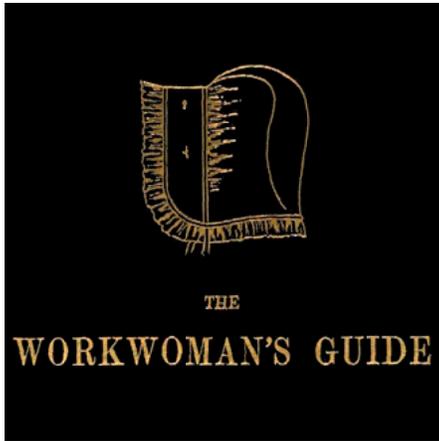


19th Century Day Caps and Patterns from the Workwoman's Guide

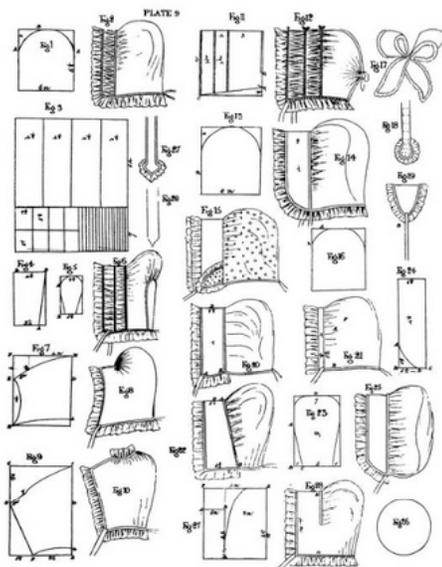


A pattern sizing project for intermediate sewers. Learn how to size up scaled down period pattern in order to make a muslin in your own size using Romantic day caps as examples.

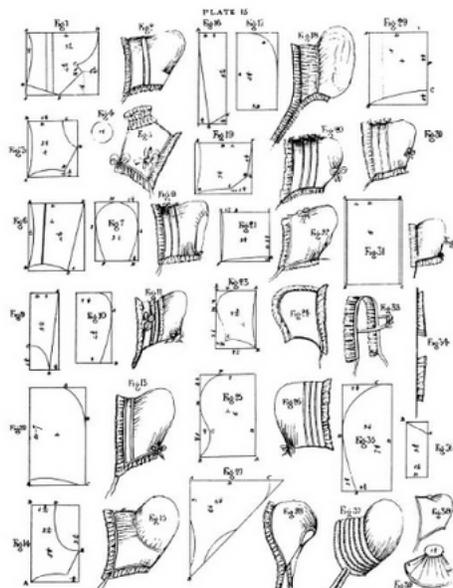
When I began costuming (mainly of Elizabethan), my goal, then as now, is recreating accurate period costumes. Patterns are critical to accuracy, and Janet Arnold's series of books featuring scaled patterns of historical extant clothing are an example of an essential resource for modern costumers. However, the first step is learning how to scale these patterns to full size. The easiest method is taking them to a copy shop, enlarging them to the recommended size, then comparing the enlarged pattern to your own measurements and scaling it again.

Pattern books written concurrent to their times present a more difficult challenge. The Workwoman's Guide, by a Lady, published in 1838, is a good example of this type of book. It is accessible on-line. At first glance you might be overwhelmed by the over 300 pages, not to mention the 24 plates and 50+ scale drawings per plate. The drawings have very few sewing notations that are familiar to most modern costumers, especially the old measurement of nails to which all drawing are scaled. This may cause most people to dismiss the source; nevertheless I would like to promote the use of this book among the costuming community and beyond. One way to do this is to make you more comfortable with using resources like this period pattern book.

Your Wardrobe Unlock'd published a four part article in 2012 on The Workwomen's Guide written by Ava Trimble. It is a wonderful introduction to the book, detailing the sewing stitches used in the Romantic period; however, there's little information about how to use the patterns. I suggest that you refer to it in conjunction with this article. I will focus on day caps as most of the steps I used to scale up and test these patterns can be applied to the construction of all patterns in the book.



The Workwoman's Guide Plate 9



The Workwoman's Guide Plate 15

There are two plates of scaled down cap patterns in *The Workwomen's Guide*, one with 13 drawings and another with 17. Each cap has a single size drawn pattern with measurements and a drawing of the finished cap from the side; however, because of the antiquated units of measure and the simplicity of the drawings it can be challenging to make the best use of the wonderful resource.

