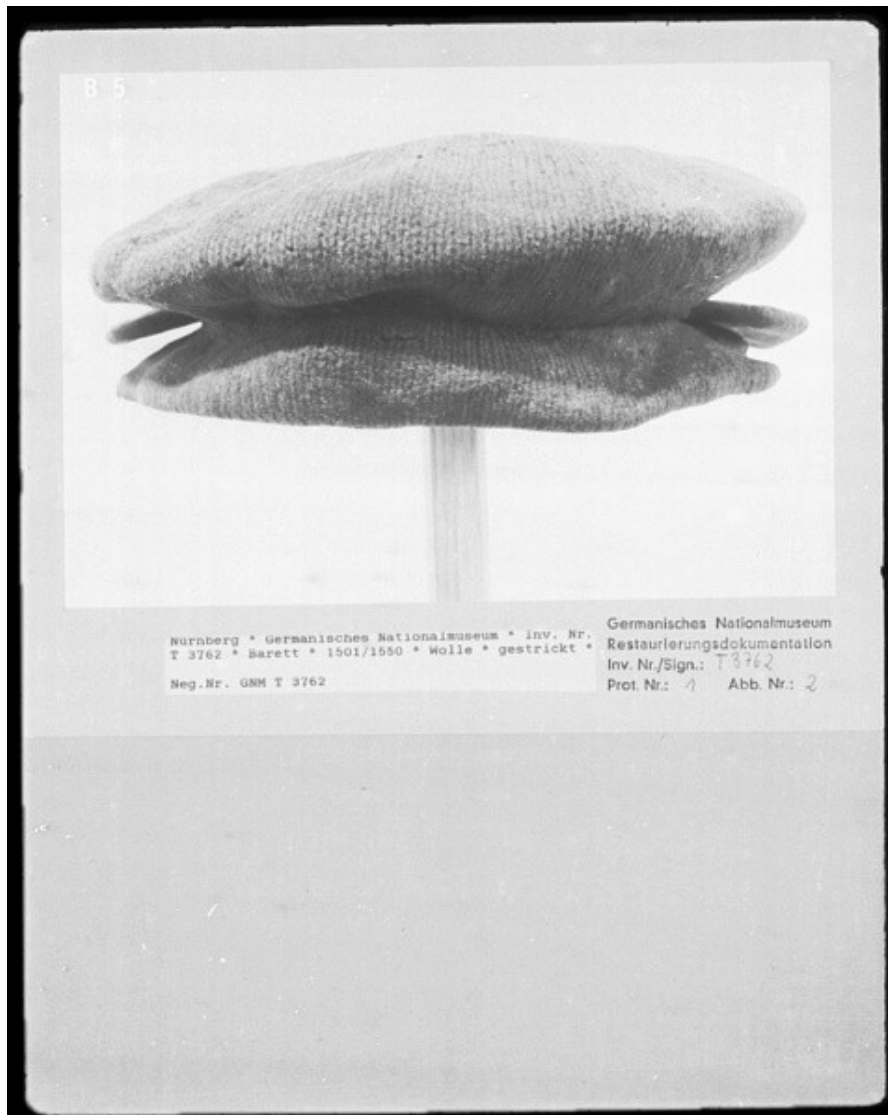


16th Century Knitted Flat Cap

One of the most basic and common types of hat in late period is the flat cap. This versatile hat can be found in portraits of men and women as well as locations from Italy to England. Working men wore the cap to protect their heads and noble women wore them as part of their finery. The caps were made from wool and velvet. It was easy to make and a very popular accessory to fashion.

Thanks to its enormous popularity and longevity, there are many extant examples in museums today. Black woolen 'barettts' were a standard article of clothing for the middle classes in Germany during the 16th century. Several examples are in the German National Museum in Nierenberg, Germany. These hats are of a basic type with a split brim.



