

The Lengberg Castle “Bra”

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Image 1: “Bra,” Lengberg Castle, Austria. ca. 15th century.



Image 2: My reconstruction.



Image 3: Side view.

Introduction and Background Material

During an extensive reconstruction project at Lengberg Castle in East Tyrol, Austria, in 2008, archaeologists discovered a deposit of dry, discarded material beneath the floorboards on the second floor, among which was found more than 2,700 textile fragments dating from the 15th century. Among these textile fragments were a number of almost completely preserved pieces of clothing, as well as fragments of linen lining of women’s garments, children’s clothes, remnants of pleated linen shirts, and what appear to be supportive linen undergarments, including a (formerly) skirted bodice with “breast bags” [Image 1] (Nutz and Stadler 2012, p. 79).

Fashion historians who have examined the finds at Lengberg castle hypothesize that there is correlation between supportive undergarments such as this skirted bra and the tailoring of the gowns worn over them. For example, a skirted bodice with “breasts bags” allows for “looser tailoring of the gown, which accentuates two separate breasts, as opposed to

supportive kirtles which result in a monobosom (one curving mound)” (ibid.). This garment served as the layer worn next to the skin, with additional layers of garments, including a smock and a gown and possibly another in between them (ibid., p. 171).

While only the front and some of the left side of the bodice of this medieval “bra” remain, there is enough left of the garment to understand how it was originally constructed. Case, McNealy, and Nutz write:

The cups are constructed in two vertical halves which are cut on the straight of the grain, but are not quite symmetrical: the outer cup halves have a slightly steeper curve, which may have counteracted the ‘east-westing’ phenomenon, in which the breasts would have tended to face away from each other if the two halves of the cups were the same size and shape...

There is also an indication that there was a center seam in the rib cage area of the front of the skirted bra... The space between the cups of the extant bra now has only fragments of needle lace remaining, but probably also held a sprang inset connected to a fingerloop braid with simple needle lace...

[The narrow hem] has sewing holes in it indicating that there was originally stitching along that edge. This indicates the presence of attached skirts...

The body of the skirted bra ends at what was most likely the natural waistline, just below the ribcage. Narrow shoulder straps made of fabric strips folded in half and whip-stitched closed remain intact... (Case, McNealy, and Nutz 2017, p. 170).

While there is no physical evidence of supportive undergarments with “breast bags” before the discoveries at Lengberg, there are several pictorial and written sources that reference similar types of garments. Henri de Mondeville wrote in his medical treatise *Cyurgia* (1306-1320), “Some women unable or unwilling to resort to a surgeon, or not wanting to reveal their indecency, insert two bags in their chemises, adjusted to the breasts, fitting tight...” (Paulson 2016). One satirical poem written by an anonymous 15th century author from southern Germany known only as “Meister Reuauß” penned the following:

Many [a woman] makes two bags for the breast
With them she roams the streets,
So that all the guys look at her,
And see what beautiful breasts she has got;
But whose breasts are too large,
Makes tight pouches,
So there is no gossip in the city,
About her big breasts (ibid.).

Manuscripts dating from the mid-15th century begin to depict similar undergarments with pleated or gathered skirts. These skirted garments do not feature the separate cups as the extant garment from Lengberg, but they nonetheless depict the wearer’s breasts as separate and lifted (ibid.) [Images 4-6]. Case, McNealy, and Nutz summarize:

Many of these manuscripts also show a particular gown style, which features pleats in the front just under the bust and sometimes ‘apple breasts.’ The construction of these gowns requires support for the breasts in an underlayer. The presence of the ‘skirted bra’ and an extant gown of this pleated type in the Lengberg finds supports the idea that the

underlayer consisted of a supportive garment. Without this supportive layer, the profile of the breasts would change, and would not appear as separate, lifted breasts (ibid.).



Image 4: Detail of a tailor by Konrad van Ammenhausen, 1467.