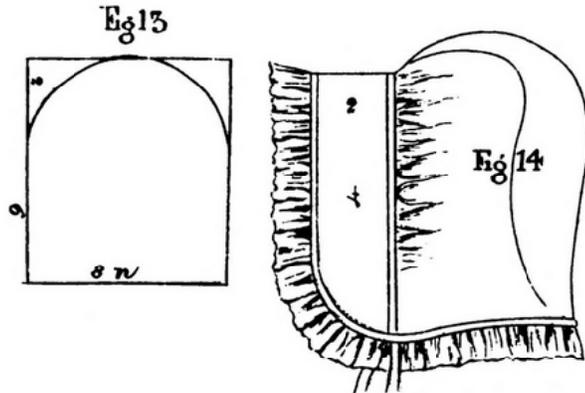


Plate 9, Fig. 13 & 14

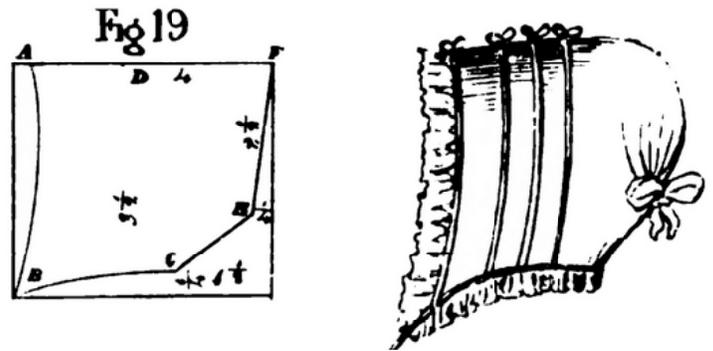


Plate 15, Fig. 19 & 20

In part 1 of this article I will discuss drafting out the patterns and resizing them so that you can construct a muslin (mock-up). I chose two caps one from Plate 9 Fig.14 and one from Plate 15 Fig. 20. based on their shapes, which I find intriguing, attractive and similar to those I have found in period portraits and in museum collections. The first step, however is to answer the question: What are nails?

A nail is 2.25" (5.715 cm). I came to the same conclusion as Trimble (2012): Just work in nails and don't try to convert to modern standard measurements or it will drive you crazy. It is recommend to take a yardstick and create your own nail ruler as she shows. Or, I have made a 4 page PDF file that you can print at 100% on a home printer in either Letter size (US) or A4 (Europe) and tape together to get graft paper.



Image 6 left, Cathrine Jensen (the artist's wife), 1825 by Christian Albrecht Jensen. A lace cap which ties under the chin with a large bow.

Image 7 right, Lucretia Mott by Kyle 1841. While most caps were made of cotton or linen (the cotton often being as transparent as with cotton organdy) I'm sure that Mrs, Mott's cap is silk organza. As an abolitionist she did not wear cotton so as not to support the slave trade.

For the Regency/Romantic time period as a pattern maker I like to divide caps into two basic types: those that come down and tie under the chin and those that end below the ears. Above are examples of those types of caps. Both young ladies and older women wore each of these styles. Because the drawings from *The Workwoman's Guide* of the finished caps are not shown on heads, there are no reference points that you can use for scaling. You don't know if a drawing of the cap is the type that ties under the chin or not. You have to make a judgment call it seems that most of the caps shown on Plate 9 are the types that should end at the bottom of the ear and those on Plate 15 tie under the chin. This is important because to scale a pattern to your size you need a measurement that you can relate to the pattern. With garments you use the standard "bust, waist and hips" but for caps you need to use some unusual head measurements. Normally for headwear you would use head size which is a measurement around the head at the level of the forehead where most hats sit but for caps if it like Cathrine Jensen's than you measure from under the chin, around you head and back under the chin. If the cap is like Mrs. Mott's cap then you measure from the bottom of your ear lobes around to the bottom of the other.



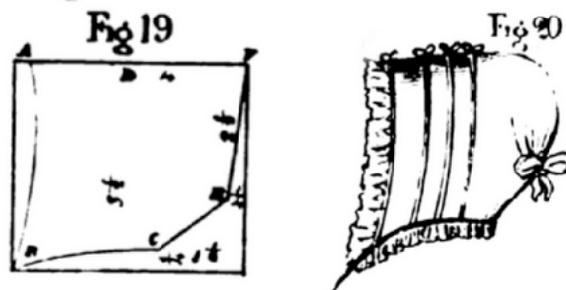
(Image 8 left) Laurie Tavan Demonstrates how to measure for the type of cap that ties under the chin.
 (Image 9 right) Laurie Tavan Demonstrates how to measure for the type of cap that ends just after the ears.