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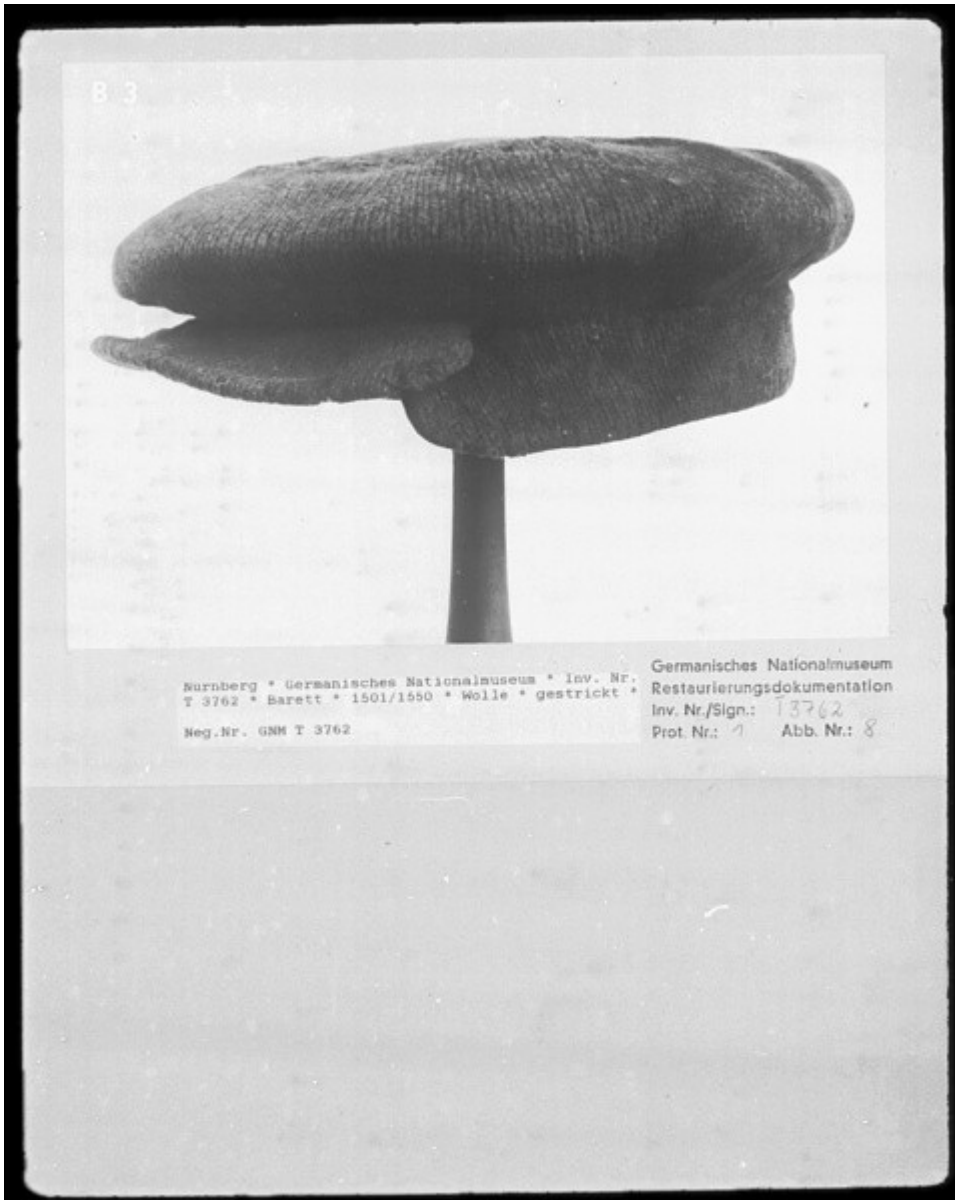
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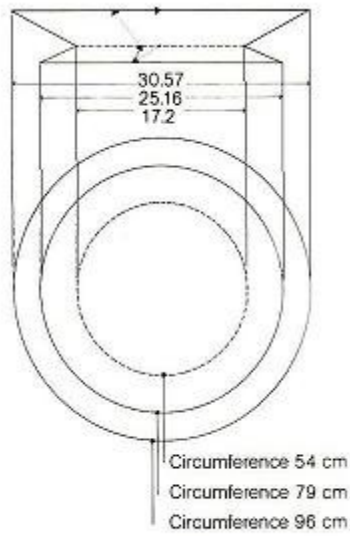
Another valuable resource for knitted hats is the ship “Gagiana”. This ship sunk off the Adriatic coast in 1583. Two these hats have been recovered from its wreckage. These are a basic barett style with a solid double fold brim. Conservators of this find have written detailed descriptions of the knitting patterns of these hats.

