

## Chapter 2—Shoes

For haemorrhoids -

Take the sole of an old shoe worn by a man much used to travel; cut it to pieces and burn it, yet neither to grey or white ashes, but to a friable and tender coal. Reduce it into an impalpable powder. Take then unfalted hog lard, and work it to an ointment, and anoint the afflicted part often therewith.

J. H., *The Family-Dictionary, or Household Companion*, London, 1695

### Background

Londoners in the 17<sup>th</sup> century appear to have expected, and for the most part were able to get, a good supply of serviceable, affordable footwear.

... they have corked shoes, pincnets, and fine pantofles, which beare them up a finger or two inches or more from the ground; wherof some be of white leather, some of black, and some of red, some of black velvet, some of white, some of red, some of green, rased, carved, cut and stitched all over with silk, and laid on with golde, silver, and such like...

And handsome how should they be, when as with their flipping and flapping up and down in the dirte they exaggerate a mountain of mire, & gather a heape of clay & baggage together, loding the wearer with importable burthen, casting up mire to the knees of the wearer.

Phillip Stubbes' *Anatomie of Abuses*, 1583

### *Differences between city and country footwear*

A survey of upper leather carried out by the Museum of London has shown that the majority of shoes from the thirteenth century onwards are made from vegetable tanned cattle hides.<sup>1</sup> Similar findings come from a survey of 2000-odd pairs of pre-eleventh century shoes in York conducted by Ian Carlisle.<sup>2</sup>

The main difference between city and country footwear seems to be the weight. A sample of 11,577 extant shoes from Northampton averaged between 780g and 820g. A similar sample of 2516 shoes from London weighed an average of 590g to 640g. The main difference seems to have been the number of layers in the sole, a reproduction pair with a round toe, average sized opening in the side, three heel lifts was weighed with two sole layers and three. The difference was 230g<sup>3</sup>.

There were major changes in shoe design during the early 17th century. It was at about this time that heels first became common— in 1601 there is a reference to shoes made in a *Belone* fashion in the notes of Queen Elizabeth's shoemakers, apparently making a reference to the Polish design of stacked leather heels (later in the century referred to as Palony/Polony fashion<sup>4</sup>). The fashion pandered to the desire by middle and upper class people to elevate themselves physically as well as socially. The addition of heels necessitated the purchase of new lasts in the proper shapes by the cordwainers. The added expense and space requirements of so many new lasts apparently prompted them to economise by making both last and shoe without right or left shape, thereby cutting the number of lasts needed. The straight shoe

predominated for the next 200 years, although flat-soled and low-heeled shoes continued to be made on the older paired lasts well into the 1620s. There is some evidence Puritans were more likely to have paired shoes than other groups in society.<sup>5</sup>

An order for 4500 pairs of shoes placed by the New Model Army in 1645 were contracted to be supplied in equal quantities of sizes 10, 11, 12 and 13. The shoes were made as straights, sizes started with size 1 at 8.5" long and each size 0.25" larger than the next. Pairs were strung together and the sizes were marked on the soles. These shoes cost 11s 11d a pair.<sup>6</sup>



**Sole view, 17<sup>th</sup> century child's latchet shoe, Museum of London**

### ***Component parts***

**Upper**—Military shoes need strong, thick leather. Normally 3mm or thicker vegetable tanned cowhide and dressed or stuffed with tallow. Guilds were supposed to regulate the preparation of leather by the curriers, but a common law judgment<sup>7</sup> making the use of anything other than “good hard tallow” an offence,<sup>8</sup> indicates that there was some dodgy trading going on that needed regulation. Buff leather of up to 5mm thickness was also used. Shoes for civilians often had uppers between 1.5 and 3mm thick.

**Lining**—an optional extra that results in a much stronger shoe. The upper edge is sewn to the inside of the quarters, and the front to the quarter or vamp, depending on where they finish. When present, appears to be 0.6-0.8mm calf or goat hide. Some shoes had the lining sewn over a heel stiffener while others have the stiffener alone.

**Innersole**—vegetable tanned cowhide 2-3mm natural finish. This layer helps clamp the upper to the welt and provides the surface on which the foot rests. At least one extant innersole from this period is made from the remains of a felted, knitted woollen cap.<sup>9</sup>

**Welt**—during the 17<sup>th</sup> century there were two different methods of welting, the rolled welt and the square welt method. The rolled welt is a 50mm strip of thin leather (1-1.5mm) sewn along one edge to the innersole and upper. This is then rolled under the underside of the innersole and held with a bracing thread. The square welt is a strip of strong leather 2-3 mm thick and 12mm wide with two rows of stitches, one to the innersole and upper, and the other to the sole.