Materials

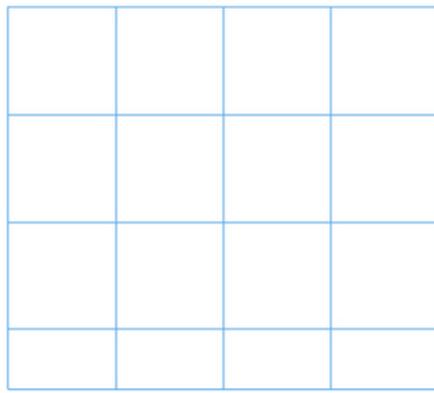
- Graft paper in nails from the PDF file. This graft paper is based on nails but has inches and cm for reference.
- Ruler / straightedge
- Paper scissors Compass
- French curves (optional)
- Tape
- Printer to print the graft paper
- 1/2 yard (1/2 M) of cotton muslin

A Bonnet Cap Plate 15. Fig. 19 & 20

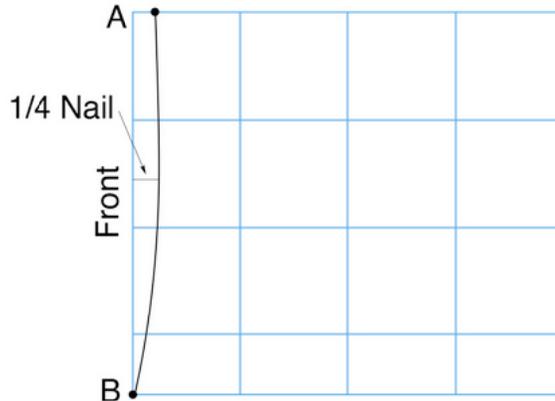
Step 1 Let's start with the cap from Plate 15. Print out page 1 and 2 of the PDF graft paper. In the steps below the historical instructions are in quotes and italic and my translations are in normal text.



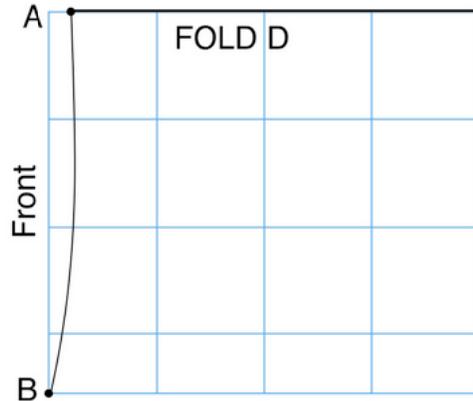
“This is a one piece pattern” This means that the pattern is cut on a fold. As opposed to a two-piece pattern, which would have a center seam that runs the full length front to back.



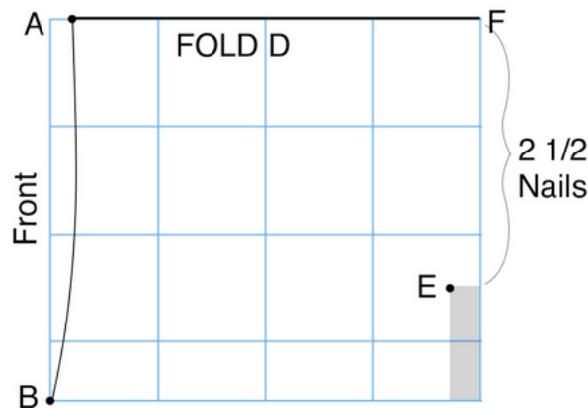
Step 2 "Let your paper be 4 nails wide by 3 nails and a half long". Cut your graft paper down to 4 nails wide and 3.5 tall.



