IT TAKES A CONCERT OF CRAFTS TO ORCHESTRATE AN OPERA OF BEAUTY:

THE ELIZABETHAN GLOVE



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Introduction

It takes many crafts to create the different elements that go together to make one pair of gloves of the 16th and 17th century Elizabethan court. I learned the many art forms in order to make the items that compose the glove. The following paper identifies the **historic basis** (in italics) for each craft (identified below) and the contribution to the glove. I then identify the amount of labor, materials used, and method I used from the information in the basis to produce the items that I put together to construct the one pair of Elizabethan Gloves on display that *emulates* those surviving editions housed in museums all over the world.

Gloves – They are made of leather, easily bought, but important to understand 'glove' leather for the proper fit. I designed the pattern that created the pieces for the glove. The details in the following documentation will tell you how I did that. Using the pattern to cut the leather to get a glove that fits the hand is a skill. To do this one must first understand leather. I share what a person should know to get the best leather for a glove. The length of the fingers on an Elizabethan glove is a noticeable feature of the glove that makes it unique to that time period. I will tell you why.

Embroidery – I'll tell you the basis for the embroidery design, the materials and stitches I used and why.

Lampwork – I made the little blue glass beads that litter the design. I'll share my lampwork techniques, the same used by Venetian lampworkers of the time period, for creating the little beads and how I got them from fire to cuff.

Ruching – Frilled Ribbon was another term for this. I will detail the ruching of the ribbon to get the effect on the gloves. I'll tell you how I created the pattern for the bobbin lace on the edge, wove it, and hand sewed it to the ribbon. With the bobbin lace attached I tell you how the ribbon was gathered to present the ruched effect and how I attached it to the glove.

Bobbin Lace – on cuff edge. – I made the bobbin lace found around the cuff edge. I will explain what pattern I used, how this was used to make the lace, and the tools I made to accomplish all of this.

Beadwork – Stitching of the silver and glass beads on the embroidery design.

Fine hand stitching – Then, in the finale, I will describe how I put all these treasures together to create the pair of Elizabethan Gloves on display.

Let me sing you a song of skill!

(Queue music - Original Conan the Barbarian theme song)

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I. GLOVE

a. Leather

A glove created for Queen Elizabeth I's court would be born from the skin of lamb or deer tanned using a special method of puering using dog manure that rendered the hide soft and supple (Ellis, 37). These qualities are required for a good glove leather in order to cover the hand for comfort and flexibility. The English 'tanyer' was also the early glovemaker (Beck, 135). By the 16th century the glovemaker understood the qualities of a good leather used for gloves without doing the tanning themselves. There



White Surviving gloves from V&A

is a long and tedious process for properly preparing leather for a glove¹.

During Elizabethan times a wide variety of dyed leathers were used. The best gloves were either in the buff (not colored) or 'in the white', directly from the tawed process and dried in the sun bleaching the hides white(Collins, 24).

To protect the English Glovers and their craft, King Edward IV in 1463, established a

prohibition of the importation of gloves which lasted until 1825. This afforded the English Glover an insured market for the development of their craft and product in England. Gloves made in Elizabeth's court would be made from English leather from Worcester, England, the area in England established for tanning leathers. Spain and France produced some fine gloves that found their way into England as gifts despite this prohibition (Leyland/Troughton, 8). On Charles V's first visit to England (1520) a banquet was followed by dancing "the ball throughout was 'the Gloves of Spain' (Anderson, 85). It was a common belief at the time that to have the perfect glove "Spain should have tanned the skins, France have cut the pieces, and England have done the sewing" (Ellis, 31).

The leather for the gloves in my project was purchased from Tandy leather. The hide is **not** prepared as they were in Elizabeth's time, but even though modern chemicals and tanning methods were used for my leather, it has the same coloration (white), flexibility and suppleness as described from the medieval leather process mentioned above, and therefore, I used this leather to construct my gloves. It is a 2 oz.

