

To Make Medieval Etui: Multi-layered Leather Cases

You will need:

- A supply of undyed veg-tan leather
- A block of wood in your desired shape and size
- Sharpened, heavy-duty scissors, and/or a craft knife and cutting mat
- A sturdy ruler and a pencil
- Water and a way to boil it
- A big jar, and a smaller jar of similar height, that can fit inside the big jar without the sides touching
- Waxed linen thread
- Leather needle(s) and a decent thimble
- Rabbit skin Glue (available at art supply shops, used for canvas sizing)
- A 1" paintbrush that you don't mind ruining (Two or three is even better)
- A rawhide hammer
- A skiving knife, and/or an inexhaustible supply of craft knife blades
- A surface upon which to skive (such as a granite or marble block)
- Several wide rubber bands (such as come wrapped around broccoli)
- Clothespins, or small low-pressure clamps
- Chopsticks or thick wooden skewers
- Scraps of linen and/or paper towels
- Whatever swivel knife, stamps, and pointy stick tools you want to make pretty patterns in the leather
- Your choice of leather stain or dye
- Cord or trim to use as a hanger
- A shockingly enormous amount of free time



Fig. 1. Examples of tools.

Layer One:

Cut a wooden block to be slightly larger than the desired size of your interior. (I use 2x or 1x pine lumber). Too big is infinitely better than too small. Sand smooth on all sides and corners.

Cut out your first layer of leather to fit around the block. It is best to do this when your leather is damp. (You may also find it useful to make a paper pattern first). This layer can be thicker, or a rougher cut of leather. No one will see it. No one will know.

You can attempt to do this layer in one piece. However, I find it preferable to do three pieces- two ends and one wrap-around middle. It means more sewing but it is easier to shape.

Determine where you want your box lid to start. Measure, mark, and cut the line.

With waxed linen thread and a very sharp needle, sew the leather rough side out around your wooden block. I find it easiest to put the seam on one corner, but you can also sew it up the center.

This stitching does not have to be pretty. It does not even have to be good. (The extant examples are often super sloppy!) This is the only stitching on the piece, and it will be entirely covered by the other layers of leather.



Fig 2-3. Super ugly stitching.

Once sewn, I like to hammer the edges and corners down. This will help smooth out the edge, and mashes the seams together.

Now you should have two pieces of leather, completely encasing a wooden block. This is the first layer.

Layer Two:

This is the layer that will form the “slidey part” of the box interior. If you have a smoother, thinner leather, that is best for this step.

There are two ways to go about this step. One is to do a smaller band of leather around the middle of the box. The other is to make the layer go all the way to the bottom. Both methods are seen in the extant examples. The first method saves you a bit of material. The second way makes for a more rectangular box, and is slightly easier to shape around. Either way, cut this portion of leather wide enough to go around your block, with 1-2 inches of overlap.

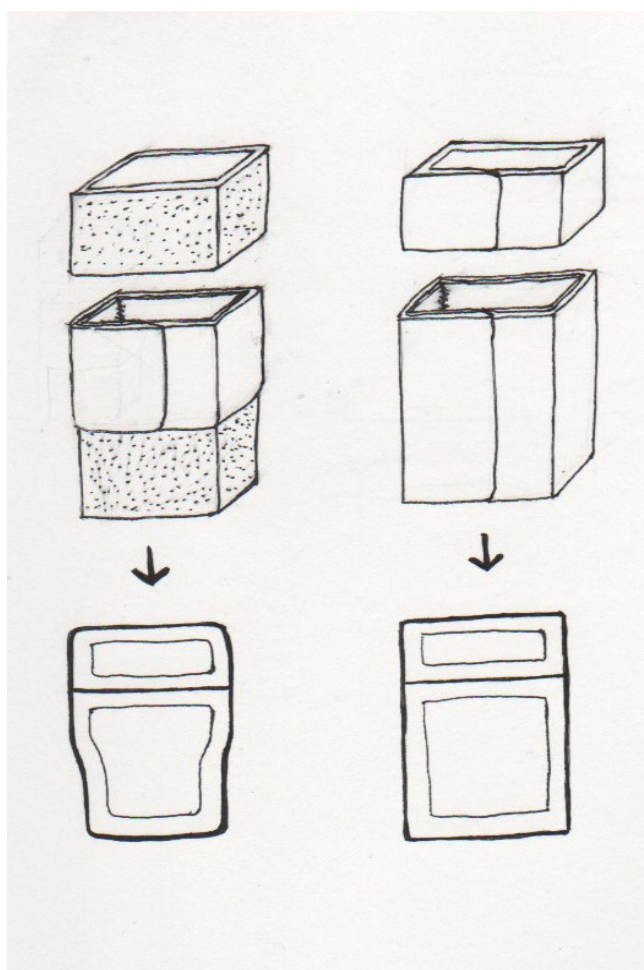


Fig. 4. The two most common Etui shapes.