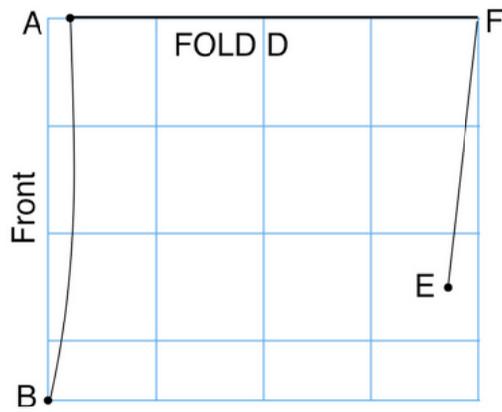
Step 3 "The front, AB, is a little hollowed, say a quarter of a nail." Draw a line from A to B that curves in about .25 nails near the mid-point of the line. This will be the front of the cap.



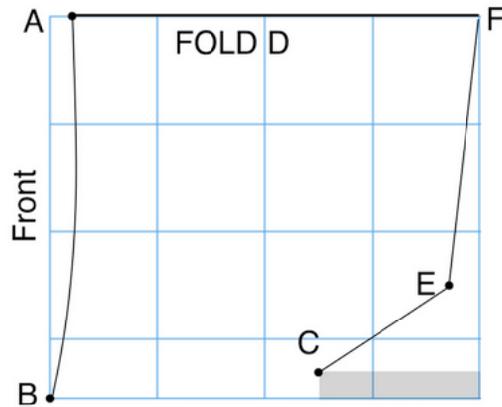
Step 4 "D is the doubled part." This means that line D is the folded edge, therefore mark the top edge as your fold line.



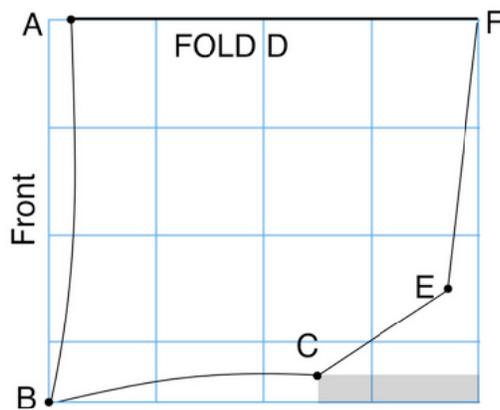
Step 5 "E is two nails and a half from the top, and a quarter of a nail from the side." Mark F at the end of the fold line and locate and mark E which is 2.5 nails down and .25 nails in from the right.



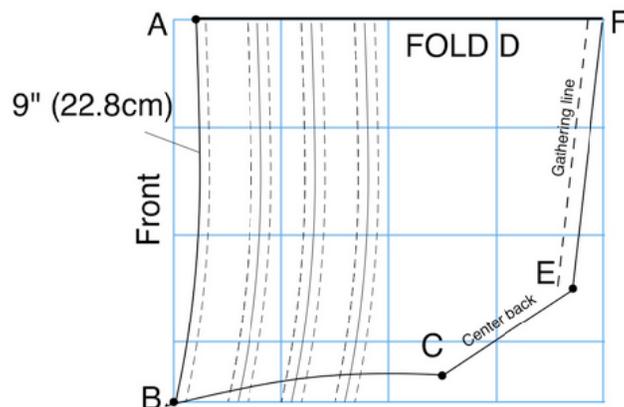
Step 6 “Slope from F to E,” Draw a line from F to E.



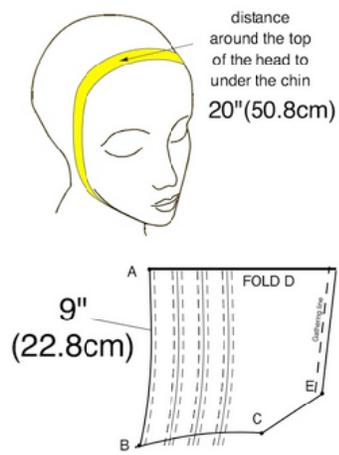
Step 7 “and from E to C, which is one nail and a half from the side, and a quarter of a nail from the bottom.” Locate and mark C. This is 1.5 nails from the right and .25 nails from the bottom. Draw a line from E to C.



Step 8 “Curve a little to B.” Connect C to B by drawing a slightly curved line between them starting at C and dropping down to B.