¹ The process of tanning a skin: Salted, soaked, depilation, beaming (removing the hair), more soaking, fleshing (removing the fatty tissue on the flesh side of the hide), soaking again, puering (process to render the hide soft and supple) dog manure used in the formula during medieval times, more washing, fermentation, drenching, scudding (small particles remaining removed with scraper), tawing (soaked in vat with 5 parts flour, 4 of alum, 2 of salt, and 1 egg-yolk), soaked again, stoved or dried (medieval times, the hides were spread on top of grass in the sun), staking (softens the stiffened leather) to prepare for use. Takes 9 months to complete. For full details see Chapter V, page 31, of Gloves and the Glove Trade by B. Eldred Ellis.

doeskin, with the same suppleness as an English tanned lambskin, and an important quality for glove leather. The suppleness of the leather when used to sew a glove to cover the hand, allows that flexibility needed for the hand to move comfortably and why I mention it. I do not have the means nor the desire to tan my own hide for gloves, but I know how. As a Glover, it is important to understand the difference between regular leather and a 'GLOVE' leather. It is from the knowledge of the medieval tanning process and how a glove leather was created that allows me to choose the proper leather for my gloves today.

b. Glove Pattern

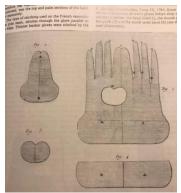
Elizabethan gloves were elaborately decorated. The most significant feature of most were the extra-long length of the fingers. It was said that Queen Elizabeth had long, elegant fingers thus her gloves would also have this feature (Cummings, 24). A pair of Elizabeth's gloves now in the possession of the Ashmolean Museum, have a middle finger and thumb that measure 12 cm long (almost 5 inches long). The same gloves only measure 8.5 cm (3.34 Inches) across the knuckles (Beck, 43). Custom of the time was to emulate Royalty, so many wore their gloves with long finger stalls in keeping with the fashion of the Queen (see Attachment A).



The Worshipful Company of Glovers was established in 1349 (and still functions today) monitored the standards of gloving. All things to do with making a pair of gloves is documented and directed by this company. It

QUEEN ELIZABETH'S GLOVES: Presented by her to Oxford University. They are of kid, with gauntlets richly embroidered with sold, and many colored silks: the fringe is sold.

was granted a Royal Charter in 1638 by King Charles I. Diderot's Encyclopedie published in 1764 records the patterns, tools and methods the early glover 16th/17th century) used (Cummings, 13). The



Cummings

pattern consisted of 5 pieces and 3 more if you use the quirks. The hand, one piece that included the top and palm side of the hand folding along the inside of the hand allowing a hole for the thumb, the forchettes, the piece that gets sewn in between each set of two fingers, and the thumb. The skill in assessing the fit of the glove varied from maker to maker. In this same Tome IV it lists the tools a glover used to work. This includes a tailors chalk or soap to mark the pattern when it's laid out on the leather, a very sharp pair of shears, weights, a doling slab and a staking beam (Cummings, 15).

The pattern I used to make the leather pieces to create my glove is one I created based upon a hands-on study of Elizabethan gloves in the Victoria and Albert (V&A) museum in London, England in 1991, and therefore is an original (see pictures in Attachment A). I edited the pattern as needed to fit many, many,

people over the past 32 years resulting in the pattern I use today as a basis for all my gloves. It is very similar to the patterns recorded from those used by Elizabethan Glovers (see Attachment A).

To get the pieces of leather that are sewn together to compose the glove, I traced the pattern on the flesh side (underside) of the leather with tailor chalk, the same tool that is mentioned in the glovers tools above. I outlined the pattern pieces of a hand, to include the top and bottom of the finger stalls, the forchettes (the piece that goes between the fingers) and the thumb. There is an option for quirks (small diamond-shaped piece at base of the forchette) but I chose not to use these because it only adds more seam bulk between the fingers. They are not found on all surviving gloves. Based upon this observation I can safely say they were optional. In order to create the pattern pieces for the other hand, I turned over the pattern pieces and traced a second set.

To cut out the pieces of the pattern from the leather, I used special leather cutting scissors (leaves a nice even edge that is easily sewn). I grouped the cut out pieces by glove, then prepared for the next step: sewing the pieces together.

c. Needles and Thread

Needle – To make the stitches in the leather to sew the pieces together, you need a needle and a thread. In the 16th Century the finer needles were made by German and Italian craftsmen. Elias Knause was a needle maker who lived on the London Bridge, London during the middle of the 16th century, His family was well known for their iron needles. Specialty needles were custom made, the triangular-pointed needles used by glovers are a good example. According to John G. Rollins, author of Needlemaking, the first glovers needles were made by a Moor who lived in Cheapside who refused to divulge his secrets to anyone, taking them to his grave. (Rollins, 3)

I do not use a Glovers needle which has a three-sided head, because although it slips through the leather like a hot knife through butter, it has a tendency to split the leather in three directions that could cause a rip in the seam. These needles are great for heavy leathers like Elk and are good for making falconry gloves, but I choose to not to use them as a rule just because they are called 'glover's' needles. I use a simple 'sharp' needle, size 9. The down side of using these needles is that they have a tendency to bend as I use them. For these gloves I went through 12 needles alone. It is not easy to use a single pointed needle. I use a thimble to push and a pair of pliers to pull it through. A little extra work but you get a finer and more even stitch with no threat of tearing.