This is the step where you will begin skiving. It is an excellent way to practice, as the stakes are lower here than they will be on the next layer. Run your leather under the water once to get it damp (not soaked), and use the knife to skive away the edges.

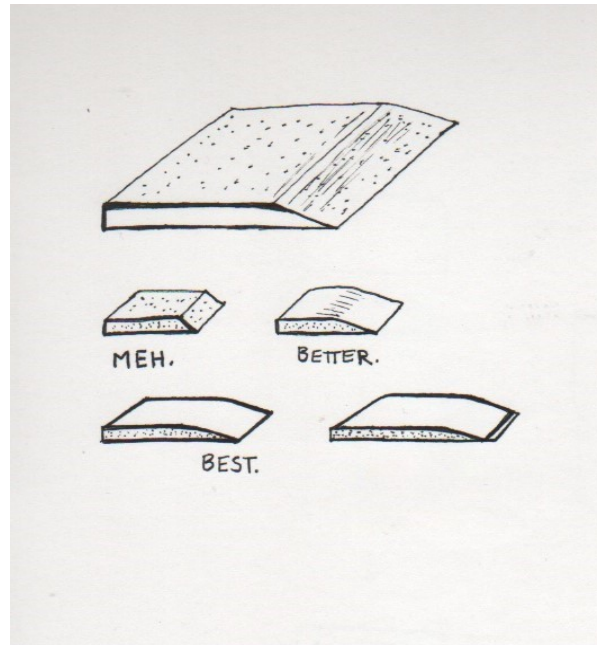


Fig. 5. Skiving = cutting the edges to slope.

Skive all four sides of your rectangle of leather, so that the edges are as thin as you can make them. The leather may stretch and pull here, especially at the corners. Trim and cut accordingly.

Once you have your skived rectangle, it is time for glue. Follow the instructions on the packet to make liquid rabbit skin glue. Mine says to soak the crystals for 24 hours, then heat in a double boiler. I use two jars to double boil. The small jar holds the glue, and the large jar holds boiling water from my teakettle. Put the small jar into the large, and let sit for 3-5 minutes. The glue will melt in the small jar, and become a smooth clear liquid. The glue will become tacky as it cools, and will solidify into gelatin after about an hour. Simply replace the cold water with hot, and you can keep working.



Fig. 6. The double boiler.

The leather you just skived may still be damp, which is perfect. Use your paintbrush to dampen the first layer to match. Now lay your skived rectangle fuzzy side up. Match the top edge to the edge just below the lid, and wrap it around so that the overlap is on the backside in the center. Mark where the underside of the overlap is covered, then score the smooth side accordingly. You can score it like you would a ceramics project, and/or you can skive away the smooth top layer. Now you are ready to glue.



Fig. 7. Scoring.

Use the paintbrush and apply the glue to both sides. The glue will rapidly soak into the leather, so you want both surfaces to be glistening with it. Wipe away any excess with a damp paper towel, especially excess on the smooth side of the leather. (If allowed to dry upon the surface, it could repel your dye).

Wrap the gluey leather around the block and clamp it tight. Be sure to get plenty of glue in the overlap as well. You can use a vise or clamp to keep the layers together, or you can use rubber bands. Either way, be sure that whatever you use to clamp does not dig into the leather and leave marks. I often use scrap pieces of leather placed in between the clamp and the surface.

Next, you will want another layer on the lid, to match the thickness of the “slidey part”. This layer will be completely concealed. Cut a rectangle to fit around the block, matching the height of the lid. (You could also do this layer in pieces, which means more skiving but it can be easier to clamp). Skive this layer on three sides only, leaving the side that will match the bottom of the lid the original thickness. Then skive away the smooth side of the leather, so that you end with two fuzzy surfaces. Glue this layer onto the lid around the block, and clamp it tight.

Leave it to dry, around 6-12 hours. This is the second layer.

