Schwertscheide mit Holzkern

Mit freundlicher Genehmigung von Roland Warzecha aka Dimicator (Newletter).

Ursprüngliche Anleitung: https://www.patreon.com/posts/making-wooden-85869475 [02.08.2023]

Disclaimer: Die Anleitung ist ursprünglich für scharfe Repliken bzw. Schwerter aus dem Reenactment Combat Fighting konzipiert.

Sie kann meiner Meinung nach aber auch auf LARP-Schwerter angewendet werden.

If you want to make a wooden sword scabbard but shy away from carving it from solid wood (like I did here), there is an alternative way to create a slim and elegant scabbard core. Once you have added a facing, the final result will be indistinguishable from an authentically made one.

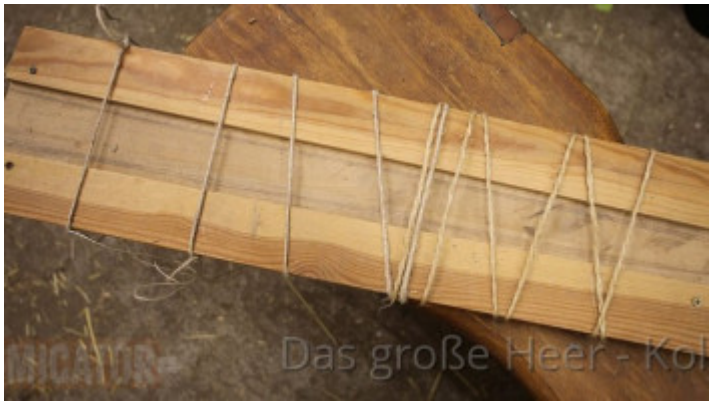
The scabbard core in the title image is faced with linen. I will add a leather cover later.

Here is a cross section through a discarded scabbard I made, revealing its construction. For a scabbard that it is not intended for re-enactment display but simply to sheath and protect e.g. your modern HEMA training sword, you do not need all these components. Below I have marked the ones that are optional.

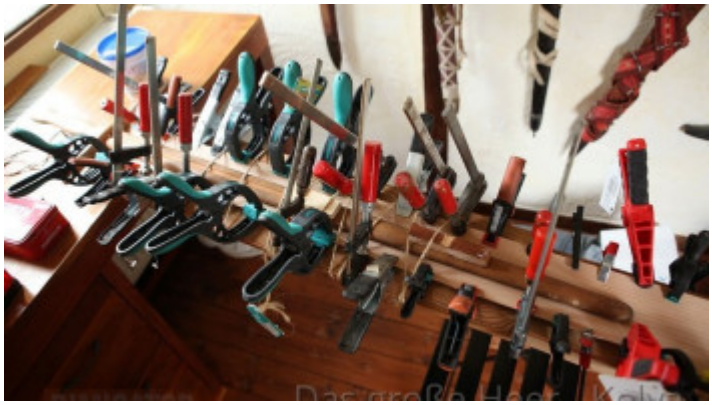
From inside to outside, you see a fur lining (optional), the wooden core consisting of two-ply wood (mandatory) and additional lath edges (optional), plus a wooden strip as a raiser (optional). The core is covered with textile (mandatory), and finally with leather (optional). You can, of course, leave out the textile and use leather as a stand-alone facing, but you do need at least one facing to provide stability and durability.

For each scabbard half you need two thin wooden boards, 1 mm thick each, about 10 cm wide and at least as long as your final scabbard. I ordered according boards from this supplier for model making. I am sure there are comparable vendors elsewhere.

I chose beech wood. For wood species used for historical scabbards, take a look here, for example.

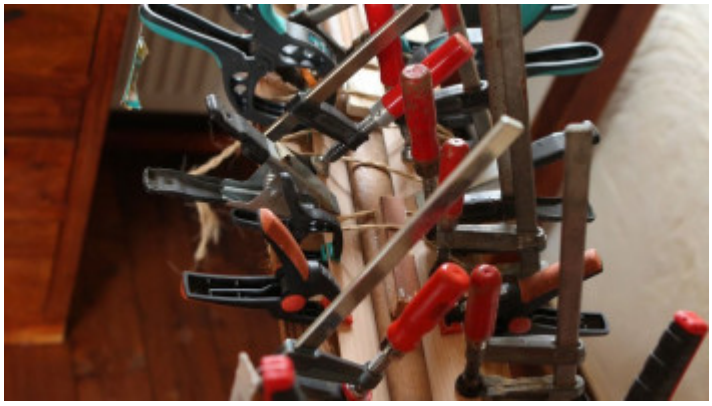


The basic idea is that the two boards are glued together while bent to create a curved scabbard half. To this end, I use a primitive mould consisting of but a wooden board with two wooden laths attached to it. They are not exactly parallel to each other, so that the gap between them is slightly tapering to the lower end. This is the negative form, or matrix.

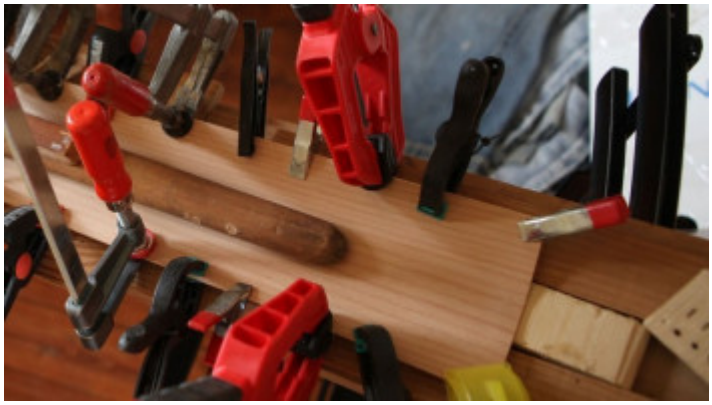


After applying the glue, the two boards are now pressed into the gap. If you decide to use industrial wood glue (like I did here), make sure it is a water proof one.

