Making 18th Century Fitted Stockings

by Rebecca Manthey

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Most stockings sold commercially are long tubes (usually with shaped heels and toes) that rely on the stretch of the knit fabric to fit the leg. This is not authentic for the eighteenth century. And, unfortunately for those of us with wider legs, they are often too tight in the calf and thigh. The solution is, of course, to make your own. Stockings can be sewn from knitted fabric, sewn from woven fabric cut on the bias (diagonal), or knit either flat or in the round (tubular).

In the eighteen century, stockings were made from wool, silk, linen, cotton, and mixtures of fibers. Yarns varied from thick (modern worsted weight, with about 4 stitches per inch) to very thin (modern lace weights, with 28 or more stitches per inch). Modern machine-knitted, fine gauge fabrics look similar to frame-knitted fabrics, and can be made into very authentic-looking stockings. Woven fabric can also be used, and Diderot’s Encyclopedia shows wool being felted onto stocking shaped forms. However, in New England woven fabric stockings were generally only worn by poor people.

There are many ways of shaping stockings, but the most common seems to consist of two pieces: the leg and heel, seamed up the back; and the sole of the foot. These sample patterns are from the 1700’s and similar stockings can be seen in many period illustrations, including Hogarth and Diderot. Note that all three are virtually identical except for the ankle gore. Gores can be as tall as mid-calf, and as wide as one quarter of the ankle width. The purpose of the gore is to improve the fit of the stocking in the ankle/heel area, and to reduce stress on the seams. Stockings with long gores were most common during the first half of the century. Often the stocking was colored and the gore was white. Later, gores became shorter and white stockings became fashionable.

Sometimes fancy “clocks” are knitted into or embroidered onto stockings at the inside and outside of the ankle. These are sometimes geometric patterns, but are usually flower motifs, and range from small and discreet to very elaborate and gaudy. Besides being decorative, they can be functional if placed to reinforce the sewn edges of the fabric where the pieces come together.

Use fabrics or yarns made with only natural fibers, or a very low percentage of modern fibers. Modern fibers are often slightly shiny, and become more so over time. Also they often produce a fabric that is more stretchy than 18th century fabrics. Be sure to follow the fabric care instructions, or to pre-wash your fabrics so they will not shrink later!
The first step in making a stocking is to take some measurements.

<table>
<thead>
<tr>
<th></th>
<th>Height/length:</th>
<th>Circumference:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thigh</td>
<td>___________</td>
<td>___________</td>
</tr>
<tr>
<td>Knee</td>
<td>___________</td>
<td>___________</td>
</tr>
<tr>
<td>Lower Knee</td>
<td>___________</td>
<td>___________</td>
</tr>
<tr>
<td>Calf</td>
<td>___________</td>
<td>___________</td>
</tr>
<tr>
<td>Lower Calf</td>
<td>___________</td>
<td>___________</td>
</tr>
<tr>
<td>Ankle</td>
<td>___________</td>
<td>___________</td>
</tr>
<tr>
<td>Heel</td>
<td>0</td>
<td>n/a</td>
</tr>
<tr>
<td>Foot</td>
<td>___________</td>
<td>___________</td>
</tr>
</tbody>
</table>

Calculate “top of foot”: foot length - (ankle circumference / 4)

The stocking should fit snugly, so it will be cut or knitted to a slightly smaller size, which will match your measurements when stretched. To do this, you must determine the amount of stretch in your fabric. Cut or knit a 4 inch square of the fabric, and stretch it a comfortable amount. Note that a woven fabric will stretch most on the diagonal, so cut your gauge square on the diagonal to get accurate stretched measurements. The square will become wider, and sometimes shorter. Make a note of the stretched dimensions. Use this “stretched gauge” to determine the size of your finished piece.

**Part 1: sewn from either woven or knitted fabric**

Using your leg measurements multiplied by the stretched gauge, draw a full size sketch. Round any sharp corners. Make sure that the pattern does not narrow so much at the knee that the fabric will not stretch enough to go over your calf? Add an inch or two at the top to turn over as a hem. Remember to add seam allowances as necessary, usually 1/8 to 1/4 inch depending on whether the fabric will ravel, and what seam finish you use. Also remember that, like all sewing, the stretch of the fabric allows you to “fudge” some of the measurements. Use this pattern to cut the fabric.