Once your second layer is dry enough to stay put, I recommend taking the case off the block. (You may need to get it wet again to do this.) Swap out the block for a slightly smaller one, either by shaving the sides down a little, or by making a second block. This step is optional, but it can save you some difficulty later. The leather will shrink and suction onto the block as it dries, and the drier it gets the more difficult it will be to remove the wood at all.

Layer 2.5

This is an optional layer. You may want to do this layer if you have nice thin proper tooling leather. This layer makes the lid slide smooth side to smooth side, and makes it easier to give the case a cleaner shape.

(I do not often do this layer, as I make my cases out of discount scrap, which tends to be much thicker).

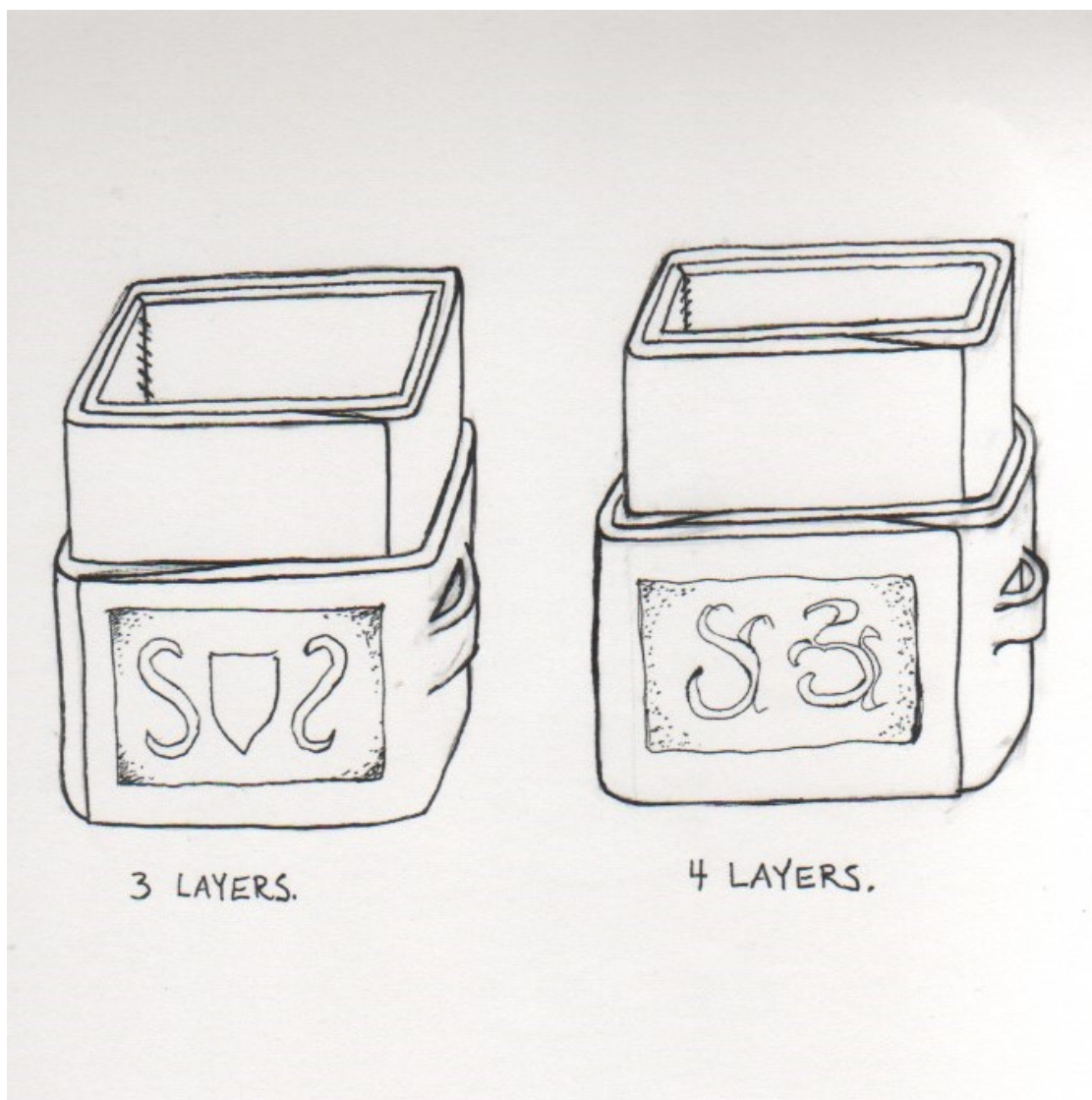


Fig. 8. Options for layers (not to scale).

