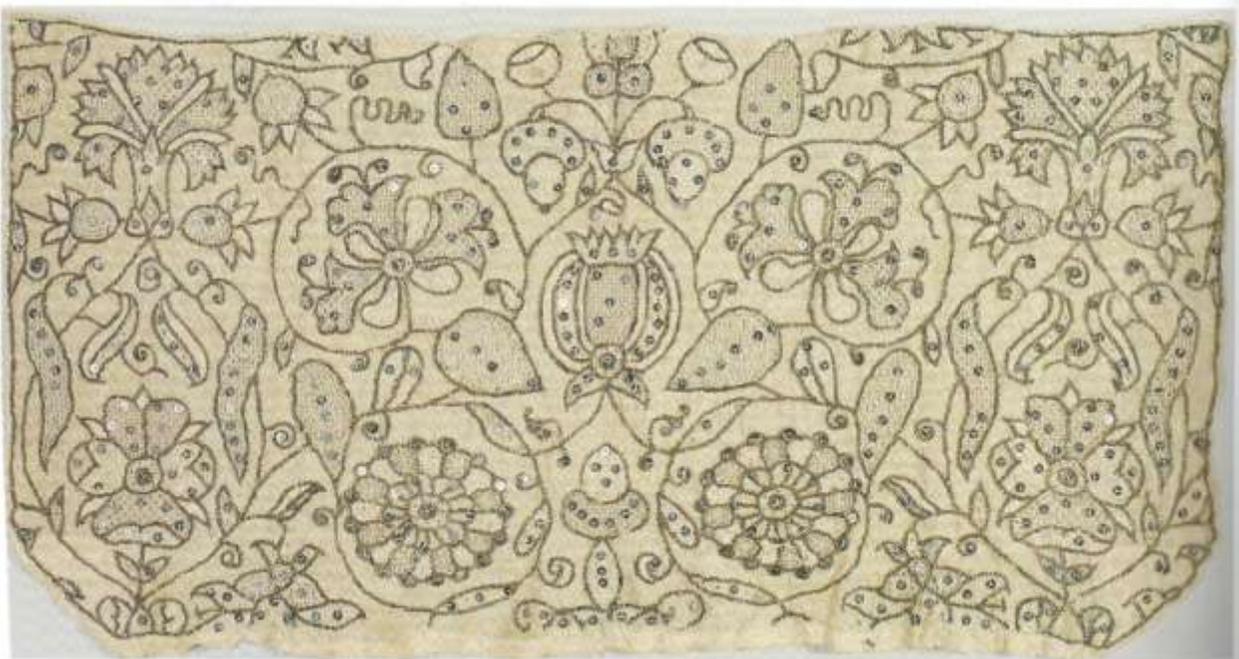


Figure 5: Whitework Coif from Twixt Art and Nature, pg 172.



Figure 6: Coif 1 Embroidered



Figure 7: Coif 1 Delivered Feb. 22, 2013 - Set on the clay figure but not yet attached.



Figure 8: Coif 2 Pattern from The Trevelyon Miscellany of 1608

The imagery on this coif contains roses, buds, and stylized leaves.