**Outer sole**—very heavy leather that must be resistant to wear, cushion the feet and must be able to have several layers hob-nailed or pegged. Sole leather was treated with a process called “crusting” where it was hammered and rolled during the final drying at the tannery. I use 3.5 to 4mm harness leather.

**Heel**— several approaches are possible, depending on the type of welt used. The technology for building either stacked heels with pegs and/or sewing had been around since the Roman era in different applications, and the “covered-platform” method using a “rand” or platform cover strip, which evolved into the Chopine and covered wood heels, had been around on over shoes since at least the 13<sup>th</sup> century. There are also number of examples of layered, or “spring heels”, where everything between the insole and the outsole of a turned-welt shoe was built up with one or two wedges of leather, or where the difference between levels was more gradual, more resembling a thickened back-part than a true heel.

## Mens' Shoes

### *Latchet shoes*



**Man's shoe from the reign of Charles I (1625-1649) (Write)**

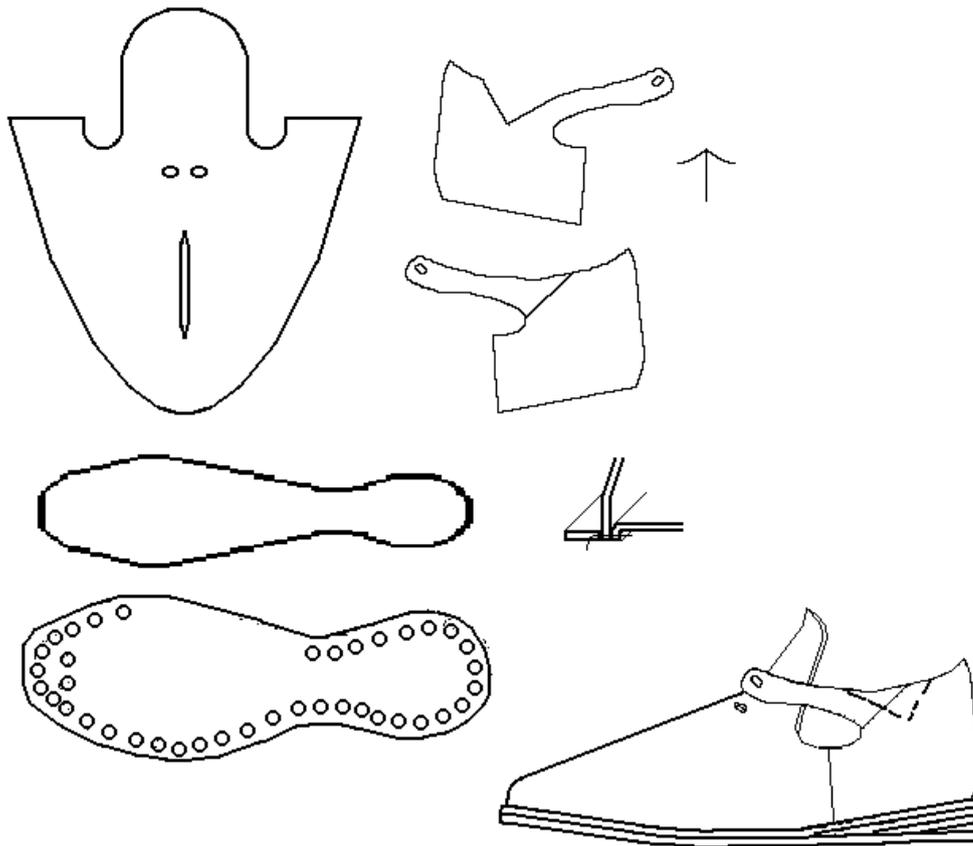
Latchet shoes are typically the footwear of choice for your seventeenth century trained bandsman. Latchet shoes were worn by a wide cross-section of the population; military and civil, male and female.

Those made for military or country use generally have small cut-outs between the quarter and vamp, although illustrations show pikemen and musketeers with large cut-outs, most likely because they continued to wear their civilian shoe during periods of military service. Some civilian shoes, particularly women's shoes from metropolitan areas had wide, often impractical gaps. By far the majority of these shoes are “lasted”, a process involving stretching the upper over a wooden foot-shaped former called a last.<sup>10</sup>

Seventeenth century lasts were usually made from a single block of wood, as mentioned above, rarely was any allowance made for the left and right shoes to be different. This would be especially true of the majority of military shoes as it meant that both shoes could be made on the one last, a saving of equipment, if not feet<sup>11</sup>.