Measure out and cut the leather to wrap around the case, with a bit of overlap. (You will only need the sides here, not the ends).

Get it wet. Skive the two overlapping edges, giving both a nice long shallow angle.

Mark where the overlap ends on the smooth side. Score the leather where it meets, so that the glue has something to catch on to.

Wrap the leather around the block, smooth side down. Mark where the previous layer's lid ends. Mark where you want the outside edge of the lid to be. The distance between these two lines will be the overlap of the lid, so it is best for it to be a good 2-3 finger widths.

Score and/or scrape off the smooth sides of the leather, on the outside these lines. You will want the glue to soak in well here, so do not be dainty about it.

When you place this layer on the block, remember that the leather will shrink a bit, so make sure to account for that anywhere there is an overlap.

Cut the line of the lid, as clean and straight a cut as you can make it. Now you should have a top and bottom piece. Try not to get them mixed up (I have done it).

At this point I find it best to work with the top and bottom as two separate pieces. You can always stretch the top or scrape the bottom at the end to get the lid to fit, but if you glue these two pieces together by accident, it is very very difficult to get it all off the block.

Glue the places you have scored, taking care not to get any on the places you left smooth. Clamp it as neatly as you can and let dry. This is the not-quite-final layer.

Layer Three/Final layer:

This is your final, fancy outside layer. Use the nicest bit of leather you can get for this. When I get a cheap quarter hide, I save and use the center corner, as the leather there seems to have the tightest grain and fewer flaws.

Measure and cut the leather for your top and bottom ends. Make these big enough to fold over the sides a little.

Get this leather wet and skive it on all four edges. Glue it down, clamp it, and let dry enough shrink it, making tidy caps on your two ends. (I find this part very satisfying).

Measure and cut out the leather for the third layer, remembering to overlap the sides. I like a nice big overlap, of at least 2/3 the width of the long side. This will make your lid more structurally stable, which you will especially need if you are only doing three layers.

Skive away on all four edges. This will need to be your cleanest, most accurate skive. A longer, shallower skive is best for the overlapping sides. A shorter, meticulously clean skive is best for the two ends. Keep your knives sharp, your leather damp, and work patient.

Overlap and match the side edges, so that the top layer is the layer covering the back. If you do it the other way around, the leather will pull and warp the edge when you pull out the side loops.

