

16th C. Stiff Foundation Hats and Their Construction:

In this class we will discuss the late 16th C hats of England, France and Spain which use a stiffened foundation. We will touch a little on Italian hats, as well.

One can trace the origins of the wearing of hats as far back as primitive man. Historical evidence has shown that some form of head covering was used for protection against the elements.

During the late 14th and 15th centuries hats played an important role in clothing and were considered an important fashion item as well as a status symbol. Rather like Jimmy Choo shoes of the period.

As hats gradually grew in popularity during the 15th Century, one begins to see tall stiff foundation hats worn by the masses and not just the nobility. Additionally, one begins to see women co-opting traditionally male styled hats and making them a fashion statement for women.

With the increase in the demand for foundational hats, there is an increasingly diverse range of materials used for their production. We begin to see some "formed" foundations such as one would see using a hat block. Additionally, separate tip and stock construction increases. (*Dreher*).

Silk, velvet, taffeta, leathers, and wool was used as the fabric to cover the stout foundations (*Arnold, PoF*).

Some of the most popular foundation materials included, hairy paper, thick paper/cardboard, heavy glue sizing over burlap and other materials with glue sizing. Working with these materials can be a little messy - there are a variety of modern equivalents that you may wish to use instead.

Period materials for hat foundations	Modern equivalencies
Burlap and other materials using glue sizing	Single and double ply buckram (available at millenary stores)
Thick paper/ cardboard	One can use the same or even plastic canvas (available at most craft stores)
Hairy paper and felt	100% wool felt - steamed and molded as desired

Styles of Hats



Note his large brimmed felt hat and her small French hood 1560's wood cut



Taller pleated hat with flat tip Drawing from
"The Booke of Hinting" 1572



Spanish - Lady Clara Eugenia 1584



Tall lhat with rounded tip - 1580



Crowd scene from contemporary wood cut 1560 -
England



nd tip pleated hat as worn by Elisabeth
Knollys - 1577



Polish painting of Sigismund



Picture of original hat from "Pattern of Fashion" by Janet
Arnold 1600-1610



Janet Arnold - Patterns of Fashion
1580-1600

Materials for constructing a round tipped pleated hat:

- Fabric: 1 yard 100% wool, silk, velvet, leather, or other fabric to be used on outside of hat
- Round tip hat block (you may be able to rent one locally. In the bay area, Lacis in Berkeley will rent for about 7\$ /week.)
- 1/4 yard 100% wool felt
- 2 cups of liquid starch
- Large wash tub or sink
- Thread: Use a good quality thread - silk is best if you can find it, a cotton thread will work too.
- Millinery needles #14 #16
- 1/4 yard of 2 ply buckram
- Millinery wire #18 or #19
- Cotton wadding or French fleece
- Chalk or tracing paper
- Manila paper for pattern
- 1/4 yard silk dupioni
- 1 yard of cotton gimp

Constructing the rounded tip:

1. Soak the wool felt in hot water. Gently massage the felt until it is completely soaked. Squishing the fabric is OK, but do not wring it.
Tip - I find it useful to wear rubber gloves for this process as it allows me to work in hotter water.
2. Once the felt is well soaked, remove it from the water and add 2 cups liquid starch to your water. Put the felt back into the hot water and continue to massage it until starch seems worked through the felt.
3. Squish excess water from felt and place over round tip hat block, press into shape.
4. Use a string or large rubber band to secure the felt at the bottom of the hat block
5. Put about 1 cup of undiluted liquid starch into a spray bottle. Once you have your felt stretched and secured onto the hat block, spray liberally with starch.
Tip - I find it useful to gently massage the starch into the fibers. Begin at the tip and work you way down.
6. Let dry completely. Usually a couple of days will do it.
7. Once dry, add millinery wire around the base of the stock.

Adding the pleated fabric to the rounded tip:

1. Add French fleece or cotton wadding to the tip and down the stock of the hat. Secure with a large stab stitch randomly around the tip and stock.

2. Cut the wool into a circle that fits over the top of the tip and reaches to the bottom of the stock with about 1/4 inch to spare.
3. Mark the center of your circle.
4. Using a long ruler and chalk, mark long lines which transverse the center point in pie-like lines such that there is about 1/2 inch between lines at the edge of the fabric.
5. Using a hearty thread, stitch a guideline through your lines about 4" from center and 6" from center. Use thread which is the same color as your hat as these threads will remain visible on the outside of your hat.
6. Place the circle over your hat blank and pull the threads to make small pleats.
7. Arrange your pleats evenly around your hat
8. Turn the fabric under the edge of the stock, and stitch using a stab stitch.

The Brim - making a brim pattern

1. Measure your head 2 inches above your ear and add 1/2 inch. This will be your head plate size.
2. Add 1/4 inch in from your head plate, this will be where you cut the buckram for the brim. The extra 1/4-inch will be used as tabs inside the hat where you will join the stock and the brim.
3. Add 2-2.5 inches from the actual headplate line, this will by the brim of your hat. If you want a point in the front, simply add it at this time.