Seams can be sewn in any order, unless you will be embroidering clocks, which are easiest to work on a flat piece. Keep in mind that the seams themselves will need to be able to stretch somewhat. If necessary, tape the seams to make them stronger. Turn under the top edge and hem it, stretching as you sew, so the stitches won’t be strained when you wear the stocking.

Obviously, a hand stitched seam is period correct. I believe that whip-stitching would be best, since it will allow some stretch and will finish the raw edge. Otherwise, use a serged or machine stitched seam (straight or zig-zag). If your sewing machine does not make “stretch stitches”, stretch the fabric slightly while sewing.
Examples: Stockings for David, using short gore pattern and long gore pattern
Natural colored machine-knitted wool.
Four inch square stretches comfortably to 5.5” wide, 4” tall.
Stretched gauge: Height = 4” / 4” = 1  
Circumference = 4” / 5.5” = 0.73
(note that the height gauge will be 1 or greater, and the circumference gauge will be 1 or less.)

<table>
<thead>
<tr>
<th>Height/length:</th>
<th>H x gauge</th>
<th>Circumference:</th>
<th>C x gauge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thigh</td>
<td>23</td>
<td>20.5</td>
<td>14.965</td>
</tr>
<tr>
<td>Knee</td>
<td>17.5</td>
<td>16</td>
<td>11.68</td>
</tr>
<tr>
<td>Lower Knee</td>
<td>15</td>
<td>14</td>
<td>10.22</td>
</tr>
<tr>
<td>Calf</td>
<td>10 to 14</td>
<td>16.75</td>
<td>12.228</td>
</tr>
<tr>
<td>Lower Calf</td>
<td>8</td>
<td>13.75</td>
<td>10.038</td>
</tr>
<tr>
<td>Ankle</td>
<td>4.5</td>
<td>9.75</td>
<td>7.118</td>
</tr>
<tr>
<td>Heel</td>
<td>0</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Foot</td>
<td>11</td>
<td>10.5</td>
<td>7.665</td>
</tr>
<tr>
<td>Top of foot:</td>
<td>8.563</td>
<td>8.6</td>
<td></td>
</tr>
</tbody>
</table>

**Part 2: knit in the round or flat**

Take your measurements as above. Knit a 4 inch or larger square and stretch it to determine “stretched gauge”. If you will be knitting the stocking in the round, this gauge square must also be knit in the round. Calculate the number of stitches and rows needed to make the desired shape.  I recommend a relatively tight gauge so the fabric will be stronger, not wear as easily, and not stretch significantly. A tightly spun yarn will last longer, and be less likely to “pill.” You can reproduce either hand-knitted stockings, or can imitate frame-knitted stockings by working flat pieces either by hand or on a knitting machine.  I suspect that most period hand-knitted stockings were worked in-the-round.  See the *Mary Thomas’ Knitting Book* for unfamiliar techniques and terminology used here.

Usually, stockings were made entirely of stocking stitch, but 1x and 2x ribbing were also used on hand-knitted stockings. Interestingly, finely knit, machine-made stockings were a sign of wealth. “Stocking frames” were similar to modern knitting machines, except that they worked a row at a time rather than a stitch at a time.  Most could produce only flat fabric in stocking stitch, and usually used fine to very fine yarns. Interesting “turn-shapes” could be worked by hand-manipulating stitches, but we won’t go into that here!

For frame-knitted stockings, the sewn fabric stocking patterns can be used.  No seam allowances will be needed, since the pieces will be butted together. Increases and decreases are made 1 to 2 stitches in from the edge.  The pieces can be worked entirely as shown and the seams sewn together using a whip stitch or mattress stitch (called overcast seam and vertical seam by Mary Thomas).  Or the leg can be worked, the back seam sewn, and then the sole stitches picked up and worked.  This would mean that there are no seam on the bottom of your foot to chafe and cause blisters.  Clocks can be worked in another color held with the main yarn as you knit (“plated”) or can be added later as duplicate stitch (*Swiss darning*) or embroidery.
For hand-knit stockings (knit in-the-round), increases and decreases are usually made at the back of the leg but are sometimes worked around the leg. Stocking-stitch stockings often had a purl or garter stitch ridge at the back of the leg to give the impression of a seam, and shaping was worked 1 to 2 stitches away from the purl ridge. When shaping ribbed stockings, try to maintain the ribbing pattern. Sometimes these stockings had the sole knit separately from the top of the foot and then sewn together, allowing a worn out sole to be easily replaced. Clocks can be worked as for frame-knitted stockings, or can be worked as purl stitches as you make the stocking.