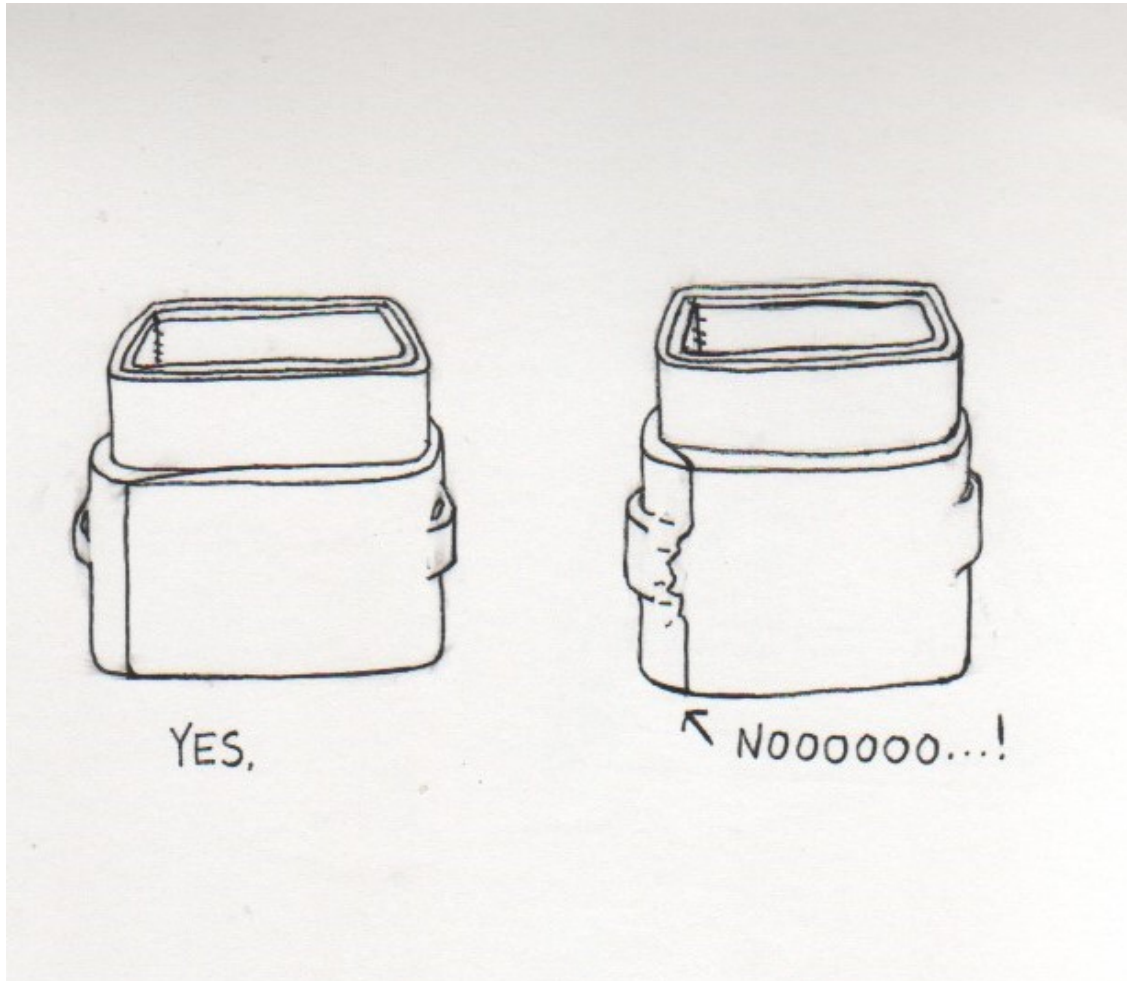


Fig 9. Don't let this happen to you.

Scrape/score the smooth side on the underside of your overlap. The more closely you measure this, the better for the glue. However, remember that the leather will shrink, so do not get too close.

Mark where your horizontal divide will be, and cut. The cleaner this cut, the better your lid will fit onto the box, and/or the less scraping and fiddling you will have to do later.

Now you are ready to glue. Once again, you will need a lot of glue, enough so that both surfaces are glistening with it. You will also need to be very careful to quickly wipe away any excess on the surface. I find it handy to use scraps of linen rather than a paper towel, as there is less chance of the cloth fibers coming off and sticking to the leather.

Sculpt the leather around the block, gluing as you go. Sooth the edges and the ends with your hands, and clamp. Let dry overnight, but check up on it often for the first few hours. As the leather shrinks and moves, it may want to pull away from the edge. You can often persuade it back into place with some pressure and warm water.

The next day, the leather should be molded to the block, but very slightly still damp to the touch. Now is the perfect time to pull the side loops.

Pulling the side loops

Pull the lid and the base apart, and make sure that you can take your case off the block. If you cannot, either because it has shrunk too much, or some of the glue has seeped through to the wood, use warm water and a butter knife to loosen it. Once you are confident that the case will come off, you may put it back onto the block for tooling.

For this stage, it is best to work with the lid and the base as separate pieces. This may involve using a second block.

Measure and mark with a light pencil line the place where you want your side loops. Use a sharp knife to cut through the outside layer.

Get the loop nice and wet with some warmish water. (It could take a bit of time to soak in). Now you may pry it up. I use the wee spoon tool to do this, but you may find another tool that works as well. If it won't budge, use some more water, and/or cut in a bit deeper with the knife.

Once the loop is pried up off the side, it is time to put a skewer through it. Anything long, strong, and slender will do. I have used large wooden needle blanks, chopsticks, and bamboo skewers. My current favorite tool for this is a set of metal kebab sticks. Whatever you use, stick the skewer through the loop, sculpt it to your desired shape, and let dry.



Fig. 10-11. Using bamboo skewers to push out the loops.

If you wish to decorate the loops, do it now, while the leather is still softish. You will not wish to get these wet again.

Once the loops are dry, use a small paintbrush and dab a bit of liquid glue onto the back/insides of the loops. The warmer your glue here, the better. This should smooth down the fuzzy side of the leather on the loop interiors, and essentially water-harden the loop. If need be, you may also trim this inside a bit, using a super sharp craft knife. Fiddle with it until you are confident that your piece of cord will travel through the loop.

Tooling the leather

Once the loops are pulled and set, now it is time to decorate. Sketch out your design on scrap paper first, taking care to account for the curve of the sides. Transfer your design onto your case. I use a simple method of rubbing a pencil on the back of my scrap paper, then going over it with another pencil to press it into the leather. If you are particularly brave, you might even draw it straight onto the case. Whatever you do, do not press in too hard, as the leather will remember your mistakes.