Image 5: Hofämterenspiel, Kunsthistorisches Museum, Vienna, ca. second half 15th century.



Image 6: Detail of "The Jerome Aventure: Friedrich and Jerome in bed together," Cod. Pal. Germ. 345, f 247r, c. 1470.

Pattern and Construction

In keeping with the extant piece and extant practices, I chose a mid-weight, white linen and waxed linen thread for my reconstruction [Images 2 and 3]. I used a combination of back, running, and whip stitches, all of which were used in the extant garment (Case, McNealy, and Nutz 2017, p. 171).

For my pattern, I altered an existing pattern I had for my Bootstrap Fashion dress form, which had been previously generated using my measurements. The dress form pattern had nearly the exact seam placements I would need for this reconstruction, I just needed to draft an additional seam for the top half of the "breast bag" to create the two vertical halves of the cup and the hole in which the bag would be sewn [Image 7 and 8]. I then drew a front and back neckline low enough to be comfortably worn under a 15th century gown.

I did, however, omit the deep, curved vee that the extant garment has between the breast bags, opting for a simple scooped neckline instead as I was unprepared to attempt any experimental needlelace or sprang panel that was part of the original.

Placing right sides together, I sewed the center front and center back seams using tiny back stitches before flat felling the seams down. Using small whip stitches for added strength, I stitched the pairs of cup halves together and then stitched each breast bag into their respective openings. I clipped access seam allowance and felled the seams.

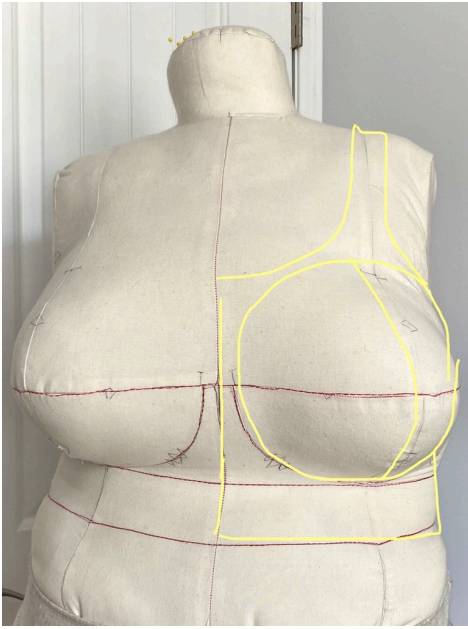


Image 7: Sketch of adjustments made to dress form pattern to create front bodice piece and cups.

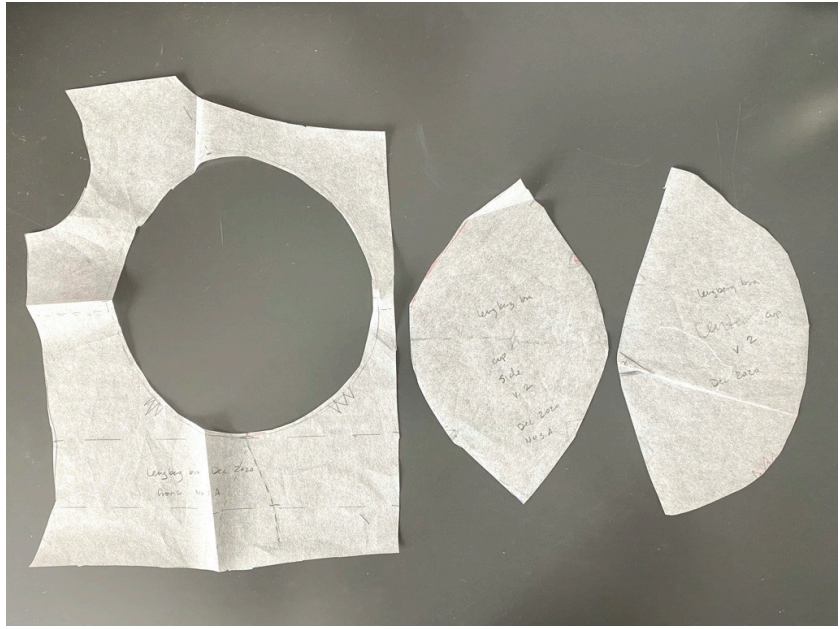


Image 8: Pattern draft of front bodice piece and cup halves.