I believe that most common modern methods of increasing and decreasing stitches are period correct for New England. Period correct shaping for toes and heels are more limited. Both the wedge-shaped toe and the star toe (called the long toe and the short toe) shaping are correct. A peasant heel and a turned heel (round heel or Dutch heel) with a stocking stitch heel flap and gussets are correct. Most reinforced heel techniques were developed later. Stockings were generally worked from the top down, but I find that it easiest to work in the round from the toe up, so I can try the stockings on as I knit.

If you wish, you can work short rows in the knee area so that there is room to bend your knee without overly stretching the fabric or pulling down the stocking. Probably not period correct, but it does prevent lots of fabric from bunching up behind your knee.

The top edge can be finished by knitting a few rows of garter stitch or ribbing, or by turning under a stocking stitch edge. Bind off the stitches in pattern. If you have knit a flat piece, butt the edges together and sew the seams.

Sources and Further Reading:
General Information:
- 18th Century Woman list. <http://groups.yahoo.com/group/18cWoman>

Interesting pictures of stockings:
LONG GORE
EMBROIDERED CLOCK
STOCKINGS

1720-1740

Sketches from the stockings
shown at
www.antiquefashion.com/1599.htm
DAVID'S STOCKING - LONG GORE
4" STRETCHES TO 4" x 5.5"

NOTES - SKETCH LEG & SOLE AS IF FOR NO GORE
SKETCH GORE (CENTER OF GORE IS BEGINNING OF SOLE LENGTH)
SUBTRACT 1/2 WIDTH OF GORE FROM HEEL OF LEG PIECE
ADD SEAM ALLOWANCES
DETAIL OF LONG GORE STOCKING
ANKLE AREA

Showing seam allowances

TLA

\( \frac{1}{4} \) inch circumference

\( \frac{1}{4} \) inch add

- \( \frac{1}{2} \) gore

- \( \frac{1}{2} \) inch

SOLE

Revised
3/02
SHORT-GORE STOCKING PATTERN
for woven fabric
mid 1700's

LEG

STRAIGHT OF GRAIN

GUSSET & SOLE

STRAIGHT OF GRAIN

1 inch

Sketched from a full-sized pattern Belonging to Fort Western, Augusta, Maine
DAVID'S STOCKING — SHORT GORE
4" STRETCHES TO 4" 5.5"

LEG

T

center-line

K

Lk

C

La circumference

C

LC

A

4/4 Foot circum.

\( \text{Top of Foot} \)

\( \text{Top of Foot} \)

H

\( \text{Top of Foot} \)

\( \text{Top of Foot} \)

A

SOLE

H

4/4 Foot circum.

\( \text{Top of Foot} \)

\( \text{Top of Foot} \)

\( \text{Top of Foot} \)

\( \text{Top of Foot} \)

\( \text{Top of Foot} \)

\( \text{Top of Foot} \)

\( \text{Top of Foot} \)

\( \text{Top of Foot} \)

\( \text{Top of Foot} \)

\( \text{Top of Foot} \)

\( \text{Top of Foot} \)

\( \text{Top of Foot} \)

No seam allowances shown

\( \text{1 inch} \)

= 1 inch
DETAIL OF SHORT GORE STOCKING ANKLE AREA

Showing seam allowances

+ LC +

+ A +

\( \frac{1}{4} \) foot circum

\( \frac{1}{4} \) ankle width

+ H +

Seam allowance

Seam allowance to \( \frac{1}{8} \)"

Cutting line?

Cutting line?

\( \frac{1}{2} \) inch

Rev. 9/02
STOCKING
NO GORE
mid to late 1700's

From the authors collection