The Curious Frau recounts this description on her web site at:

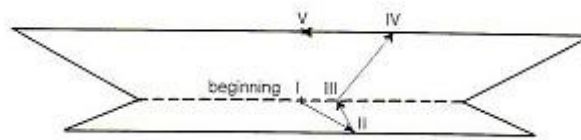
www.curiousfrau.com/Diaries/Knitted_Hat_Gagiana.htm



of



721 Pattern of the men's knitted hats.
Knitting pattern in cat. 26.



Description of knitting technique used, written by the conservators (Flury-Lemberg, M. page 328)

I - Cast on: 100 stitches, all plain:

In the 5th row at each 6th stitch, in the 10th row at each 7th stitch, in the 15th row at each 8th stitch, 1 added.

II - Then reversed: In the 20th row at each 8th stitch, in the 25th row at each 7th stitch, in the 30th row at each 6th stitch, 2 knitted together. Knitted 5 rows

III - Amount of stitches back to 100 (I - II same height as II – III)

Knit I and III together.

In the 5th row at each 6th stitch, in the 10th row at each 7th stitch, 1 added etc. until at each 10th stitch, 1 was added.

IV - 1 row purl

Now again decreased in each 5th row, started at each 10th stitch, then each 9th, etc., etc., until no stitches were left (V)

Another find for flat caps is from Scotland and is dated to the 17th Century. This cap was found on skeletal remains and was the most intact piece of the find. This is the same type of construction as above. The yarns in this find are of mixed z and s spun wool. It is described as follows: "Knitted cap, internal circumference 21 ins., brim 1 in wide, circumference of crown 28 ins. Brown, 2-ply, Z spun, S twisted. 5.5 sts. On brim and 6.5 sts. On crown per inch, 10 rows per inch. Worked on 4 pins in stocking stitch.

Knitting starts at the inside under edge of the brim with 118 sts., increases in the 4th row to 129 sts., decreasing in c. 17th row to 116 sts. There are 20 or 21 rows in brim. Upper edge is fastened back to beginning row. The junction of brim and crown is obscured by felting. Crown must start with 118 sts., increases soon after beginning and again in 14th or 15th row making 171 sts., the maximum number. After 12 plain rows there are decreases in every 3rd st. to make 130 sts. After 10 rows decreases to 92 sts. Decreases in the 7th, 5th, 5th, 3rd, 3rd rows ending with 5 ss. It is extremely felted inside and on the outside where the crown is hidden by the brim.” (www.scotwars.com)