Step 9 Add any pattern notations at this point such as gathering lines and the lines for the runners (ribbon channels). Then measure the length of A to B.



distance around the top of the head to under the chin
20"(50.8cm)

9"
(22.8cm)

A B C D E F

FOLD D

distance around	X	grathering percent	=	target A-B
20"	X	120%	=	24"

target A-B	=	percent
original A-B X 2	=	enlargement needed
$\frac{24"}{9" \times 2}$	=	$\frac{24"}{18"} = 133\%$

Or	$\frac{50.8\text{cm} \times 120\%}{22.8\text{cm} \times 2}$	=	$\frac{61\text{cm}}{45.6\text{cm}} = 133\%$
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Step 10 The ultimate goal is not to draft out but to use the pattern once drafted to help us calculate something that will fit you, at least close enough to make a muslin. Now for some math: The most important thing with this type of cap is that it meets or nearly meets under the chin. Refer back to image 8. For example, if it's 20" (50.8 cm), you need a measurement from the pattern that is comparable or twice the length of line A-B or 18"(45.6 cm).

That would be enough with most patterns but, looking at the drawing of the finished cap, you will see that the edge is gathered because it is part of a runner (channel). This is the most difficult part of scaling this pattern up as you must guess just how much gathering is needed. In other words, how much larger do we need to make the pattern to account for the gathering? Let's estimate: If gathering 12" of fabric down to 6" in length is dense gathering and if gathering 12" down to 9" of it length is medium then perhaps this (looking at the drawing) is taking 12" down to 10" or 12 divided 10 which is 20% more, which is 120%. So, our target size for the pattern is not really 20", it's 120% times 20" or 24". Now that we know our target (final) size, 24" and we know how large it is on the pattern (18") so, now we can figure just how much we need to enlarge the pattern. If you divide 24 by 18 you get 133%. 133% is just an example your factor will be larger if your head is larger.

There are a few ways of getting your drafted pattern to the size you want for your muslin:

- 1) If you have a scanner you can scan and print it at 133% in the print dialogue box.
- 2) Or you can enlarge to 133% on a copy machine.
- 3) Or you can use a camera to take a photo of it (make sure you camera is level) and if you have drafting software on your computer, you can scale the picture until the grids are 2.25" (5.7 cm). Then printing it with the scale set to 133% in the print dialog box.

Those people with drafting software can skip drawing out the pattern all together by enlarging it to fill your computer or cell phone screen and taking a screenshot of the cap pattern and using their program to size up the pattern to scale (nails) and then do the math to obtain the enlargement percent for their size.

"In making up, hem it in the front, and make three or four runners to admit a colored ribbon, the number and breadth of these depending on fancy." **Note: I've already added the lines for the channels (what are called runners in the period instructions). If your ribbon is not too wide, I discovered through trial and error that it was not necessary to add them in the drafting stage; however, if you have lots of hair or a long front-to-back head measurement, you may want to add them to your final pattern. This is one of the things you will learn by making a muslin this, and any other changes you might need to make before you cut your final fabric.**

Step 11 Now you have you pattern to a size that is close enough to cut out a muslin. Cut one on fold. Press a hem along the front edge of the cap and sew a gathering stitch (just for fitting the muslin). Press each of the solid runner lines and sew a gathering stitch 1/4" (0.63 cm) to 3/8" (0.95) over from each of the press lines.

Step 12 “Join it from E to C, either plainly or with a piece of insertion-lace, and at the back.” E to C is the center back seam so that needs to be sewn. I used a 1/4” (0.63 cm) seam allowance everywhere.

Step 13 “C B, make another string-case.” This lets you know that the cap’s tie is threaded through a casing along the bottom edge so that some gathering at the center back of the cap will let it fit to your head. You do not need to do this for the muslin.

Step 14 “The upper part, from F to E, is gathered and drawn together, and a bow put to conceal the gathering.” Make a narrow hem along F to E before gathering it with a fairly long gathering stitch. This allows the fabric to gather to a very small hole with no raw edge exposed.

Step 15 Gather all the stitches mainly in the upper crown area with a little gathering and none if any on the lower part of the cap and try on for fit.



Muslin for cap Plate 15, Fig. 19 in head size 21”

A Neat School Girl Cap Plate 9, Fig. 13 & 14

Step 1 I chose this cap because it has a non-gathered head-piece. The head-piece is period term for the part of a cap that most closely fits to the head. It is attached to a gathered crown (sometimes called the caul or bag). After these two are joined lace or ruffle are added. There are five patterns on Plate 9 with a similar style of cap consisting of a one-piece crown, head-piece and ruffle. However, because this cap has a non-gathered head-piece it is much easier to achieve the right size and, with some simple modifications, you could create any of the others. There is no pattern for the head-piece; therefore, you will have to draft one.

