

Sample Keys from Hetland, Rogaland
Norway



Norse Key

I keep the keys to our locked 6 board chest, where we keep the household valuables. I have had to lock up the spices that we use to mull wine and mead from my Husband, as he spends the whole winter complaining about how cold he is and mulled wine is the best and only way to warm him up. I am sure that if I left the spices out, nothing would get done around the farmstead.

I made the key with the lost wax method of casting and using a Viking pit furnace. This was a group project that the Barony of Tir-y-Don did a little over a year ago. I had a wonderful time learning how to do this technique. We started with a basic shape in beeswax. I chose a key and a medallion. Each of us personalized our project with carving. Then we made a mixture of 50% clay and 50% sand, plus 30% organic material (we used oak pollen and saw dust.) This concoction helps to absorb the extra water in the clay and lessen the thermal shock impact, when the mold is fired. The

mixture was used to create both the molds and the pit furnace. The molds and furnace were dried slowly over a week. On the weekend, the furnace was loaded with a mix of charcoal and hardwood, and a fire was lit. The furnace fired at the same time as the molds were baked. As time progressed and the molds heated up, the wax was burned off. We tried to recover the wax, but that is not possible when you are working with the lost wax method of casting. By now it was mid-afternoon and the weather was looking threatening. We decided to try and melt the bronze. We had a few problems. The period crucibles that were made had a 100% failure rate. We had a modern crucible for a backup method, which was put on



Fired molds

the fire, and the bellows were turned up. The fire got even hotter, but our crucible was too large for the amount of bronze needed to pour. Then disaster struck, it started to rain. (If bronze gets wet it will explode.) We quickly rushed the bronze under cover and buried the furnace and molds with sand. We hoped that the project would cool slowly enough not to crack. I rescued the molds in the fall, after a very wet summer. I have the ability to pour pewter. After cleaning up the molds, I poured all of them. It was fun to break them open and see if the projects were successful. We had two good Thor's hammers, one great strap end, one passable strap end, one medallion which got cooked a bit on the bottom, three keys, four molds with blown out bases and two molds with a cinder blocking the pour spout. I was surprised at how

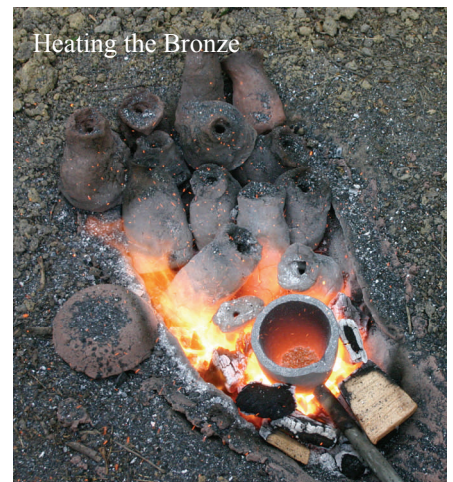
brittle the molds were and that some of the molds were burnt. After a bit of trial and error I discovered that the easiest way to clean up the key was using a small file.

The class was taught by Mistress Lucrezia, who took a class at Pennsic. I found it equally interesting to see how the knowledge was passed from one individual to another. I



Burning off the wax

could probably create a furnace on my own and with a little trial and error I could probably cast more objects. The skill to create beautiful broaches should come with time.



Heating the Bronze

Ownership Mark



If I have to stay at home and tend the farmstead when my husband goes out to sea, the very least he can do is send me home a package in the Spring when it warms up. This last time I sent him with a small piece of fabric to wrap my package in. He had better send me something good or he can sleep in the barn.

The Norse left their mark on many objects, for example brooches have been found that have a craftsmen's repair mark on them, wooden tags to assemble buildings note which piece goes where and everyday items have an owners mark on them. I found owners marks or makers marks on a number of items that were before the time period I was interested in and several very good examples of tags from the 1200 or 1300's. I am making the assumption that, if the tags existed before and after the 1000's, then it is just a matter of time before we find a tag for the missing time period.

Ownership tags were common in most of the areas settled by the Norse. They were used to send packages home. The goods would be wrapped in a piece of fabric and the tag used to hold the bundle closed. It would then be placed on a ship bound for home. My tag reads Kaleeb's Pile in Rune Futhark. This is the style of runes which were in use from 700-1200AD, in Anglo-Saxon areas. The Rune Futhark alphabet has 33 sounds or letters.



Textile fragment



Tabby weave

The ownership tag should be inserted into a coarsely woven piece of fabric. I figured my first attempt at weaving on a warp weight loom would qualify as crudely woven. The warp is a wool two ply yarn that is in the grease. The term in the grease means, that the lanoline has not been washed out of the yarn before it was processed. I figured that wool which is spun in the grease is easier to spin, hence closer to my spinning talents. (They are not very strong.) I chose a simple tabby weave, for my first experiment, as it is the easiest weave to produce. (I also made the loom. It still has a few quirks that still need to be worked out.)

