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VIKING SHOES

by

Danr Bjornson, 1999 (with minor updates in June 2005)

Summary

Shoes are an everyday item which people have used for millenia. It is no surprise that many archeologists found shoes in their search for artifacts from the Viking Age. Much like the trends of fashion we see today, the designs varied according to place and time, and sometimes shoes of different design were found within the same location and time period.

I made these shoes from leather. All shoe finds that my research discovered were made of leather. While leather survives better than textiles under most climate and soil conditions, it is a very common material for shoes even today.

The design used in this pair of shoes is based on several different archeological finds. It is a composite of my favorite features from two or three actual artifacts.

I made these shoes for my lady. She likes them very much. In fact, she rarely wears any other shoes with her garb, which accounts for the wear they have already accumulated in only four months. I will soon have to replace the soles. I plan to gouge a stitch line in the sole bottom to reduce wear on the thread, but plan no other changes to the design. When time permits, I will make a similar pair for myself.

Main Documentation

Designing the shoe was the difficult part of this project. The shoes were for my lady, who has always had difficulty finding shoes that fit. Therefore, I based my design on several period artifacts, choosing the features from each that would help me achieve a good fit.

The shoe pictured here comes from Coppergate in the 10th century. It is difficult to see the exact construction of the heel in this photo, but it is clear that there is some sort of stitch which does not run straight up the back. My lady has narrow heels, so the idea of a multi-piece heel offered possibilities for a good fit. The shoe is closed by wrapping part of the upper (side) around the front of the ankle and fastened with a type of toggle. My lady also has narrow ankles, so this kind of closure offered a good fit there as well. The seam across the top of the foot appears to be a complicated one to fit, and I decided to search further for a design I could use. Thus I settled on a multi-part heel and a wrap-around closure.

(from Wooding, page 74)



▼ Viking Age skate from Coppergate. This 10th-century ice skate is made by attaching a popular style of leather shoe to a sharpened bone, which acts as the runner. Maybe when the river froze the Vikings took to recreational skating. In their homeland however, such skates would have been essential technology.

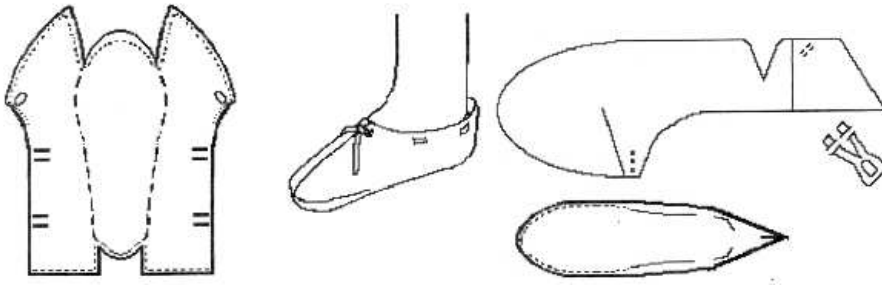
Shown to the right is an assortment of Viking Age shoes from various sites. Clearly visible are the seams running down the front of the uppers. This kind of seam is relatively easy to measure and fit. Some of these shoes also have seams running along the toes where the upper joins the sole. This form of construction would assure that I could fit the shoes exactly to each of her feet with a minimum of difficulty. Finally, the shoe on the far left shows the key to the heel construction. The heel curves upward slightly as it comes together in the back. The only way to achieve this is for the sole piece to have a triangular protrusion that attaches to the bottom edges of the uppers. Thus I decided to use the central seam down the arch, the seams along the toes, and a triangular protrusion beneath the heel.

Below: Both men and women wore leather shoes that were low-cut and slipper-like in shape. Men also wore ankle- and calf-high boots that laced either at the front or the side. The usual material was cattle hide, but goatskin was used for the very finest quality boots.

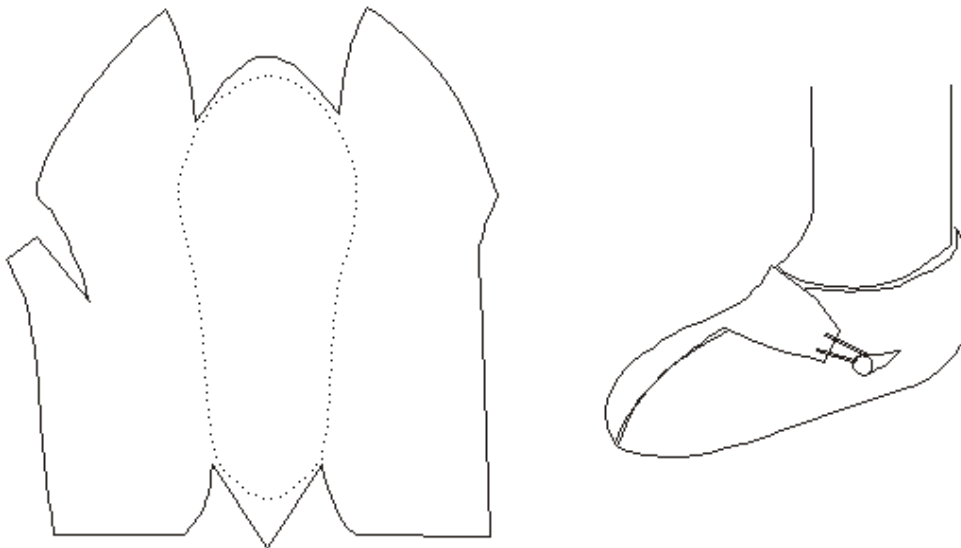
(from Graham-Campbell, page 67)



Having chosen basic design elements, I had to put them all together into a pattern. I found a few shoe patterns on an Internet site (Carlson). Interestingly, the patterns there appear to be the same shoes I had looked at above. Shown below on the left is the Carlson pattern of the Coppergate shoe from Wooding. Below on the right is the Carlson pattern of a slipper that looks very like the one shown in the top of the Graham-Campbell photo.