Following the extant example, I created narrow shoulder straps by folding strips of linen in half and whip-stitched them closed and sewed them to the bodice pieces. I finished all other raw edges by folding over twice and hemming them with whip stitches.

While the extant garment is missing its right side and it is unknown whether it had lacing on this side as well, researcher Rachel Case included lacing on both sides of her own reconstruction, hypothesizing that “lacing along one side would misalign the garment if the wearer gained weight and the lacing needed to be loosened” (ibid.). Following her example, I included lacing on both sides to better accommodate any weight fluctuation I may experience in the future. I flatlined the side edges of the bodice pieces with additional strips of linen for strength, folded over twice, and then whip stitched down. Then, using a bone awl, I opened several eyelets along the reinforced side seams [Image 9]. In keeping with the original, I hand bound the eyelets using simple whip stitches with additional waxed thread [Image 10] (Case, McNealy, and Nutz 2017, p. 170). The eyelets were staggered so that the bra dress could be spiral laced at the sides; spiral lacing being the method of choice in period [Image 3]. While it is plausible that garments such as these would have been laced using fingerloop braided cord, I opted for natural linen cord from Burnley and Trowbridge as I was not prepared to fingerloop braid such a heavy-duty laces for the project (Nutz 2014, p. 116).

I made a simple skirt from two rectangles of linen, roughly the length of my waist to mid-calf. I sewed the sides together to make a tube, leaving the top 8 inches or so open to help with getting the finished garment on and off. I then felled the side seams and hemmed the top and bottom of the skirt. By using the “divide and conquer” method, I knife pleated the top edges of the skirt and then whipped it to the bodice.

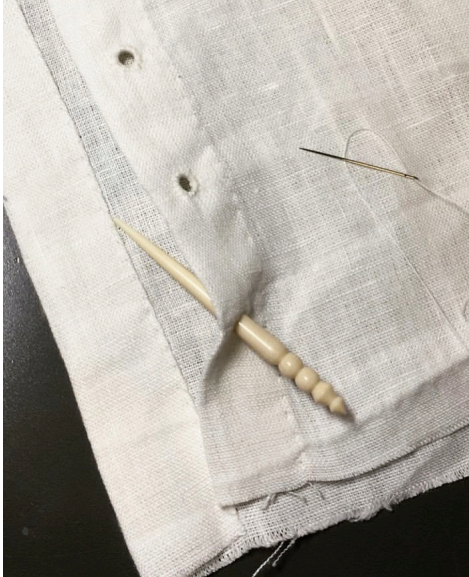


Image 9: Creating the eyelet holes.



Image 10: Completed hand-bound eyelets.

Lessons Learned

Sewing a fabric bag to contain something as pseudo-spherical as a human breast is very difficult and it took several attempts and lots of basting to ease the cup pieces into the round openings in the front pieces. Next time, I would like to add more eyelets for lacing in hopes of creating a smoother line when the laces are pulled taught [Image 3]. With more time, I would have liked to experiment more with the use of grainlines to achieve a better fit. In retrospect, I could have made the skirt of the dress narrower, resulting in less fullness around the waist; after all, this is supposed to be worn under one's clothes. In the future, I would also like to attempt the needlelace (or possibly sprang) panel that is supposed to be between the breast bags. Case, McNealy, and Nutz hypothesize that having a stretchy panel and clever shaping "may have helped the bra lie close to the body," as well as "helped the cups lie flat, and... provided coverage for the décolletage (ibid.).

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The Lengberg Castle Bra

Additional Photos