The Ownership tag could easily have been made from several of the tools found in the Mastermyr Tool Chest. (I have power tools.) The Gotland Tool Chest was found while plowing a field in Mastermyr in October 1936. (It is referred to as the Mastermyr find or tool chest.) The

contents have been kept intact. Scholars feel the tool chest belonged to a blacksmith who had carpentry skills. It is even possible that the owner may have been a boat-builder. The tools which interested me were the ones related to carpentry. They include 2 axes, 2 adzes (used to smooth planking), 2 saws (one of which is an unusual hand saw) a large collection of spoon-augers (used to drill holes), gouge (used with mortise and tenon joints), chisel, 2 rasps and 4 files (generally considered smithing tools), and a small whetstone. It is difficult to date the find because carpentry tools do not tend to have stylistic characteristics



Gunna owns



Thorgrims pile



Wooden scoop with owners mark



Melbrigda owns this brooch

Card Weaving



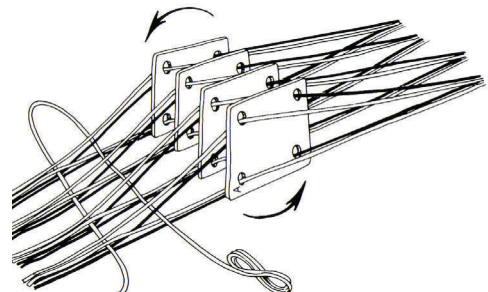
Oseberg ship burial cards for weaving

The one good benefit of have a Husband who hates to go out in the cold, is that I have a large number of cards for tablet weaving. Now if I could only teach him to weave.

Card Weaving is one of the oldest weaving techniques used to create a boarder or to finish off the edge of a piece of fabric. The Oseberg ship, built in 815-820 burial contained the grave of a woman, thought to be a woman of very high status, buried with a card weaving loom warped with 52 cards. This find is in surprisingly good condition.

I chose to weave my trim on an inkle loom. This loom is more modern than a Norse woman would be familiar with. Normally a piece of band weaving would have been tied to a stationary object, then attached to a belt around the weavers waist. It is for this reason that I chose the more portable inkle loom, as I was unable to weave my trim in a single setting. I chose a cotton warp, instead of a wool or linen warp. I have tried weaving with wool in the past and I was unable to control the tension. I had a tendency to break warp threads or end up with a very fuzzy product with uneven edges. I tried several different weights of yarn, before I chose an 8/2 unmercerized cotton. It seemed to produce the best product in terms of hand or drape. My favorite fiber to weave with is 3/2 perle cotton. Unfortunately, it produced a stiffer and heavier band, when used with cards. (It would make a better belt, then garment trim.) After a considerable amount of reading and exploring of different fibers, I have come to the conclusion that the mercerized cotton produces the closest look of silk (in my price range.) It has a slight shine, that I think the few examples of extant textiles must have had, when they were new.

The sagas tell us that the Norse had a love of color and decoration on their clothing. For this reason I have put trim on the cuffs and neckline of my tunic. In case you are wondering the deep center slit is to accommodate nursing a child. I have done a lot of research on maternity garb. I feel the most practical solution is a deep slit in the neckline, rather than to stuff a hungry baby underneath a tunic starting at the hemline.



Rotation of cards in a pattern

Norse Coat



Fig. 110 Mary and Elisabeth,
Genoels-Elderen Diptych

My husband is always cold, so that means any chores which need to be done in the raw cold are left to me. I have gotten tired of doing my chores one handed while I clutch my cloak closed to prevent a draft. I want one of those new coats that everybody in town is wearing. I told my husband that it was “get me a coat or learn to milk the cow.” The cow likes my new coat.

There is a lot of controversy about the Viking coat. Very few textile remains are large enough to answer all of the questions needed to reconstruct the coat, therefore some assumptions must be made. The first question which needs to be answered is were the coats worn by women? The *Dress in Anglo-Saxon England* book has a nice section on coats for both men and women, it does mention some of the Norse in York. What fibers were the coats made from? The textile finds are large enough to answer

this question. At least one coat was made in wool with a silk lining. My coat has a twill wool outer layer and a heavy silk lining. I could not tell from the written references what weight the silk was. I chose a heavy weight silk for warmth. How were the coats closed? The men's' coats may have had buttons, but the women's did not. They were pinned at the neck with a three lobed brooch. There is textile evidence of card weaving and a heavy wool on the back of some brooches, where it would not make sense to pin the over garment to the under garment with an odd brooch. (I will have to get my husband to buy me a new brooch, I think I will wait until the next really cold spell before I ask.) Archeologists have found a few edges of garments, which might indicate the length of the coat. It seems to be below the knee, but not all the way to the ankle. This makes sense with the style of layering your garments, so you see a little bit of what is underneath from the previ-