Now I had the basic elements I wanted for a good, comfortable fit, and I had patterns to illustrate how to achieve each of these elements. I simply had to combine them. The result of my combining the patterns into one shoe design is shown below in a drawing I made:.



This pattern combines all the features I wanted for a good fit. As it turned out, my pattern required minor adjustments for an exact fit, but was basically correct.

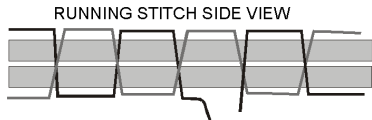
Process and Materials

As discussed in the summary, I decided to use leather for the shoes. For the uppers, I chose a 4-ounce cowhide. It was already dyed in a color my lady favored. I believe this leather is oil-tanned but I am not sure. This was soft enough to be flexible but still thick enough to protect the foot if someone dropped an object unexpectedly.

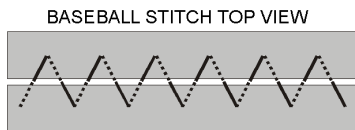
I decided to add a separate sole, sewn onto the integrated sole called for in my pattern. I wanted my lady to be able to walk on gravel or rocks without discomfort, and the addition of a thicker sole would assure this. For the sole, I chose a 7-ounce vegetable-tanned cowhide for its toughness and durability. Being on the bottom of the shoe and generally out of sight, no color treatment was necessary, and I put the split side down for better traction.

I traced around both feet and drafted a pattern. The sole pattern was simply cut from the foot trace. The pattern for the uppers required more care. Starting with the heel and working forward, I made each cut in the pattern and rechecked the fit after each cut. Numerous times, I had to make minor adjustments to ensure a proper fit. The second shoe was easier, for by then I had fine-tuned the pattern. I simply had to make a mirror image of the first shoe, with enough slack for the minor differences between feet that most people have.

For thread, I used commonly available waxed saddle thread. Modern master leatherworkers prefer linen thread, which they coat with beeswax. The wax binds the threads to limit fraying and adds friction to hold the completed stitches together. I did not find any sources on the threads used for leatherwork in the Viking Age. Both linen and beeswax are found in other Viking crafts, so Viking leatherworkers may have used waxed linen thread, but this is speculation on my part.



I sewed the sole on first using a running stitch for strength. This stitch uses two needles, is easy to repair, and holds very well. The stitch holds even if a thread breaks, as illustrated to the right. In fact, the wear these shoes have taken since I made them testify to the strength of the running-stitch. Several stitches have worn through on the bottom of the sole, but it stays on.



Next, I sewed the back, followed by the front, using a baseball stitch for comfort. The shoe from Wooding appears to use some kind of hemmed stitch, perhaps a running stitch which is turned inside out for a clean appearance. I decided that such a seam would chafe the wearer with the stiff leather I was using. Therefore I settled on the baseball stitch, which is the easiest way to butt two pieces of leather flush together. There is no seam to feel on the inside or to protrude on the outside. It is also a very quick stitch to perform.

Finally, I carved the toggle button and fit the thong to close the shoe. I chose an antler tip for the toggle button. The shoe from Wooding clearly shows a toggle made from leather, and the Carlson patterns do as well. However, I chose antler tips for two reasons. First, I had some tips left over from some buttons I had made. Second, it is reasonable to assume that Viking craftsmen might have done the same thing. It is well known that antler shafts were used for combs. Some time ago, I read in *World of the Vikings* that some comb-makers probably threw the antler tips away, as many discarded tips have been discovered in craftsmen's work areas. Unfortunately, I no longer have access to that source and cannot document it here. As an enterprising Viking, I decided to use these "waste" antler tips for my toggles, and carved them for added decoration. I carved a double ring to symbolize our marriage (we are Christian Vikings), with my rune on one side and my lady's rune on the other. I also signed my work by adding my rune to the large end of the toggle. Waxed thread attaches the toggle to the shoe. A simple leather thong loops over the toggle to tighten the shoe around the ankle.

These shoes took an evening to plan and a couple of evenings to cut and sew. I had fun making them, and my efforts are returned to me when I see my lady wearing them in preference over her other shoes.

Sources

Carlson, Marc, FootWear of the Middle Ages, Historical Shoe Designs #3 and #4, <http://www.personal.utulsa.edu/~marc-carlson/shoe/SHOEHOME.HTM>, 1996. For an Internet page, this is a well-documented work. It is a good source for anyone looking for historical shoe patterns and related information. **AUTHOR'S NOTE, JUNE 2005: UPDATED MARC CARLSON'S WEB LINK.**

Graham-Campbell et. al., Cultural Atlas of the Viking World, Andromeda Oxford Ltd, Abingdon England, 1994. ISBN 0-8160-3004-9. This is a very good source for maps, artifacts, archeological sites, and history of the Viking Age. At 240 full-sized pages, it goes into fascinating depth on many topics, though it has little to say about shoes.

Wooding, Jonathon, The Vikings, Rizzoli International Publications, Inc., NY 1998. ISBN 0-8478-2106-4. This is a good scholarly overview of the Vikings and their way of life. Its small size and 159 pages limit the depth of its coverage, but it does have that very nice picture of the shoe (ice skate) which I could use.



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