Using the brim pattern

1. Using the above pattern cut 2 brims from 2-ply buckram, one on the bias and one with the grain.
2. Steam the two pieces together (it is rather like basting them together)
3. Add millinery wire to the edge of the 2 pieces of buckram.
4. Add 1/4 inch to your brim pattern and use it to cut out 2 pieces of your fashion fabric
5. Place fabric on brim, pin securely
6. Turn each edge and sew using invisible stitches. (Please see photocopied page from - Albrizio, A. *Classic Millinery Techniques*, Lark Books, Asheville, NC 1998

Attaching the crown to the brim:

1. Using chalk or a marking pencil, mark your head plate.
2. Mark in 1/2 inch and draw another line, Cut the head hole along the inside line
3. Cut easing tabs out to the original headplate line
4. fold tabs (fabric and buckram) up
5. Place stock on brim and sew through stock and tabs using a stab stitch.

Adding a lining

I like to use silk dupioni for lining as it has enough body to stay up in a hat and not become floppy over time. You may wish to add a sweatband inside the hat for comfort and to finish the look.

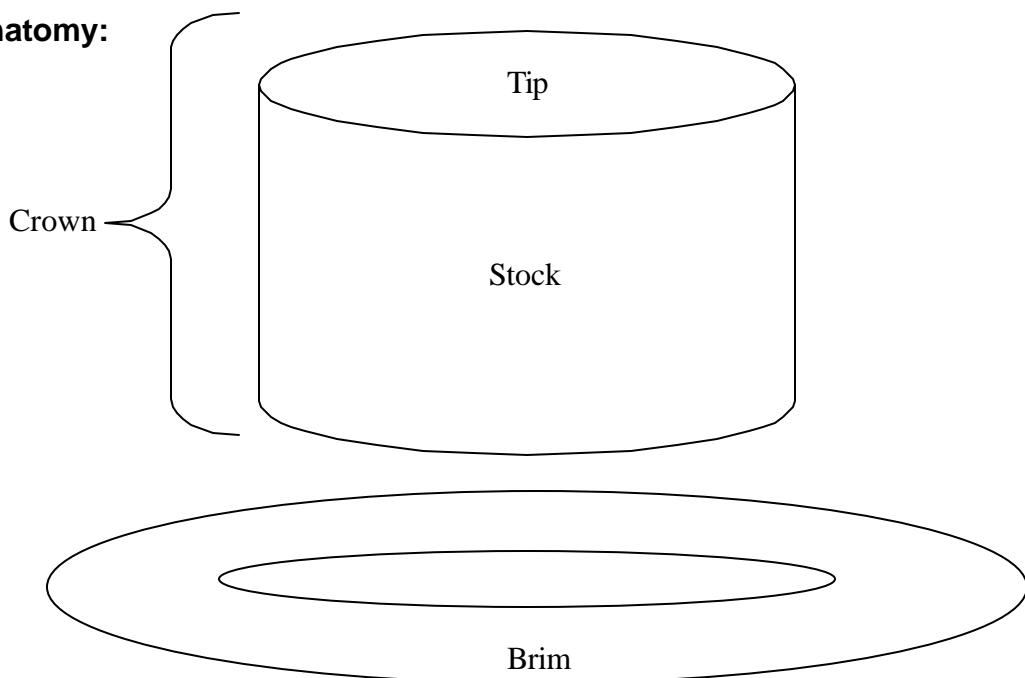
1. Cut a circle the same size as your outside fabric, of lining fabric.
2. Sew large darts from the raw edge to 3 inches from the center - you'll need about 8-10 darts
3. Sew inside your hat folding under raw edges and securing with a short stab stitch.

Construction Tips:

- ◆ When buying buckram, make sure you get "2 ply buckram" I like to get my supplies from California Millinery in Los Angeles.
721 South Spring St
Los Angeles, CA 90014
213.622.8746
- ◆ Be patient when pleating, they have to be small pleats or it won't work
- ◆ I like to use a steamer when steaming pleats rather than an iron that can flatten your pleats and silk pile.
- ◆ In order to get a good head plate shape; you might find it useful to invest in an "architect curve". It lets you measure around odd shapes and retains the shape so you can trace it. This allows you to have an exact head plate. If you don't have a curve, feel free to use the plates at the end of this paper.

Millinery Vocabulary:

Hat Anatomy:



Buckram - cotton or polyester fabric with a wide tabby weave which has glue sizing added to it. It is made commercially (California Millinery in L.A. cost \$5-\$10/yard)

Cotton wadding - padding material used under the fabric of hats to give the hat a smooth finish (California Millinery in L.A. cost \$4/bat)

French Fleece - padding material used under the fabric of a hat to give the hat a smooth finish. (International silk and Woolens in L.A. cost is \$20.00/yard) If you can, this material is a much better choice than cotton wadding.

Head plate - the measurement of your head with 1/2 inch added.

Joiners - small metal "clips" into which one puts the ends of millinery wire to finish a join.

Millinery wire - narrow wire in sizes from #12-#20 which is covered with thick thread and used around the edges of buckram on the brim, bottom of stock and edges of a flat tip.

Millinery needles - hand-sewing needles made for use with very heavy materials such as buckram. These needles have much thicker eyes and more flexibility.

Petersham - milliner's grosgrain. The edges of the grosgrain are not stitched together and allow for easy turning of the ribbon for a better fit in the hat.

Bibliography

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

Arnold, Janet., *Queen Elizabeth's Wardrobe Unlock'd*, W. S. Maney & Son Ltd., Leeds 1988

Tudor Royal Proclamations, Vol. I1, The Later Tudors (1553-1587), Yale University Press, New Haven

Dreher, D. *From the Neck Up*. Madhatter Press, Minneapolis, MN, 1981

Albrizio, A. *Classic Millinery Techniques*, Lark Books, Asheville, NC 1998