As for the crown, it seems very large. From the description of Fig. 13, “This pattern needs little further explanation, the shape and size are so clearly given in the plate.” The plate says 8 x 9 nails. If you printed out and taped together the graft paper to that size (8 x 9 nails), you would see it is very large. Instead I recommend using the crown pattern given in Fig. 1, “Women’s Day or Night Cap.”

Step 2 Print enough pages of the graft paper and tape them together to create a piece sized to 6 x 6.5 nails for the crown, and a piece 1 nail wide that is long enough to go from the bottom of one of your ears to the bottom of the other for the head-piece. As in Image 9.

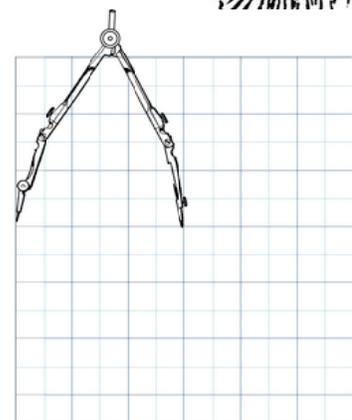
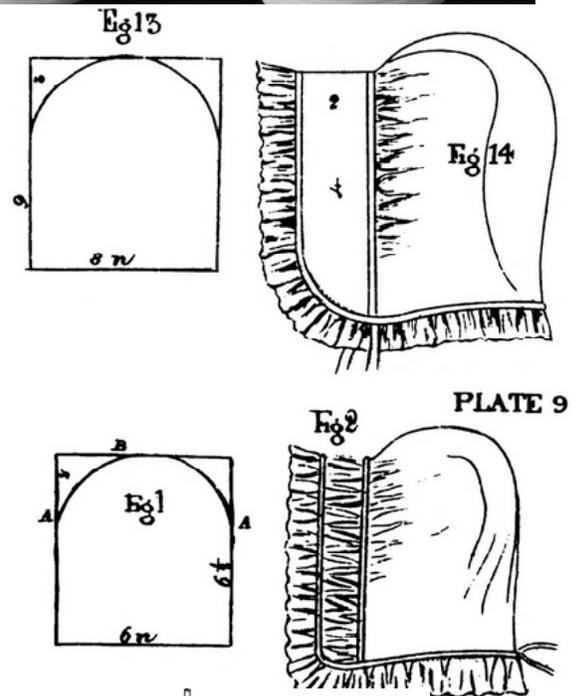
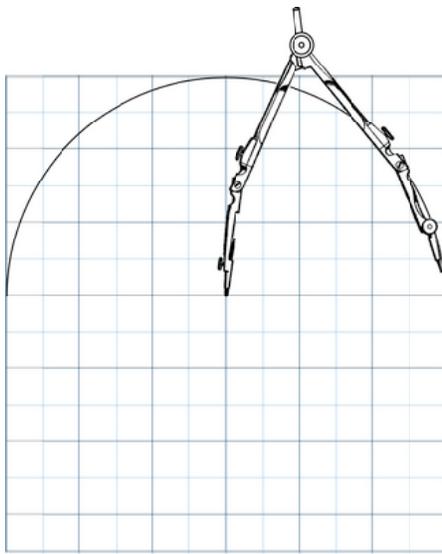
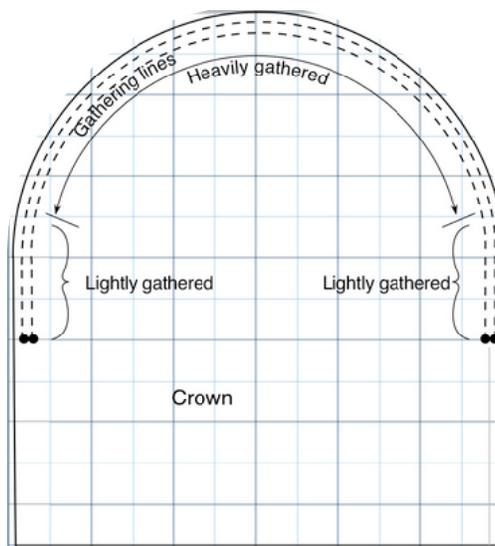


IMAGE 23

Step 3 Set your compass to 3 nails wide.