Typically, the upper of latchet shoes consists of three pieces; a vamp and two quarters. The upper was attached to the sole using a welt, the quarters and vamp joined with a skin-edge

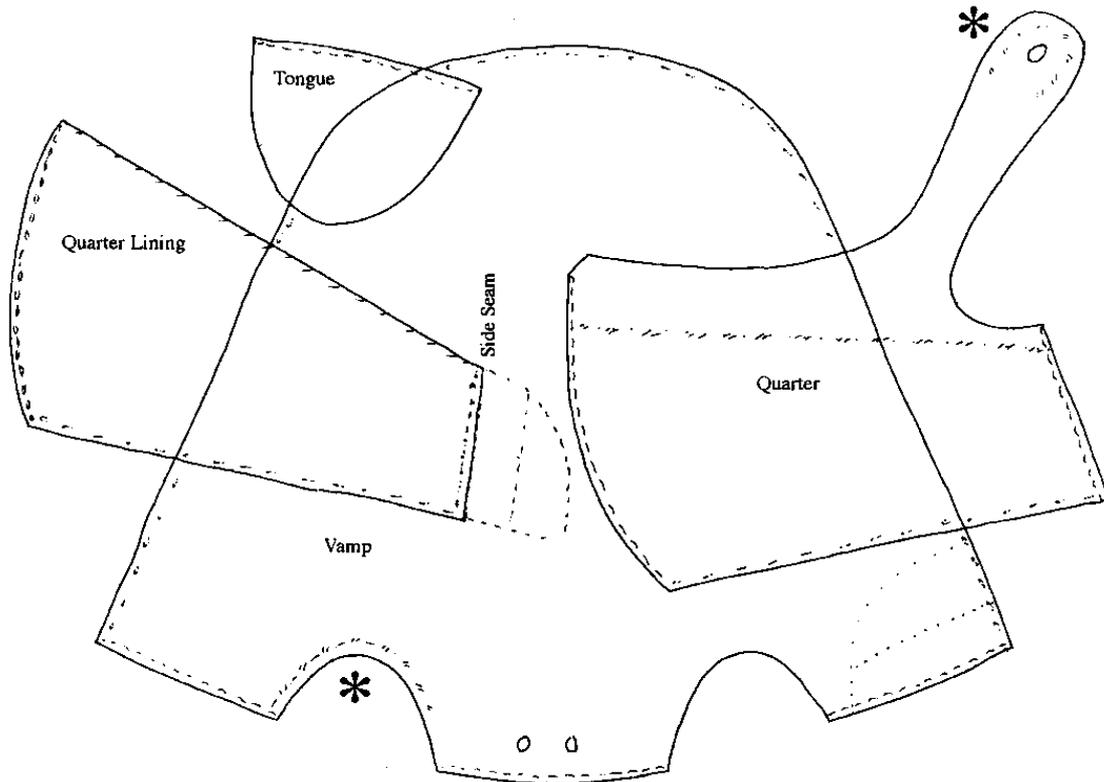
butt stitch and the cut edges were often reinforced with running stitch binding. From extant military shoes of the period, spacing of six and ten stitches to the inch is appropriate.



**Watford Shoe, 1606<sup>1</sup>.** (Northampton museum P36/1965 4/85) Illustration by Carlson  
This front-laced latchet shoe was found concealed in a half-timber house in Watford. The outsole is 4.4mm, with hobnails and spring heels. The innersole is 4.0mm. The outside quarter is cut down in a wedge shape. The side seams are round closed on the inside, with a pitch of seven stitches per inch. The back seam is round closed on the outside, with a pitch of ten stitches per inch.

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<sup>1</sup> The Watford Shoe is based on unpublished material by D.A Saguto



**Smeerenberg, 1610-19 or 1630-40<sup>2</sup> (SMB1107) Pattern by Goubitz.**

A shoe from at Smeerenburg (“Blubbertown”) in Norway has cutouts about 1.5” in diameter. The shoe may be from 1610 to 1619 when the town was an English whaling station called Spitsbergen owned by the English Muscovy Company or from the period after the Dutch invasion and takeover, between 1630 and 1640. Uppers 1.5-2mm cattle or goat; lining 0.8mm calf or goat; heel stiffener 2.5mm, 0.5mm at edges; insole 3mm cattle; welt 1-1.5mm calf; sole 3-4mm cattle; heel lifts 4mm cattle. Strengthening cord is sewn in where indicated with \* on pattern.



**Romont Gate c.1570-1600/40<sup>3</sup>**

(Inv. No. FRI-PL/R.ROM 604) Illustration by Carlson  
 Made on a straight last, from thick cow leather, welted construction. There is a reinforcement binding around the quarters, inside the latches, and along the instep. There may have been a lining. The vamp is pierced to secure the tie for the latches.

<sup>2</sup> The Smeereberg Shoe is from an article by Goubitz, reproduced in Waller. It and the other illustrations from that article are used without permission.