Thread-

Silkwoman were the resource for threads, and miscellaneous items like buttons and ribbon. Linen and silk were the common threads used for sewing. "...as throwsters, they converted into thread the raw silk imported from Italy where it had been reeled from the cocoon." (Arnold,219)

I used 100% waxed white silk thread to sew these seams. In order to apply the wax I pulled the thread over a block of beeswax. The wax gives the silk holding power in the leather, keeping the stitches tight as you add a new stitch.

d. Stitches and Seams

Stitch – The stitch used that holds the pieces of leather together for a glove is a 'prix' stitch. This stitch is made by placing the opposing pieces together with the flesh side touching. Pull the needle back and forth through the leather, parallel to the edge (Leyland/Troughton, 31). The gloves from the pictures of the gloves in the V&A in Attachment A are made with a prix stitch. If you look carefully you can see tiny holes at the edge of the finger, but a thread does not go around the seam, indicating that the thread is running parallel to the seam through the leather.

I used the prix stitch and it is actually my preferred stitch. My experience indicates it is better served on the heavier leathers like 3-4 oz elk for the heavier gloves like falconry or under fighting gauntlets. If placed properly with a thin needle and silk thread, it can also look nice on a finer leather.

Seam – As with many surviving gloves in the V&A, the seam is on the outside of the glove. If you examine the gloves in Attachment A, you will see the seam is on the outside of the glove.

I sewed the gloves with the seam on the outside like the surviving examples found in the V&A museum and shown in Attachment A. I like the seam on the outside of the glove because it allows for a more comfortable fit without the feel of the seams on the inside. It also allows for display of the stitching.

II. CUFF

a. Embroidery

Silk threads in many colors decorated many of the garments and accessories of the 16th and 17th century. As it pertains to gloves, the embroidery was the expensive part (Digby, 79). A floral pattern was very popular and 'cosmopolitan', originating in workshops of Paris or Antwerp on the mainland and overflowing into England. The Catalogue of English Domestic Embroidery of the 16th and 17th Century has a list and pictures of recorded gloves that show that **white satin** was often used as the ground for a **floral embroidery design** on a glove cuff. This inventory also defines the stitches used in the embroidery design.(Nevinson, 94–97)

"Pair of Glove Guantlets: About 1600 – Silk and silver gilt thread on satin; long and short, and satin stitches and couched work. Colours – Bright green, pink, orange, yellow, yellow-green, pale blue, deep blue, maroon, cream." (Nevinson, 94) I chose a cornflower for my floral design because it has spikey edges that look cool. I reversed the

coloration and made the outside of the flower dark and the inside light. As illustrated shades of blue embroidery were used. I used DMC floss for the dark, only because I didn't have any silk in that color. The lighter blue is 100% silk and that is done in a chain stich. Chain stitch is not mentioned in the example above, but is listed as a stitch used in time period. The satin stitches were mentioned as used in the inventory above.



Cornflower

b. Ruched Ribbon

The ruched ribbon is fashioned after a piece of ruched silk on a pair of Henry VIII gloves. As you can see in the picture below, there is bobbin lace sewn on the edge of the ribbon with spangles (little silver discs). Bobbin lace was made from silver gilt thread using a round pillow as shown in the engraving from a 16th Century workroom. Pictures of bobbins are shown on the Bobbin Lace Attachment B. I did not find a description of how the ruched silk was 'ruched' in period, but based upon a modern method ruched my ribbon to look like the piece on Henry VIII's gloves.



Henry VII Gloves-Ruched Ribbon

I used a wide blue ribbon to match the blue theme of the gloves. They emulate the ruched silk described on the Henry VIII's gloves. The added element to the ruched ribbon is the lace with spangles. I made my own bobbin lace. I made the little bobbin lace pillow and hand carved my own Bobbins. I designed the pattern (pricking) for the lace and then executed. I added the spangles, the little metal discs, one at a time on a strand of metal so it could be woven into the pattern. Please see the attachment C and D with my tools and the lace as I was making it. The only downside was that I had to use DMC silver embroidery floss in substitution for

silver gilt thread which would have been used in period as mentioned in the Embroidery accounting. Bobbin lace is made by twisting and turning the bobbins holding the thread, pinning at a designated time, and twisting and turning until the lace is made.