I use a wooden training sword to evenly press them down. The waister is kept in place by strings wound around the construction, and by bar clamps.



I use additional clamps to join the boards' edges.



I also pushed a piece of wood under one end to fold up the boards on the side where the scabbard point will be situated later. However, this kind of fine tuning is not actually required at this point.

Finally, I leave it to dry overnight. The next day I repeat the process for the other half.

After removing the boards from the mould, they retain a gentle curve which is exactly what I want.

I mark the blade’s outline on each workpiece. Because no sword is perfectly symmetric, I also put marks on either side of the sword and the corresponding scabbard half. I will transfer the marks on the scabbard before obscuring them by montage, lining or facing, of course. This way I will know how to put in the blade for perfect fit.

I add allowance to each blade outline. The width of allowance depends on your choice of edge material (see below). You do not really need additional edges for blunt swords. However, in this case you still need some allowance for the raw edges to join when sandwiching the blade.

I cut out each shape with a simple coping saw.

Here are the cut out halves for two scabbards which I made for two sharp swords.

For the lining of the scabbard mouth, I cut strips from sheepskin. A lining is not actually required for your blunt training sword. But it does help to secure the sword, and it polishes the blade each time you draw or sheath it. A lining also holds together a snapped scabbard core from the inside, so you could still use it. Something that might be a comforting thought for battle re-enactors.

I am using up some scrap material for these scabbards, so they will be partially lined with woolen fabric.

When adding a lining that consists of multiple pieces, it is essential that they overlap downwards, in order to reduce the risk of the blade sliding between layers. When pieces of the lining become loose, and end up buried deep in a scabbard, it is basically ruined (unless it is detachable like e.g. some Iron Age models).

As you can see above, I have made edges too. I used twisted strands of hemp. But any cord would work. The edges could also be made from prefab laths for model making. However, you will have to cut them to shape before fitting the pieces together (compare to the cross section above).

I found the hemp strands quite convenient to shape a point with. It is the first time I tried this. Note that is not a technique that is confirmed by any historical sources or by archaeology. Bear in mind that this tutorial is not for making a museum replica!

Glue produces fumes for quite some time. So any adhesives used on the inside of your scabbard should be free of acid to not corrode the surface of your sword blade. I used casein glue which is a historical glue that creates a strong bond and is waterproof.

Before joining the halves, I trim the fur. Note that I left an overlap that will protrude from the scabbard mouth.

Subsequently, the pieces are glued together and left to dry overnight.

I neaten edges by carving them to shape.

I did not sand them but of course you could do so if you wish. The nicer the shape and surface of the wooden core, the nicer the final scabbard. Irregularities tend to show even after having attached facings.

As you can see, the scabbard cores turned out pleasingly flat.

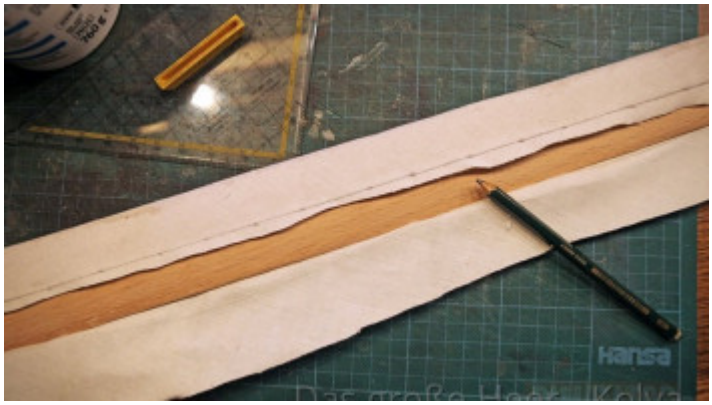
At this point you must **absolutely resist the temptation** to insert your sword. There is a danger that the joined edges will crack open. So wait until you have attached a facing which will keep halves firmly together.

I start by marking a center line on the back of each scabbard.

I draw the scabbard's outline onto the linen fabric which I want to use for a facing. I add sufficient allowance. You can use any kind of cloth but for living history, hand-woven linen is an appropriate choice for most periods and regions.

Note that I placed the scabbard on the cloth at an angle. This way I can use a fabric's natural flexibility when wrapping it around the core. At right angles, there would be no flex.

First I glue the fabric's center to the front of a scabbard.



Now I fold the allowance onto the scabbard and transfer the center line.

I glue the overlap, and cut off excess material before the glue has cured.

As the facing is on the outside, you can use industrial wood glue for this task again.

I do the same with the other side.

After trimming the excess at the scabbard mouth, and shaping it with some glue (note that the lining should fold over the edges of the mouth!), I can finally insert the blade.

Do this only after all glue has dried, and **do it very gently**. Do not despair if the last inches of the blade are hard to push in. This is actually a good sign. Once the lining is compressed by the blade, your sword will be secured in the scabbard by a snug fit. Ideally, it should not slide out, even if turned upside down.

So take your time to completely sheath your sword. Sometimes it helps to leave the partially sheathed blade for a couple of hours, and then try again. Also, a drop of oil helps.

After one or two days of your sword sleeping in its new home, drawing it should become noticeably easier. Once I have added a final facing and sword belt arrangement, I will provide a sequel tutorial.

If you find this information useful for your own scabbard projects, please send images of the results. I would be delighted.

Cheers,

Roland