<sup>3</sup> The Romont shoe is based on material in Volken, Serge, et Volken Marquita. *Les Cuir La Port de Romont: 600 Ans d'Histoire Révélés par l'Archeologie.* pp.59-63; Thanks to Marc Carlson for supplying the information on this and the Watford shoe above.



**Man's shoe, 1680-1690 (Cumming)**

**Black leather buckle shoes with narrow straps that buckled over a high tongue to which a plain or decorative buckle could be attached to fasten the shoe.**

### ***Brogues***

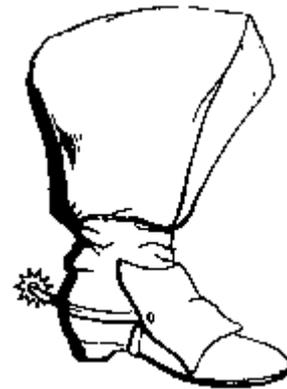
The most common unlasted shoes were brogues, a type of turnshoe favoured by Scottish and Irish mercenary troops. This technique goes back many centuries, with many if not all shoes of the medieval period made in a similar way. The upper was made of four pieces; vamp, quarters and separate latches. The upper was sewn inside out to the sole and then turned right way out. The innersole could also be stitched to the upper and sole with thongs, sinews or hobnails. The appearance wouldn't be dissimilar to the Watford shoe shown above. Additional sole and heelpieces can be pegged, stitched or nailed in place, similar to the latchet shoes above.



**Reproduction Irish Brogues. Additional sole and heelpieces have been attached with small wooden pegs. (Beabey)**

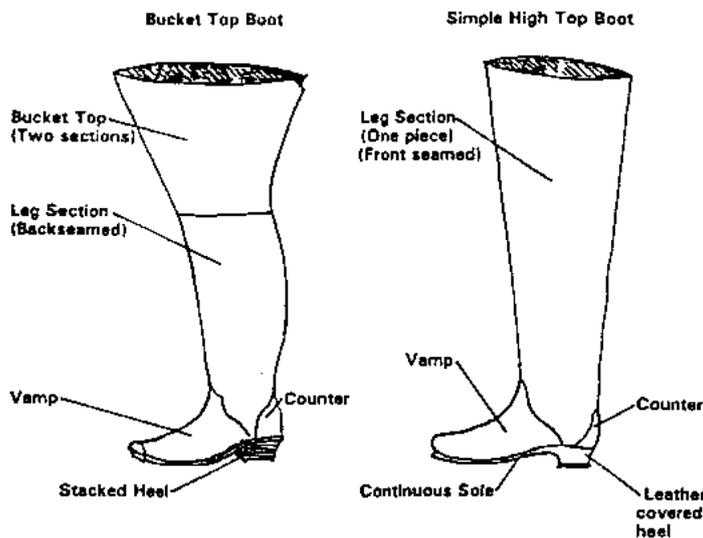
## Boots

The characteristic types of boot for the period, with the thigh portion of the leg folded down then up again, usually with lace boot hose spilling out of it, and crushed into multiple wrinkles around the ankle, were a good thigh-high boot, just degenerated into a fad item. These were sometimes worn crushed down and folded so the whole boot might only reach as high as mid-calf. It was supposedly Charles I, allegedly trying to hide his weak rickety legs, who popularised the fashion of boot-wearing, but soft boots had been fashionable for walking, as well as riding, since the 1590s.



JOHN LILBOURNE'S BOOT.

Boots such as “High Top” boots and “Bucket Top” boots appear to generally be the domain of mounted troops as they provided protection to the lower legs. Many soldiers are shown wearing bucket top boots with the tops down in illustrations; some of these may have been dragoons (mounted infantry). According to *The Romance of the Shoe*<sup>12</sup>, Cavaliers of the period from 1630 to 1640 wore broad toed boots, while Puritans wore pointed toes, thus rendering footwear a sign of political affiliation. I think this statement smacks of urban legend, and haven't been able to find any information either for or against. Contrary to this theory, Witchfinders are almost always depicted wearing square-toed high boots.



There are two main variations in the design of high boot. Both have a vamp piece similar to a shoe, but have a leg piece rather than separate quarters. The “High Top” boot had a front or back seam, never both; the leg section being cut from a single piece and fitting the leg fairly closely. The other style, “Bucket Top”, had either a front or back seam to the knee, and then a softer top section stitched on. The top section was often made of two pieces and could flare alarmingly. When up, the bucket top allows a

degree of movement for the knee, but when folded down can make walking awkward.