The lace was hand sewed to the ribbon. I ruched the ribbon. To ruch, you weave a running stitch evenly zigzagging a path along the length of the ribbon. You then pull so the ribbon gathers. Once it is gathered in the density you wish, you sew this on the glove.

c. Bobbin Lace

The lace hand sewn on the edge of the cuff was made using a pattern called 'Crown lace' because it leaves little crowns in the design. Baroness Kate, a friend from 30 years ago, gave me the pattern she

said she got when she was stationed in Spain. I know no more of the orgins of the pattern. See lace attachment B for surviving samples of bobbin lace on an Elizabethan doll. Bobbin lace can also be seen on the glove cuff above. It was made using the same technique as described above. I added the spangles to the pattern.

I made a different bobbin lace pillow in order to make this lace and it is shown on the Bobbin lace Attachment D. I made the stool based upon descriptions. I hand carved by own bobbins and made the glass beads that weight the bobbins and hang at the bottom of each. I used this to make the lace that are on the gloves.

d. Blue Glass beads

"A pair of 16th Century mittens of crimson velvet, embroidered on the backs, and in a lesser degree on the palsm, with a conventional design in gold thread. The hands and thumbs are edged with gold-thread cord. The guantlets, covered with white satin, are cut in panels at the bottom and embroidered with flowers in various coloured silks together with conventional leaves, and pendent semicircular designs in gold and silver thread and spangles, and tiny beads are sprinkled about the ground." (Redfern, 45)

"One English gown of plain murrey-coloured velvet embroidered with white glass beads has been recorded, and beyond that nothing." (Zeitschrift fur hist. Waffen- und Kostumkunde, N.F. IV (1933), p. 172. (Nevinson, 77)

Lampwork has been a craft since thousands of years B.C. (Jargstorf, 10). This is the craft that produces glass beads. It is the craft of melting a soft glass (sand with a soda-lime base), over a low temperature tallow fueled fire, melting the glass and manipulating it on a metal rod so it becomes the shape of a bead, button, game piece, etc. (Dubin, 111). In this case, beads.

Soft glass is what was used in the 15th century. Moretti/Effeteri was used to make these beads and is the closest type of glass we are able to buy today to replicate the glass of the 15th century. The glass rods were bought just as they would have been by the bead maker in the 15th century (Jargstorf, 32). I use a mixture of oxygen and propane in a 'minor bench burner' to produce the fire that melts the Moretti. It is safer than a tallow mixture in an oil lamp, which was used in the 15th century (Jargstorf, 95). Even though the glass we



buy today is considered soft, it is not soft enough if I wanted to melt it over a tallow oil lamp. The glass of the 15th century was softer which means it had more silica vs. lime (Hoyt, 11). It could burn over the lower temperature fire that a tallow oil lamp would produce. I have tried to make my own glass to no avail and finding a glass recipe is still as difficult as in the 15th century Venice. The secrets of glass mixture are still coveted as I found out from a local furnace when I was told that they don't print the ingredients on the bags of glass (the contents of the bag get put in the glass furnace) because the ingredients are secret.

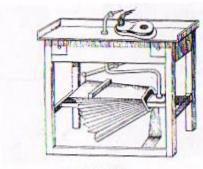


Fig. 2.15. Munkbeach with first bollows.

The blue glass beads are justified by the resources above. Them mention glass beads being used in decoration, so why not gloves. I learned this craft so I could make the beads that I sewed on the glove. I used a minor bench burner torch to melt my 'soft' glass to create my beads. I bought the glass rods and melted them, rolling the glass on a rod then annealing the glass bead. After the annealing was done, I had to clean the bead release out of each bead, one at a time. I them sewed the little beads of different sizes for texture, onto the embroidery design. I own 5 glass beads from

roman times and they are blue. Blue is a common color found in glass beads. I wanted to use them on this design.

e. Sewing the Cuff to the Glove

After the lace was hand sewed to the embroidery on the white satin, I took an equal amount of blue satin to back the embroidery design. I used buckram to stiffen. I then sewed the cuff to the glove. I used a prix stich and you can see the seam on the inside of the glove. I normally would cover the seam with ribbon, but wanted to leave the seam since it did not cause any difficulties when sliding the hand inside. After the cuff and glove were joined, I sewed the ruched ribbon around the wrist portion, covering the seam of joining. I used silk thread for all the sewing. The bobbin lace was sewed to the cuff with DMC silver thread so it could add to the decoration.