This document covers the making of a pair of medieval hide shoes which is any shoe made from a single piece of leather fitted to the foot. Specifically Cuarans (in Celtic), Rivelins (in Teutonic or Scottish), or sometimes referred to as bag shoes by Scadians. This is a relatively simple shoe design dating back to at least the 7th century based upon finds from a bog in Ireland. The shoes are constructed from one piece of leather stretched and gathered about the foot with thongs. The dating on these shoes are not exact, since no datable reference artifacts were found (or recorded as being found) with them. This is a common problem with all leather goods due to the tanning processes used and the permeable nature of the leather itself. Similar shoe designs are still in use today in the British Isles, Iceland, Norway, and Estonia, and the design is such that it may go farther back and be present amongst many peoples with a strong background in hunting and animal herding. A monk named John Eldar in 1543 described the construction of similar footwear by a Scottish hunter to Henry VIII in a letter.

These shoes were constructed from modern tanned leather using a utility knife, a measuring tape, and a lace cutter (if you don’t have ready-made lace). If desperate you could easily get away with just using the knife. Period materials would have consisted of uncured hide, vegetable tanned leather, and possibly Alum tanned leather (used by the invading Romans). The shoes are constructed without a separate sole or bottom reinforcement. Evidence does point to the use of grasses and cloth substances as interior padding and insulation. When using hides that still have fur the shoe was constructed fur side out. The general construction of the shoe is taken in three steps. If you reverse this concept using a ¾ knap sheepskin you can make yourself a very comfortable and warm set of slippers. Construction is done in 3 steps; the cutting of the leather upper and the thongs, the cutting of the lacing slots in the leather upper, and the lacing of the shoe.

**On the cutting of the uppers and thongs.** The upper is constructed from a ‘horse shoe’ shaped piece of leather chosen for its flexibility and availability (3oz to 8oz). The forward end of the shoe (the curved end in figure 1) needs to have the most flexibility, so cut your leather with this in mind. If the leather needs some softening I suggest chewing on it a bit (yum, yum). The piece is sized as in figure 1.

![Figure 1 Pattern Dimensions](image)

**Figure 1 Pattern Dimensions**

A) Length from heel to tip of most protruding toe plus 1 to 2 inches.
B) Distance from ground to ankle +-1 inch. I like just below the ankle.
C) Distance around the foot at the instep.
D) Distance around the foot at the ball of the foot.

I like to smooth out the pattern so the width over the length of the pattern is C or D whichever is largest. The curving starts near the ball of the foot. Transcribe the measurements to the leather and cut out the upper. Strong lacing will be needed for the gathering the shoe over the foot. So purchase a good lace material or cut it from a strong hide. The lace should be between 3/16 and 1/4 of an inch in width. You will need about 3 feet of lace per shoe.

**On the cutting of the lacing slots in the leather upper.** Slots are then cut around the edges of the hide starting from the center of the piece. Each slot should be at least 3/16ths inch in form the edge of the upper. Each slot is about 1/4 of an inch long and 1/4 to
Making a pair of medieval ‘bag’ shoes

3/8ths of an inch apart (the distance apart will need to be increased as the leather thickness increases). Placement of the slots is made according to figure 2 and figure 3.

![Figure 2 Lacing Slot Locations](image1)

E) The distance necessary to allow a fold about the width of the heel when the heel excess is folded up.

F) The distance from the heel to the instep plus 1 to 2 inches.

Six ankle slots are cut evenly spaced around the ankle. The Heel excess is found (see figure 3) by butting the rear end (flat edge) of upper together around your heel. To facilitate this butt the rear end of the hide together and tape it in place with a bit of masking tape (from the inside of the leather so as to leave no noticeable marks). A point will be created at the bottom. If this is folded up the point will come to the place to cut heel slot #3 and continue cutting the rest of the heel slots until the top edge of the shoe is reached.

![Figure 3 Determining the Heel Excess](image2)

On the lacing of the shoe. The final step is the lacing of the shoe together. There is no set pattern for lacing hide shoes. The design and fit of the shoes can be drastically changed by the pattern of lacing in the upper (see figure 4 below). For example by running the lace around the edge of the shoe and gathering the leather you can make the shoe have an open face. The pattern of lacing varies according to personal taste and skill. Lacing patterns need to be experimented with for best-fit and maximum comfort. Creasing (I usually fold the leather and chew it until it keeps the fold) the leather where it gathers helps to give the shoes more form.

![Figure 4 Options used when lacing the vamp](image3)

In general lace the shoes as follows:
Making a pair of medieval ‘bag’ shoes

Heel:

Figure 5 Lacing the Heel

VAMP (part across top of foot):

Figure 6 Lacing the Vamp

When the slot pair on the instep is reached continue by lacing around the edge of the upper and tie the shoe in the most comfortable fashion (figure 5).

Figure 7 Lacing around the ankle

Before serious wear (Pennsic and the like) it may be a good idea to protect your mundane feet by sewing or gluing on a sole, padding the interior (a commercial insert with arch support works great), or by wearing foot coverings (socks).

REFERENCES:
2) Miss A.C. Metcalf and R.B. Longmore, Leather Artifacts from Vindolanda, Manchester University 1972-73. An article from a museum publication on English medieval shoes.