Twill fabric textile remains



Typical size of textile remains being
used to reconstruct garments

ous layer. The cut of the coat is in great debate. I chose to cut my coat in the same manner as a tunic. It has very simple rectangular pieces, with gores or gussets added to make the garment comfortable. The Norse would probably not have used a shoulder seam, but that was the most conservative use of my cloth. The next time I make a coat I will cut it so the front panel has more of an overlap and the sleeves are fuller. Color of garment can be open to interpretation. Dye waste from madder (red), woad (blue) and weld (yellow) has all been found in the Coppergate digs. Those dyes could be used in different combinations to create a whole range of colors, including black. I might question the purity of the black fabric that I have chosen, not the color.

Weld
Plant



Naalbond Socks

I have had to learn how to Naalbind to keep peace at our Farmstead. I got tired of listening to my husband go on and on about how cold his feet were in the winter, especially since I will not let him have the key to lock on the 6 board chest.

I have always wanted to learn to naalbind, as it is a skill that every good Norse woman should know. Fortunately naalbinding is the precursor to knitting and crochet, skills which I will probably never master. I bought a pair of Jorvik style boots, at Pennsic this past year, and I have found the only comfortable sock or boot liner is wool naalbond socks (even in warm weather.) I have experimented with cotton and silk socks and found them uncomfortable. I made my first pair of socks a little over a year ago. The socks were made too large, so they would felt to a smaller size. (An added bonus to the felting processes is arch support. I now have a nice wool arch support built into my socks.) Because my socks will be worn with ankle boots, I have made them taller than the sock pictured below. I have not felted my socks, so the stitches can be clearly seen.

Naalbinding (also spelled nålbinding, nalbinding, nalebinding) is a needle-work technique that produces cloth with similar characteristics to knitting. It is a more tightly worked cloth, which can be felted, thus it tends to be warmer. The cloth will also stretch, but if a stitch is missed it will not unravel. Unlike knitting naalbinding uses a length of yarn and a single needle (not a ball of yarn and two needles.) The stitch I used to make my socks is called the Oslo stitch. The construction technique I used was to start at the cuff and work my way to the toe, then stitch the heel in place. In the past I have not stitched the toe end of the sock as tightly as I should, causing my big toe to poke out. Apparently mending a naalbond sock was a common problem, as Jorvik sock was also mended. The Jorvik sock is the only complete garment or textile find to come from the York Archeological digs. It was from the tenth century.

Everybody has quirks and one of mine is that I always wear yellow socks. I was concerned that colored socks would not have been correct for a Norse persona. I have found evidence that the Norse people loved color, as described in the sagas. One of the most common dyes to create yellow is weld.

Weld has been around for well over 2000 years. It has been found at Neo-

lithic sites in Switzerland and through out the British Isles. Wool that has not had a mordent used will not take color easily.

Alum, tin and copper were mordents used in the Viking era. I can now enjoy my yellow Naalbond socks, with my newfound knowledge about Viking era dyes and craft skills.

Weld Dye Chart

Alum on wool

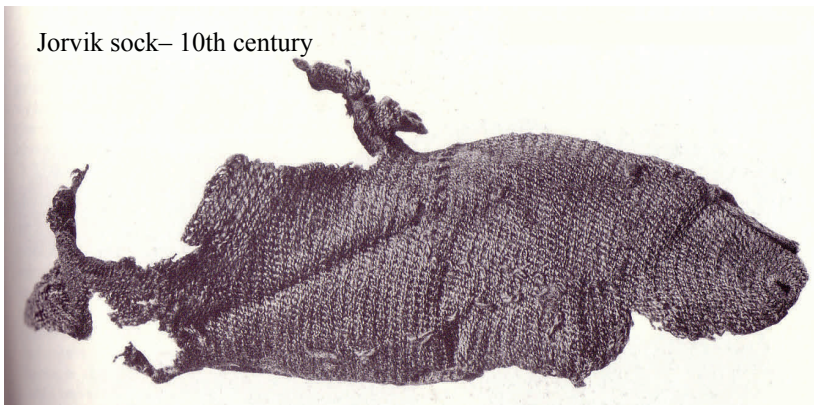
Alum on wool

Tin on wool

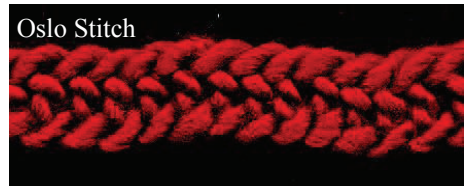
Copper on wool



Jorvik sock— 10th century



Oslo Stitch



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