An additional hat was found in Tarvie, Scotland and was made of green wool. It is described as such: “The cap is slightly oval in shape, the circumference inside the brim is 21 ins., of the crown when flat 33.25 ins. There are two cut slits under the edge of the crown just above the brim, probably the position of a brooch or badge. The cap is very felted; the stitches on the inside are indistinguishable. The outside appears to have been shaved. Stocking stitch and four pins have been used. There are 7 stitches and 10 rows per inch. The knitting seems to have started at the lower inside edge of the brim with about 103 stitches. The width of the brim is only 0.5in., and on its outer edge the number of stitches has increased to 125. On this edge where the brim folds back on itself there seems to be a row of garter stitch. The inner edge of the upper side of the brim is attached to the brim, but the junction of the brim and crown are too felted to distinguish the stitches or ascertain whether the brim and crown were continuous or stitched together after knitting. The crown must have started with about 103 stitches, and after 21 ins. It reached its maximum diameter with 230 stitches. The first row of decreasing is almost at the edge of the crown. There are 9 rows of decreases between here and the centre 13, 9, 7, 5, 4, 5, 2, 1 and 1 rows apart; the last 6 stitches are pulled together at the centre of the crown.” (www.scotwars.com)



Additionally, knitted woolen caps have been found in the wreck “Gnalic”, which sunk in Venice in 1583, and three were found on the wreckage of the “Mary Rose” which sank in 1545.

My Recreation

I became interested in the spring of 2006 with early 1500s German garb research. I was looking for a new way to challenge myself and a style of garb with large numbers of stylistic choices. In the process of researching this style, I kept coming across these hats over and over again. I had learned the basics of knitting as a child, but had never accomplished knitting anything but squares. I decided I should put my frustration with knitting aside and attempt to recreate this piece. I have tried over the years to do this and have had wooden needles in the past that my dog decided he needed to eat to end my frustration. So I decided to start from scratch.

The first decision to make was what gauge I should knit the hat in for best effect. I knew from the above descriptions that I need a fairly firm gauge so that the hat would not be too floppy. This meant that I should use a yarn and needle combination that would result in a fairly tight weave. I also knew that these hats were fulled, or felted, after completion

so I could not knit so tightly that there was no room for shrinkage. It seemed rational that I should find out what sorts of wool yarn were available to me before choosing the needle size. I went to several stores and decided to use Lion Wool's Worsted Wool yarn. It was the only 100% wool I could readily find that wasn't a novelty yarn or too bulky for the purpose of this hat. I considered spinning the wool, but did not want to invest that kind of time into the project if I was going to be unable to knit the finished hat. Descriptions have been found for hats in liver, ash, white, red, green, and black. The most commonly described and found color has been black. I decided that black would be the color to use on this project.

Now that I had chosen the yarn, I sat down to determine the needle size I would use. Generally, when designing a garment, a knitter would knit a swatch to determine the gauge and design the garment based on the gauge. Lacking the understanding of how to do that with a round shape, I decided to knit some to find my stitches per linear inch, but forgo the stitches per row. I would tackle the number of rows as I went along.

According to the web site "A flat cap dyed with madder", copper needles have been found in excavations in England that correspond to modern US size 0 and 1 needles. Bearing in mind that small needles have been found, I chose to use US size 3 needles made of aluminum. I lack the funds to obtain copper needles, and brass which would have been available in period would be too heavy and pull on the fabric causing the gauge to be thrown off. Size three would give me a tight enough weave, but allow for some shrinkage. Smaller sized needles would not have allowed the wool to shrink properly.

Using the US size 3 double pointed needles, I determined that I would stitch 5 stitches per inch. This is greater than the stitches per inch described by conservators in extant finds, but those hats had already been fulling which would have shrunk the size of the stitches. I felt that after fulling, this gauge would closely approximate that found in extant finds. My head measurement is 22.75 inches. I decided to add 10% to allow for the effect of shrinking during the fulling process. That gave me a starting measurement of approximately 25 inches. With 5 stitches per inch, I determined that I needed to cast on 125 stitches. I have never knitted anything round, so the description of the pattern from the "Gagiana" find seemed a logical place to start. I decided to knit four rows in plain knit stitch and on every 5th row increase. Each increase row I would separate the increase by one additional stitch from the previous row. I started the project at the brim and continued according to plan until the brim looked wide enough to look aesthetically pleasing. I then continued 4 more plain rows and one increase row to allow for shrinkage. I chose to use an invisible increase on the increase rows to make the finished product more smooth. From the photos of extant pieces, it appeared that this is the increase that would have been used. At the last increase row, I knitted four more rows in plain knitting and started my decrease rows. I decreased in the opposite direction as I increased in the same pattern. Once I reached 125 stitches, I knitted four more rows so it would match and then joined the beginning row to the current row of stitches.