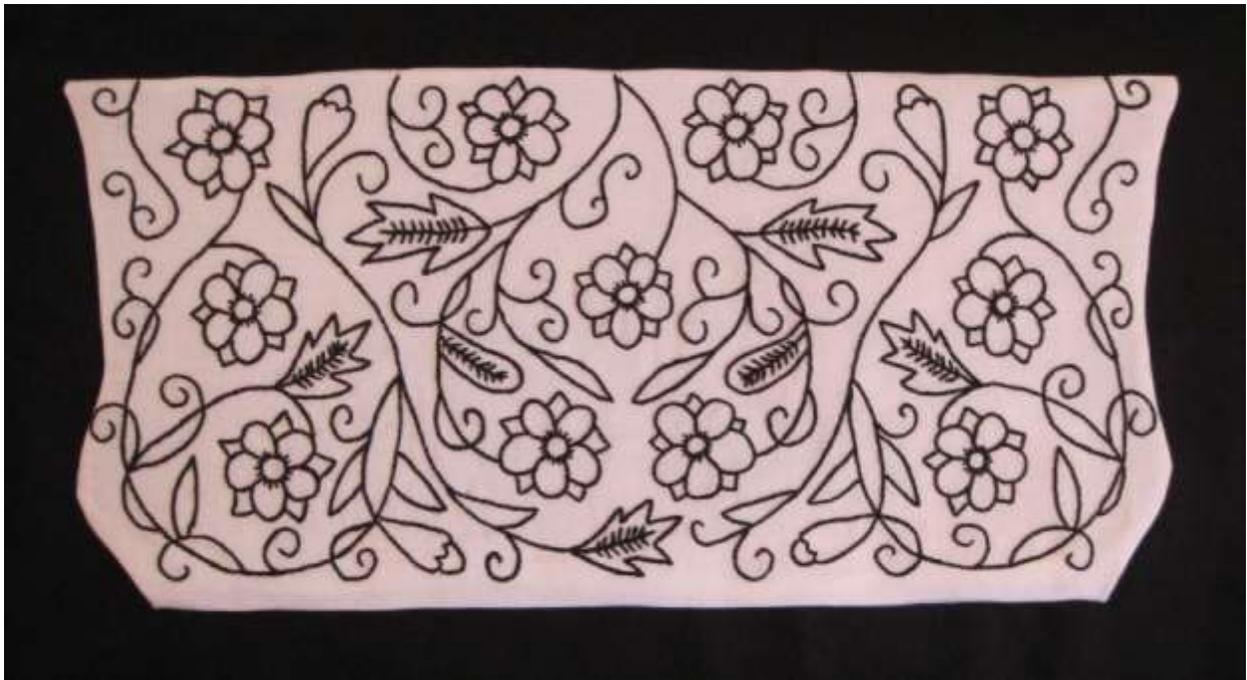


Figure 9: Coif 2 Embroidered



Figure 10: Coif 2 Delivered March 18, 2013

Please note that the figure above is only for demonstration purposes. When arranged on the bust, this coif should look exactly like the coif in Figure 7.

### **Stitch Type**

Many different types of stitches were used for coif embroidery: chain stitch, plaited braid stitch, back stitch, ladder stitch, French knots, etc. Since the time for this project was limited, I chose to use a simple split stitch, with four strands of silk so the embroidery would hold up under the application of resin.

### **Construction**

The coif is lined. A gathering channel was created at the bottom of the coif through which a fingerloop braided cord is strung. Though most of the coifs that I have seen in period do not have linings, I lined the coif to support the resin overcoat that is going to be applied. The lining is meant to give the coif body.



Figure 11: Lined Coif with Gathering Channel at the Bottom

The coif is then folded in half and sewn down the top center seam.



Figure 12: Coif folded in half. The front of the coif faces left.

Many different stitch types are used in extant coifs. I chose to use the simplest method shown in Janet Arnold's patterns of fashion on page 47, photo 52B, which shows a simple visible stitch using white thread. I attached two-thirds of the seam in that manner, then pleated the last third.



Figure 13: Coif 1, top view, stitched together 2/3 from front to back



Figure 14: Coif Gathering Shown from the Inside

## Amateur vs Professional Embroideress

Among textile researchers, opinion is divided on whether many embroidered Elizabethan artifacts were made by professionals or amateurs. After looking at hundreds of examples of embroidery from the period, I agree with the centrists who posit that some of the embroidery was done by amateurs and some was done professionally. I, myself, am an amateur and I was able to both draft my pattern and embroider the coif myself. The only difficult aspect was the time required.

### Application of the Coif to the Bust of Jane

While the photos of Jane look like she is wearing a white coif, she is in fact wearing a white coif that has been attached to her head with a chemical spray. The entire bust/coif combination was covered in a single application so that my coif now feels like plastic. It was then repainted by an artist who painted the coif white, again, and followed my lines of embroidery to make it look like an embroidered coif.

So why did I do the work by hand, you might ask. It's a reasonable question. Simply put, there was no other way to get the look of the embroidery correct.

### Location of Jamestown "Jane" Coifs

Currently, there are two Jane busts on display wearing my coifs. One is in the main floor of the Smithsonian Museum of Natural History in Washington, D.C. The other is at The Nathalie P. and Alan M. Voorhees Archaearium at Historic Jamestowne, 1368 Colonial Pkwy, Jamestown, VA 23081.

For more information and the original announcement made on May 1, 2013, see:  
<http://www.historicjamestowne.org/jane/jane.php>

### Final Thanks

Many thanks to Beverly Straube, Senior Researcher and Archaeological Curator for Preservation Virginia for finding my work online and asking Genie Posnett to track me down for this project. Also thanks to Kari Bruwelheide and Doug Owsley of the Smithsonian for guiding me through the process of helping put together a professional museum exhibit.

### Appendix 1: Project Hours

The table below breaks down the hours used in this project.

<b>Task</b>	<b>Hours</b>
<b>Research/Pattern draft for Coif 1</b>	17
<b>Coif 1 Embroidery</b>	34
<b>Coif 1 Construction</b>	4.5
<b>Research/ Pattern draft for Coif 2</b>	6
<b>Coif 2 Embroidery</b>	36.5
<b>Coif 2 Construction</b>	4.5
<b>Report</b>	6.5
<b>Total</b>	109

## Appendix 2: Summary of Coifs to Determine Average Size

As is typical, different museums measured coifs in different ways. Some list the coif dimensions as stitched, some as unstitched.