Towards the late seventeenth century the English riding style for men gradually changed from “riding long”, straight-legged with low stirrups, to “riding short” with the knees bent. This change in riding style affected the design of boots in as much as the stiffer tops needed to either be flared larger to accommodate the thigh at whatever angle your knee found itself in, or just be permanently folded-down.<sup>13</sup>

An alternate and probably rare type of footwear in an English Civil War context is the “Startup” or calf boot. Styled similarly to high quartered, front fastening turnshoes of previous centuries<sup>14</sup>, this type saw wide service in Europe during and after the Thirty Years War but is not often found in the writings of the period or in the archaeological record. One in the German Leathercraft Museum in Offenbach dating from the 30 Years War has a rolled welt and leather covered wooden heel. A figure in the Royalist newsheet, *Murcurius Rusticus* is wearing a pair of calf length, front lacing boots with either hob nailed or pegged soles. This is a highly practical type of shoe for soldiering.

#### **Mules and Pattens**



**Men's mules, 1670-1680 (Cumming)**

**Pink satin embroidered with metal thread and spangles. The high fronts, inverted toes and wedge heels are typical of this period.**



**Woman's mule, c1660-1665 (Cumming)**

**Crimson velvet embroidered with a scroll and flower design in silver thread and edged with silver braid. The wooden sole is covered with fabric.**

**This slipper is traditionally associated with Queen Henrietta Maria.**

Informal dress for men and women included mules, which were worn in the house as both day and nightwear.

Pattens were outdoor shoes often worn over shoes to avoid the crap on the streets. Both had wooden soles, pattens having leather straps and sometimes iron hoops to secure the shoe, while mules had a single fabric vamp and were worn by slipping the foot inside like a slipper.

## Ladies shoes

Be it resolved that all women, of whatever age, rank, profession, or degree; whether virgin maids or widows; that shall after the passing of this Act, impose upon and betray into matrimony any of His Majesty's male subjects, by scents, paints, cosmetics, washes, artificial teeth, false hair, Spanish wool, iron stays, hoops, high-heeled shoes, or bolstered hips, shall incur the penalty of the laws now in force against witchcraft, forcery, and such like misdemeanours, and that the marriage, upon conviction, shall stand null and void.

New Jersey Sumptuary Law (1670)

### Latchet



Silk brocade shoe, English, late 17th Century (Write)



Shoe covered with Persian brocade, English, c.1700 (Write)



Shoe with lace trimming in pale yellow silk it is embroidered with flowers. (Write)



Lady's Shoe, leather with applied silk braid, English, Reign of Charles II. The latches are incorrectly shown under the tongue, to show more of the design.

Men's and women's latchet shoes were similar in shape and construction, although round toes are more common on extant women's shoes than men's. Heels may have been up to 30mm in height, but were finer than men's. Comments made by the Venetian ambassador in 1618 on the design of women's shoes in England suggested all gentle women wore men's shoes.<sup>15</sup>



(Left) Girl's shoe c 1600 Ashmolean Museum, Oxford (Cumming/Arnold)

White alum tawed leather with suede finish punched with chevron bands of decoration between slits incised in the surface, made as straights. The open sides would reveal much of the stocking. Latchets tie over and through a top pair of holes on the tongue; a second, lower pair of lace holes allowed a shoe rose to be attached.



(Right) Youth's shoe c 1605-1613 (Cumming)

Brown leather with a wedge heel. The shoe is made straight. It is fasted by latchets tied through a pair of lace holes on the high tongue. A simple incised decoration is found on the surface of the leather.

### *Corked shoes*



Girl's 'pantoble open at the toe', of silk overlying brown leather embroidered with silver thread. There is an accompanying satin sock. c1600, Ashmolean Museum, Oxford.

Outdoors English gentle women occasionally wore *pantoble* to protect their shoes. Often elaborately embroidered and made of rich fabrics, the pantoble would have protected the shoe from dirt and mud.<sup>16</sup> Also described as exceptionally high clogs, the cork or wooden-soled platforms could be 200mm or higher and had only a thick strap of cloth to hold the shoe on the foot.<sup>17</sup>

Corked shoes were primarily used on the Renaissance stage to mimic the fashions of Spain and Italy, and as such, become markers both of gender and foreignness. In *English Poesie* (1589), Puttenham describes actors: "The actors did walke vpon those high corked shoes...which now they call in Spain and Italy *Shoppini*" (quoted in the OED). In the 1623 play, *Willy Beguiled*, the actor talks about "...holding up my petticoats.... to shew my fine coloured stockings and how trimly I could fit in a new pair of corked shoes I had bought."<sup>18</sup>

## Making Unlashed Latchet Shoes

Before you begin, be aware that by far the majority of latchet shoes from this period were lasted, even if some of the shoes pictured above show little evidence of lasting. Unlashed latchet shoes are at best an approximation of 17<sup>th</sup> century footwear. Unlashed square welt shoes have fewer compromises than unlashed rolled welt shoes; in the latter, the bracing threads may be omitted.