It was time to start the crown. I knitted outward in the exact same manner as the brim. I continued past the brim a little ways until the brim was two thirds of the hat. At the edge of the hat I chose to knit one round in purl stitch. The Curious Frau used this technique at the edge of her increases and it seemed a logical thing to do. This technique is used in modern knitting where a crease, pleat, or edge needs to be placed. It allows a natural

fold in the stockinette stitch. Since this edge did not have the benefit of another piece to be anchored against like the brim, I thought this technique would help the hat lay with a fairly creased edge and not tend towards rounding out with the stitching. After the purled row, I returned to plain knitting with decreases at every 5th row just as on the brim. I continued by subtracting one stitch from the decrease interval until I was down to decreasing at every other stitch. The space to close up the crown of the hat at this point was small enough that I did not feel I should put in 4 more rows of plain knitting. I chose to do one round of knit followed by one round of decrease at every other stitch until I was down to 8 stitches. At this point I sewed the remaining stitches to each other with the tail of yarn from the knitting. I then worked in left over ends to the yarn into the knitting.

Now I was left with a rather funny looking knitted cap. I knew that I still needed to full it. The hat took me 7 months to knit and I was despairing at the thought of it not turning out. I decided the safest thing to do would be to full it in the washing machine. I put it through one hot/cold cycle with gentle baby detergent and then laid it out to dry. I gently shaped it with my fingers into a more hat like shape and left it to dry overnight. The next morning, I used a hot steam iron to iron it into shape on a ham. I think next time I do this hat, I will stretch it over a Corelle dinner plate to shape it. It was very difficult to press it into the right shape using the ham. When I was finished, I was ecstatic to see that the hat had turned out and the fulling process had shrunk it about the expected amount.

Bibliography

Arnold, Janet. *Queen Elizabeth's Wardrobe Unlocked*. Leeds: Maney, 1988.

Arnold, Janet. *Patterns of Fashion: The Cut and Construction of Clothes for Men and Women C. 1560-1620*. London: MacMillan London Ltd., 1985

Boucher, Francois. *20000 Years of Fashion*.

Buckland, Kirstie. "The Monmouth Cap." *Costume* 13 (1979), 1-16.

Crowfoot, Elisabeth. Frances Pritchard, Kay Staniland. *Textiles and Clothing C. 1150-C. 1450. Medieval Finds from Excavations in London: 4*. London: HMSO, 1992.

Rutt, Richard. *A History of Hand Knitting*. Loveland, Colorado: Interweave Press, 1987.

Turnau, Irena. "The Diffusion of Knitting in Medieval Europe." *Cloth and Clothing in Medieval Europe: Essays in Memory of Professor E.M. Carus-Wilson*. Ed. N.B. and Harte K.G. Ponting. 1 ed. London: Heinemann Educational Books – The Pasold REserch Fund Ltd, 1983. 401.

Zander-Seidel, Jutta. *Textiler Hausrat, Kleidung und Haustextilien in Nurnberg von 1500 – 1650* English Translation by Katherine Barich, available on the web through the Yahoo! German Renaissance Garb List.

Mit Nadle und Faden

Web Sites

Decorating the Tudor Cap <http://www.reddawn.net/costume/hats.htm>

English Cap <http://www.vam.ac.uk/collections/fashion/knitting/objects/object.php?id=10>

Early Textiles Found in Scotland http://www.scotwars.com/html/narra_17thtextiles.htm

Knitted Man's Hat from the ship Gagiana

http://www.curiousfrau.com/Diaries/Knitted_Hat_Gagiana.htm

www.bildindex.de