

# Making Medieval Shoes

Written by Chris Stevenson after Martin Austwick of The Exiles

Shoes in the late medieval period were constructed in a somewhat different manner to their modern-day equivalent. The following is a construction guide for anyone who wishes to make a pair of authentic turnsoles.

What you will need:

- Sole Leather – 4-7mm thick vegetable tanned
- Upper leather – 1.5 – 3mm thick vegetable tanned
- A square of canvas about 40 – 50cm each side
- Two saddlers' needles (heavy duty blunt needles)
- Linen thread
- An awl – diamond section, very sharp.
- A Stanley/Craft knife
- A tape measure
- A pencil
- Scissors
- Leather thonging
- Beeswax

## Stage 1 – Making the pattern

There are many different methods used to create the pattern, authentically a last should be used. What follows though is an easy method of creating a mediaeval looking shoe.

Firstly draw around your foot on a piece of paper and extend the big toe into a point (it's also worth narrowing the middle slightly) to give your shoe that mediaeval look. See fig 1.

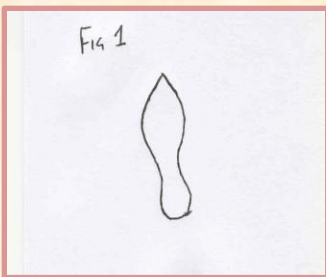


Fig 1

Cut this out and using it as a template mark the shape out on a vege-tan sole leather. This should be at least 5mm thick, then using a very sharp knife cut out the sole. It generally takes a couple of passes with the knife to cut through sole leather, you need to be as accurate as possible at this stage as the smallest mistake now can ruin the shoe.

You should now have one mediaeval shaped sole.

Place your foot onto the sole and measure from the floor, over the highest point of your foot back to the floor. Mark this point on the side of your leather sole. Divide this measurement in two (I will call this number "x").

Take a piece of canvas or other non-stretchy cloth and place the sole on it with plenty of space on either side. Draw around the sole on the canvas and then transfer the mark from the highest point onto the canvas pattern. Measure "x" in either direction and mark it onto the pattern.

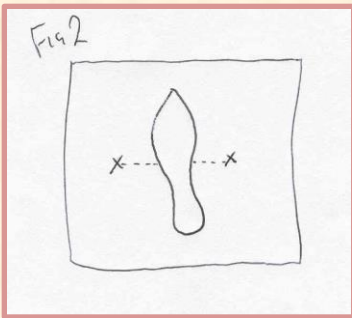


Fig 2

Now for the tricky part. Holding the point of the sole in position pivot the sole around until it touches point "x" on one side. Draw down the side of the sole. Repeat this process for the other side. You should now have something that looks like this.

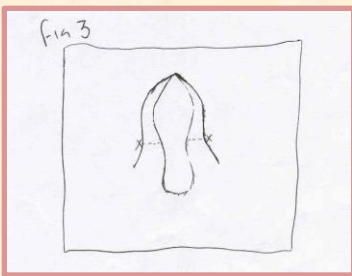


Fig 3

Allowing 0.5 inch all the way round for seam allowance, cut this shape out of the canvas (across the sole at the "x" points). This will form the "vamp" of your mediaeval shoe.

For the back of the shoe measure around the sole from point "x" on one side to point "x" on the other and cut out a canvas rectangle this long by approx 4 inches high.

You should now have one leather sole (i) and two pieces of canvas (ii and iii).

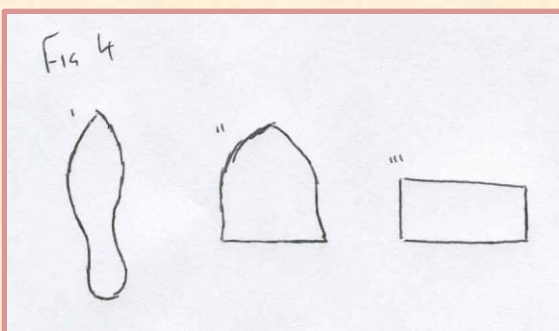


Fig 4

This is a mediaeval shoe pattern. Section 2 deals with the construction of the shoe from this pattern.

## Stage 2 – The Construction

Using the pattern, you have just made as a template, cut the two sections of the upper out of vege-tan leather. You will also need to cut a triangle of leather approximately 3 inches per side – this will become the heel stiffener to prevent you walking down the back of the shoe and therefore making the shoe unwearable.

Take your sole and on the rough side mark a line 0.5cm from the edge, all the way round, this acts as a guide when piercing the sole before stitching. Some people recommend that you make all the holes in the sole leather before you start to sew, however I tend to do this as I go along. Either way is as effective it is just a matter of preference.