This section describes the construction method that can be used to make a pair of unlashed latchet shoes with a square welt, stacked leather heel and continuous sole, similar to the pair worn in Thomas de Keyser's *The Portrait of the Artist David Bailly* c. 1627. A later section describes the differences to produce a rolled welt pair.



**Detail, *The Portrait of the Artist David Bailly*, Thomas de Keyser c 1627.**

Materials needed:

- Upper Leather - this is a thinner leather which can range from 3oz (1.2mm) to 6oz (2.4mm)
- Sole Leather - the thicker leather used for the sole can be from 10oz (4mm) up. This leather is also used for a square welt, and the heel if a stacked leather heel is used.
- Leather Dye
- Linen thread
- Leatherworking needles - the best needles to use are egg-eyed saddle needles (we use No 10). You could use boar bristles if you are trying to do things the right way – see Appendix 2 for more information about them.
- Awl - diamond sectioned ones are best. The round ones don't tend to close up and seal after the sewing's done. Round awls aren't found in any pre-modern context.
- Good knife - Stanley or similar. Something that can cut through the sole leather, possibly a jigsaw, industrial laser or plasma cutter is required.

Decide which way out the leather will be. Shoes with the flesh side out usually have an external back seam and no lining or stiffener. Shoes with the grain out may have either an internal or external back seam.



come from the top edge of the quarters, about a third of the way along, adjust to fit your foot (or adjust your foot to fit).

Lay the vamp, quarter and innersole template on your chosen upper leather, mark and cut out. Turn the quarter template over, mark and cut another. Cut a sole using the sole pattern and a long strip about 12mm wide from the sole leather. This strip is used as the welt. Originally, the marking would be done with a “clicker’s awl” and cut with a hooked knife with a fine point, allowing the awl marks to be accurately followed.<sup>20</sup> Once cut, these pieces can be dyed. The originals were dyed in the hide before being cut, so try dipping them in a dye-bath and allowing them to dry for a few days for a really even colour. You could leave them oversize, dye them then cut to the final size to leave undyed edges.

Sew the quarters and vamp together using butt-stitch – the stitching should be visible on the outside of the shoe, but not penetrate the inside. You can use contrasting or matching thread to sew all the bits together. See Appendix 2 for more information on how to do butt stitching. At this point, the shoe would normally be stretched over the last and nailed in place. If you aren’t using a last, ignore this step. Using an awl, make stitch holes along the bottom edge on the completed upper. These holes should be the thickness of the welt in from the edge. Make two parallel rows of holes with the same spacing on the welt 3mm in from either edge.



**Front and back views of the quarters, showing the stitching (not visible from the inside) and the counter.**

Finally, cut a slit in the sole and make a single row of holes, again with the same spacing as shown in the exploded cross section above. A shortcut is to cut a groove in the sole using one of those grooving thingies you get from leather suppliers, so the stitching is protected from wear. It won’t last nearly as long, and will be inclined to draw water into the shoe, so isn’t an ideal solution.

Cut a slit in the underside of the innersole, similar to the slit in the sole, and make holes corresponding to those in the upper and welt. Stitch from the underside of the innersole, through the upper and from the top through the welt as shown in the square welt exploded cross section above. A possible shortcut is to leave the innersole to be glued in later and just stitch the upper to the welt. This shortcut results in a slightly weaker shoe as the welt is only held on one edge, not both.

Attach the welt to the sole with the skin side down, using double running stitch or saddle stitch. A stacked leather heel should be made from five or six heel-shaped pieces of sole leather. Leather heels are normally held on by drilling both heel and sole and pegging with oak dowels. The dowels should be 3mm diameter, about 10mm apart and far enough in from the edge that they don’t cut the stitching. One pattern I’ve seen a few times is an arch of pegs around the back of the heel with a cross in the centre. If you really want to cheat, glue the heel on. Glue the innersole in now if you didn’t stitch it in earlier.

Dampen the edges of the sole, and then wait a few minutes for it to soften. Using a metal last or block of hardwood on the inside of the shoe and a hammer, hammer the sole to close the stitching channel and compress the sole. File any protruding pegs, trim the heel, sole and

upper if required. The cut edge on the original shoe was rubbed with a bone “slicker” to polish it. I used a linisher with a polishing belt for the same result. This edge was not dyed.