In the table on the next page, values in parentheses indicate where I was uncertain if the museum was listing the coif's width as unstitched, which would be double the sewn measurement. I had to make educated guesses. For example, #21 is listed in the text as 23.2 cm x 22 cm. This is roughly equivalent to 9 " x 8.5", which means Nevinson was listing a folded width, though which was the width and which was the height is a guess.

Given the lower average height of skulls in 17th century England, where I had to make a guess about coif measurements, I chose to use the smaller measurement as the height.

Average width = 16.9. If items 2 and 4 are excluded for being unusually small, the average = 17.20. Average height = 8.7

Table 1: Coif Measurements

	Source	Width x Height in Inches	Size in CM	Date
1.	Christie's Lot 217	24 x 17 (8.5?)	61 x 45	1600
2.	Christie's Lot 230	13 x 8	33 x 20	Early 17 <sup>th</sup> c
3.	Christie's Lot 231	15 x 8	38 x 20.3	Early 17 <sup>th</sup> c
4.	Christie's Lot 229	12 x 7.5	30.5 x 19	Early 17 <sup>th</sup> c
5.	Seligman Coif	16 x 8.5	21.6 x 40.6	1575-1600
6.	Twixt Art & Nature	9 (18?) x 8.5	22.8 x 21.6	1600-1630
7.	JA: Middleton Collection	20.8 x 8		1600-1610
8.	JA: MFA Boston	16 x 11		1610-1620
9.	JA: Royal Ontario Museum	16 x 8.5		1610-1620
10.	JA: Burrell Collection 29/22	17 x 9		1610-1620
11.	JA: Royal Ontario Museum	18 x 9		No date
12.	JA: Burrell 29/131	16 x 10		1610-1615
13.	JA: National Museum of Scotland	16 x 9		1590-1600
14.	JA: Burrell 29/130	15 x 8		1610-1615
15.	Ashmolean Museum: 1947.191.318	15.5 x 8.5	395mm x 218mm	No date
16.	Ashmolean Museum: 1947.191.319	15.25 x 8.25	390mm x 210mm	No date
17.	Whitney Antiques	17.5 x 10	44 x 26	No date
18.	Feller Collection, pg.106 F369	15.75 x 9	40 x 23	No date
19.	Feller Collection , pg.108 F448	15.75 x 7.87	40 x 20	No date
20.	Feller Collection, pg.109 F476	9.84 (20?) x 7.87	25 x 20	No date
21.	V&A 252-1899 (Nevinson pg. 84)	9 (18?) x 8.5	23.2 x 22	1600-1625
22.	V&A T.28-1975	17 x 8.25	43.5 x 22.3	1600-1610
23.	V&A T.69-1938	16.75 x 8.85	42.5 x 22.5	1620-1640
24.	V&A T.32-1936	9 (18?) x 8	22.8 x 20	1600-1625
25.	V&A T.11-1948	16 x 8.85	41 x 22.5	1579-1599
26.	V&A T.25-1975	17.5 x 8.5	44.2 x 22	1590-1610

	Source	Width x Height in Inches	Size in CM	Date
27.	V&A T.239-1960	8.75 (17.5?) x 8	22.2 x 20.5	1575-1625
28.	V&A T.177-1958	18 x 9.4	45.8 x 23.9	1620-1640
29.	V&A T.98-1925 (Nevinson)	19.5 x 8.89	49.6 x 22.6	1590-1610
30.	V&A T.12-1948	16.5 x 9.17	42 x 23.3	1570-1599
31.	V&A T.13-1948	17.91 x 9.68	45.5 x 24.6	1590-1610
32.	V&A T.21-1946	15.86 x 10	40.3 x 25.5	1600-1629
	Average	17.20 x 8.7		

JA = Arnold, Janet. Patterns of Fashion 4. Macmillan, London. 2008.

V&A = Victoria and Albert Museum Collections page. <http://www.vam.ac.uk/collections/index.html>

## Bibliography

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8. Whitney Antiques. A Golden Age, Rare and Historic Embroideries From the 16th & 17th Centuries. No publication date listed. ISBN 0-9543313-6-2.

## Websites

1. Christie's Auction House. <http://www.christies.com/>
2. Folger Shakespeare Library. <http://www.folger.edu> (Specifically, [http://luna.folger.edu/luna/servlet/view/search?q=trevilian&os=0&pgs=50&sort=Call\\_Number,Author,CD\\_Title,Imprint](http://luna.folger.edu/luna/servlet/view/search?q=trevilian&os=0&pgs=50&sort=Call_Number,Author,CD_Title,Imprint) )
3. Harris, Karen. [www.larsdatter.com](http://www.larsdatter.com)
4. Victoria and Albert Museum Collections page. <http://www.vam.ac.uk/collections/index.html>

## Museums

1. The Burrell Collection, Pollok Country Park, 2060 Pollokshaws Road, Glasgow G43 1AT.
2. Victoria and Albert Museum, Cromwell Road, London SW7 2RL.
3. Museum of London, London Wall, London EC2Y 5HN.