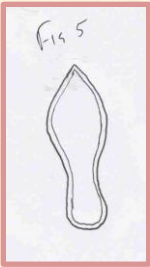


Fig 5

Take a length of linen thread (fairly heavy duty) and coat it well with beeswax. Thread a saddlers needle onto each end, pick up your awl and you are ready to go.

Starting just at one side of the point of the shoe pierce through the sole as in fig 6 – into the flat and out through the edge, also pierce through the upper leather.



Fig 6

Remember that mediaeval shoes are made inside-out and then turned so make sure the rough side of the leather is on the outside. Push one of the needles through this hole and even out the lengths of thread so one doesn't run out before the other. Make another hole (through both pieces of leather) with the awl on the other side of the point of the sole and thread one of the needles through leaving plenty of slack. Push the point of the other needle in the opposite direction through this hole and then pull some of the thread back (from the first needle). This ensures that the second needle does not pierce the thread as this would not allow the stitches to be pulled tight. The stitches should be no further apart than 1cm, though no closer than 5mm. If they are too far apart the leather bags through the gaps and if they are too close together the leather tears along the stitch line like perforated paper. If you run out of thread then tie the ends in a knot and start from the same hole with a new length, but don't forget to wax it.

As you repeat this process down the side of the sole you will need to pull the stitches tight regularly, you may also need to gather the upper slightly to ensure it does not extend past the mark on the side of the sole (remember marking the edge of the sole when you made the pattern?).

When you get to the end of the front section of the upper (vamp) you need to attach the rectangle of leather. Butt the edges together as closely as possible and continue sewing as described until you get close to the heel. At this point you need to insert the heel stiffener. This goes in with the triangle pointing upwards away from the leather upper of the shoe so that when the upper is turned inside out the stiffener will be on the inside of the shoe.

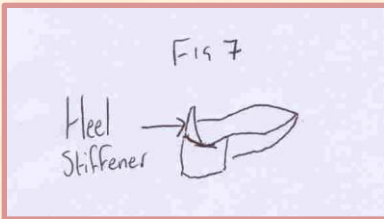


Fig 7

As you stitch around the heel you need to make sure you are piercing all three pieces of leather. Carry on stitching until you get to point "x" and then start stitching the vamp down the remaining side. Gathering the leather, if necessary, sew all the way to the point and slightly past it round over the stitches you started with. This gives the point slightly more strength. With the two threads leaving two adjacent holes tie them in a knot and cut off the waste. Your shoe is nearly ready to turn, but before we move onto this you need to sew the side seam. We will only sew one seam as it was common throughout the entire mediaeval period to have shoes that laced up at the side.

The sort of stitching used for side seams is a little trickier. It involves piercing with the awl from the flat at an angle so it comes out of the edge of the leather. This will hide the stitches once the shoe is turned and is called butt stitching.

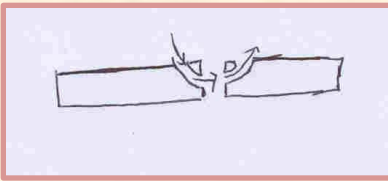


Fig 8

Other than this it is exactly the same as you have already done. Once you have successfully stitched up one of the side seams (I would suggest the inside seam, this makes it easier to put on and take off the shoe) you are ready to turn the shoe.

To soften the leather, you need to soak it in water. I find sitting a shoe in a bucket of warm (but not hot) water until it has completely stopped bubbling gets it as soft as possible. Take the shoe out and without tearing the stitching turn it inside out. This is a lot harder than it sounds, I find it much easier to use a turning stick (about 30cm of broom handle works, or even a hefty wooden spoon). I kneel down and hold the stick between my knees and then holding the shoe firmly in both hands I place the stick on the bit of leather I need to turn and lean on it. If you are lucky this will be all you need to do, as once it starts it gets easier.



Don't give up on it, all shoes will turn if you have used vege-tan leather, remember leather is very strong and stretchy so you will not tear it, your stitching (especially the side seam) is the weakest point so be careful around it.

Once your shoe is turned you will notice it is very floppy and a strange shape. This is normal. You will probably need to trim the leather around the top of your foot at this point, using a pair of sharp scissors cut away the leather in a semi-circle from one side seam to the other. You should end up with something that looks not too dissimilar to this.



Fig 9

Put the shoe on your bare foot (this does not feel good) making sure you do not tread down the heel stiffener and allow it to shape itself to your foot a little, then stuff it with newspaper and leave it somewhere warm to dry.

Once it is dry take a circular leather punch (about 3mm across) and punch holes up either side of the outside seam (the one you didn't sew). Lace this up with a piece of thonging and oil the shoe well with a good quality leather oil and you are now ready to make the other shoe.

When you make the other shoe remember that once it has been turned it will become the other foot (A left shoe inside out becomes a right shoe the right way round). Good luck RL Shep, 1986.