Once complete, wet the toe of the shoe and stuff it with newspaper until it is stretched to shape. Allow it to dry. The shoe should be “stuffed” with tallow, but if you feel like being offensive to the common justice of the Peace and Plenty of this Commonwealth, use bees’ wax. Normally the tallow or wax would be warmed and rubbed into the flesh side of the leather until it will take no more. One easy way is to substitute solvents for heat and use a bees wax/turpentine polish. An occasional rub with bees wax furniture polish will then keep them in good condition for many a March or Die™.



The finished shoe — modern size six

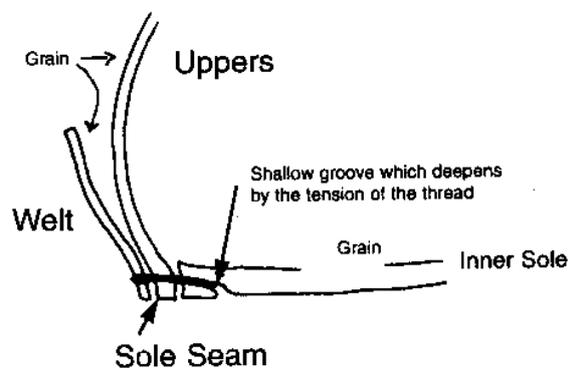


Two views of a square-toed shoe for a child

### Construction — Rolled Welt

Rolled welts are required if you are making a shoe with a leather covered wooden heel. Even though this is supposed to be an unlasted shoe, it will make stitching much easier if you cut a piece of 12mm ply the shape of the innersole. Attaching it to a stick to use as a stand allows you to stretch the leather a bit if needed.

Make the pattern as above for the square welt shoe.

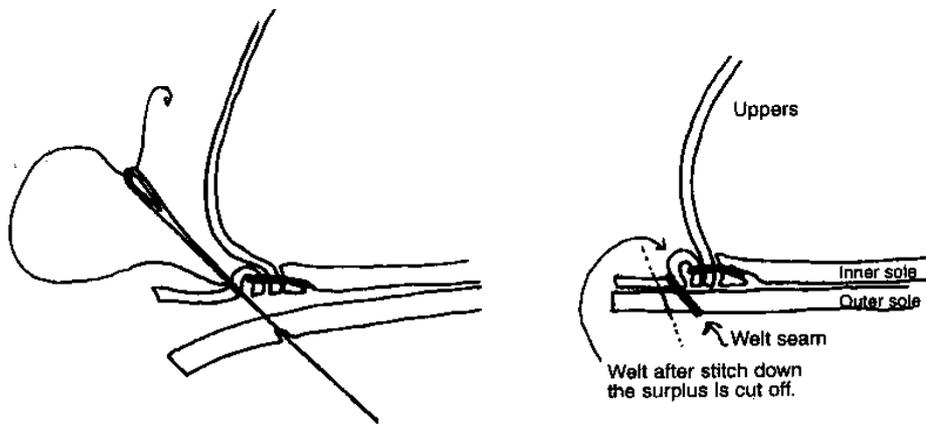


Cut and dye the leather, leaving the sole a little oversize. Stitch the upper together as before. To recap, sew in the following order: the tongue, if there is a seam in the vamp; the heel seam in the quarters; the lining and/or heel stiffeners; then the side seams. The attachment of the innersole, welt and sole differ from the square welted model.

Cut a shallow groove in the innersole for the stitches. Cut the welt 10mm wider than you think you'll need. The extra is cut off or rolled under later.

The join in the welt should be somewhere around the instep, although it doesn't affect the wearing if it is joined elsewhere.

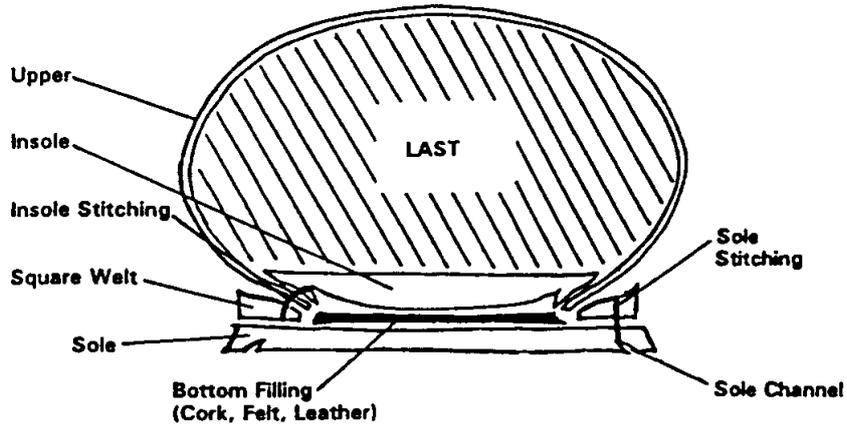
Start stitching a few holes towards the toe from end of the welt and work around the shoe. Join the innersole, upper and welt together using saddle or running stitch and pull tight every few stitches. Next, either fold the welt flat as shown below, or if you are confident, roll it under and put in some bracing threads as shown on the next page. A thin layer of cork felt or leather should go between the innersole and bracing threads.