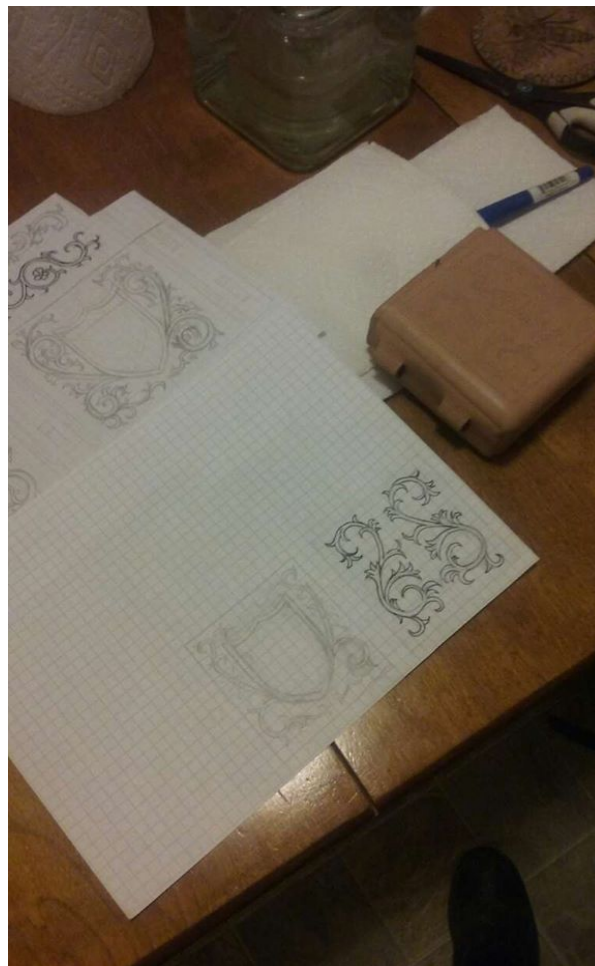


Fig. 12. Design Transfer.

Moisten the leather surface with room temperature water. I do the first pass by swiping it under a faucet, then subsequent passes with a paintbrush.

Using your preferred tools or stamps, lay your design into the leather. I find it difficult to do the traditional hammer and stamp method here, as the layers behind have already hardened a bit, and also the project is on a wooden block, rather than a stone slab. So my preferred tools are a swivel knife, and a pokey stick. Your mileage may vary.

This is hard on the hands. Take lots of breaks. You can always re-moisten the leather, at least up to a point. My ideal time line is 2-3 days for a handheld case, or perhaps 8 hours for a wee small one. Because the case is at this point quite portable, I often drag it out and about to work on, as I would with other types of handwork. With a bit of water and a pointy stick, you, too, can tool leather at the laundromat.



Fig. Tooling on the go.

Once the leather is tooled, remove the case from the block, and allow it to dry completely. This may take a couple days, up to a week depending on weather conditions. The leather may shrink a bit more as the glue cures, so keep an eye on it. After about 2-6 weeks, the glue will have hardened to maximum durability, and you can knock the case around almost as if it were a piece of wood.

Finish Work

Now it is time to decide on stain, paint, condition, or dye. There are extant examples of several

different finishes, including leaving the thing naked. Black seems the most common color, followed by dark brown, the natural tan/lighter brown, and very occasionally red. Plausible period dyes include vinegaroon, oak gall, and madder. I mostly use a modern alcohol dye to imitate these colors, as I only have the bandwidth for so much.

The examples with paint seem to be mostly colored only in the small details. My limited experience with tempera paint indicates this is probably wise, as the paint is prone to flaking. It sure does look nice though, and adds extra flair.

Once your case is colored up to satisfaction, the last step is to add the cord. I like a piece of braided or spun hemp, as it is sturdy and has just enough slide. You could also use a cord of silk, or a thin bit of tablet weaving. If you or someone you know does finger-loop braiding, that would also be lovely and functional.

The cord must be long enough to go through the loops, hang off your belt or hook, and let the lid loose enough you can still get in to the box. Once again, it is better to be a bit too long than too short.

Tie one end of your cord, making a knot that is big enough it cannot pull through your loops. Thread the cord through all the loops, then tie off another knot. If you can make tassels, that's even better.

Your case is done, hooray hooray! Now you can carry around your stuff, and be super extra awesomely medieval.



Fig. 13-14. Some finished cases.