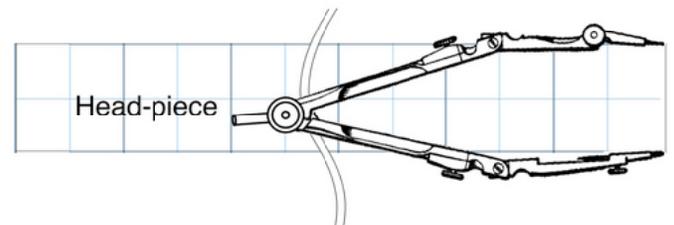


Step 4 Draw a half circle at the top of the graft paper. Cut away the extra paper at the corners.

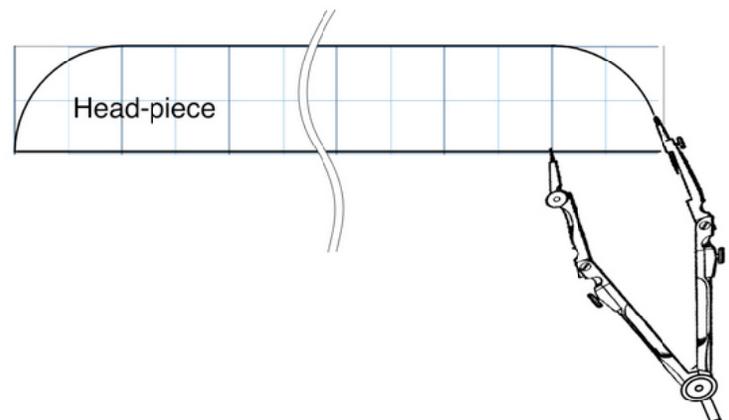


Step 5 Add notations to the pattern that mark where you need to gather the crown.

Step 6 The head-piece is the key to the fit of this cap. Although there is no pattern, there are hints about drafting it: *“The head-piece is sloped off at the ears, beginning to cut at 1 nail above the corner, to 1 nail beyond the corner, at the bottom of the cap.”* Once you have a strip of graph paper equal to the correct length, set your compass to one nail wide.



Step 7 Round off the same corner on opposite ends of the strip.



Step 8 The first pattern ran very small but, the second one even using the 6X6.5 crown runs large. In fact I found that it fit me perfectly but I have a large head size, 23" (~58 cm). My head-piece is 18" (45.7 cm) long. You would need to re-size the crown pattern for a different head-piece length. Say you wanted 16" (40.6 cm) you would divide 16 (40.6) by 18 (45.7) to get 88%. That means that you would reduce the crown portion of the pattern to 88%, then follow either #1, #2 or #3 from the last section. Or you could print the pattern I have included with 5 different sizes at the end of the article.

Step 9 To make the muslin, cut one of each pattern piece. Sew the gathering stitches on the crown and adjust the gathers until the edge of the crown is the same length as the long edge of the head-piece. Pin the crown and head-piece together and sew.



I'm leaving with both caps in the muslins stage perhaps you will want to give a try to sizing other patterns from the book. Head coverings are no doubt simpler than garments and true pattern sizing to body measurements is much more complex than using percentages to just get it close but I have found that a combination of sizing patterns close to your measurements and then re-pinning the seams on a dress form or your own body is much easier and less time consuming than the draping method of patterning. This is especially true with period pattern where each time period has its own special angles to seam lines. In part 2 I will show how to calculate the amount of ruffle needed, what fabrics are the best choices and how to finish the caps.



(Image 29 Laurie Tavan modeling the finished cotton organdy version of the muslin shown above. Gown and lighting by Laurie Tavan, cap and chemisette by author.)

- What took a many words to explain in practice only takes a couple of minutes and it's a useful skill.
- It's sometimes easier to work in the scale of the time period i.e. you can create a ruler or graft paper to help you do that.
- The most important thing to know when you are sizing a pattern is how large it needs to be to fit you and where to measure yourself and the pattern so that you can enlarge it.
- There are numerous ways to enlarge a pattern.
- If there are written clues use a combination of drawings and text to understand what you need to. Sometimes the written clues are not understandable without the drawings.
- First check your enlarged paper pattern, does it seem the correct, then make a muslin. If necessary mark the muslin for alterations, cut and make another before moving on to you final fabric.

Acknowledgements I would like to thank, first my editor, Gailynne Bouret she really helped bring it together. Then my model, Laurie Tavan, you can put anything on her and she always looks like she belongs to the time period. Lastly Noelle Paduan for lending me a camera so I could finish the article on time.