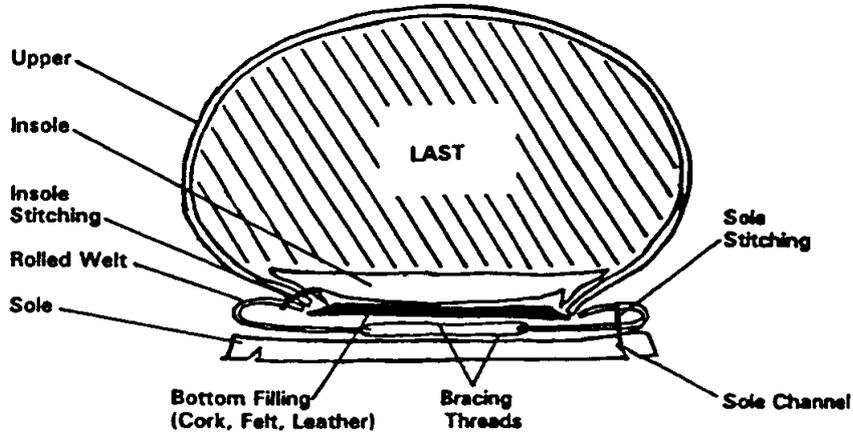
Cut a groove in the sole about 3mm in from the expected shape and stitch to the welt. You may have to dampen the welt to get enough stretch to avoid puckering at the toe and heel. Attach the heel lifts by gluing and stitching or pegging. Now comes the bit that is character building: extract the stitching stand. Try to do it without destroying the shoe. Wet and stuff as per the last paragraph of the square welted construction, above.

**SEVENTEENTH CENTURY FOOTWEAR MANUFACTURE - WELTING**

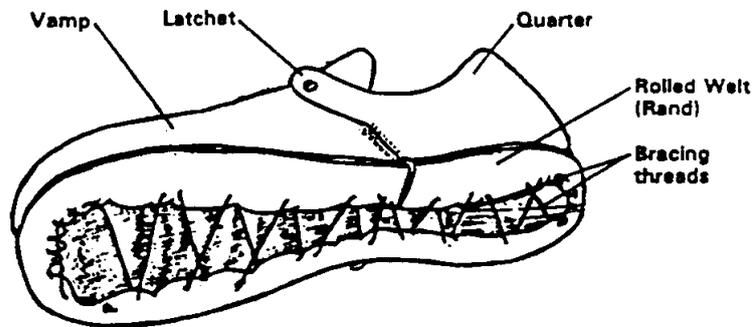
**SQUARE WELT - EXPLODED CROSS-SECTION**



**ROLLED WELT (RAND) - EXPLODED CROSS-SECTION**



**SEVENTEENTH CENTURY LATCHET SHOE WITH SOLE REMOVED - SHOWING ROLLED WELT AND BRACING THREADS**



Lifted from Beabey

- 
- 1 Grew & de Neergaard, p46
- 2 Message posted to medieval-leather by Ian Carlisile, April, 1999
- 3 Morris, p10
- 4 Arnold, *Elizabeth's Wardrobe* p216
- 5 Richard Pickering, *Plimoth Plantation Shoemaker - Carriage House Crafts Center*
- 6 Morris, p11
- 7 20 March, 1648 at York Assizes Serjeant Thorpe, Judge of the Assize for the Northern  
Circuit, on the *Great Statute of Leather* of 1604
- 8 Waterer, *Leather in Life, Art and Industry*, p61
- 9 Waterer, *Leather in Life, Art and Industry*, p77
- 10 Beabey, p19
- 11 Beabey, p21
- 12 Write, cited on *The Costumer's Manifesto* by T Maginnis
- 13 The Crispin Colloquy: Open Forum: Shoes In History: *Wherefore Top Boots?* By Dr. Obuv  
Friday, October 15, 1999 - 06:26 pm
- 14 Grew and de Neergaard, p73
- 15 Kippen, *The History of Footwear - Sumptuary Laws*
- 16 Arnold, *Elizabeth's Wardrobe* p215
- 17 Higginbotham
- 18 Kippen
- 19 The Melbourne file should use The Age. Other files should move to where they have a daily  
broadsheet, or try the Oz if you don't think making patterns is beneath its dignity. Broadsheet paper  
seems to be stronger and have better grain for making patterns.
- 20 Beabey, p20