

# The imperfect treaty of Making Wax Seals for documents



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## Foreword

This is an simple booklet of making wax seals for scrolls. I've learned the basic technique from King Gerhardt of Drachenwald, and I've done some testing of my own on the subject. I don't claim that this way is accurate method of making seals in any way, but still useful for beginning experimenting the subject further. I've done 30 or so seals with this technique, and you can easily make them in your kitchen table with relatively simple materials and tools. I try to describe whole process as simply and clearly as possible. I do not take any responsibility if you try this at home and burn down your house, or worse. Enjoy your reading and be careful if you decide to make your own experiments.

Experimenting with new things is joyous,  
cleaning the mess afterwards is infernal.  
Haakon

## What you need

- Seal matrix
- Seal lacquer, co loured beeswax or co loured candle wax for seal impression
- Beeswax for seal cake
- Candle and matches
- Mini torch
- Small pot for melting wax - it will be useless cooking afterwards!
- Stove for melting wax
- Baking paper sheets
- Old newspapers
- Dull thin bladed knife such as butter knife
- Sharp knife
- Sandpaper or file
- Thin metal spike such as needle stuck in wooden handle
- Other small thin cutting, lifting and pasting implements
- Tweezers
- Permission from the owner of kitchen to do this

## Preparing the work area, scroll and the materials

### Table

Clear the kitchen table and spread used newspapers evenly on whole surface. This protects the tables surface from heat and accidental spills of molten beeswax. Spread sheet of baking paper on the newspapers. Most of the work will be done on the sheet of baking paper. Polished stone slab would be also very good working surface if you have such available. Have the

candle, matches, butter knife, spike and few small boxes and tissue ready for use.

### Heat sources

Candle on a small plate, matches, and mini torch are needed for melting and heating in several phases of the process.

### Wax and the pot

Have clean, secondhand pot with lid for melting the wax. The pot will not be good for anything else than working with wax without really hard cleaning up, so save the sweat and have one you can sacrifice for melting the wax more than once. Break the clean beeswax in relatively small chunks, that they fit in the melting pot. You can wrap the wax in few plastic bags or old clean sheet, and then with hammer break the piece into smaller ones.

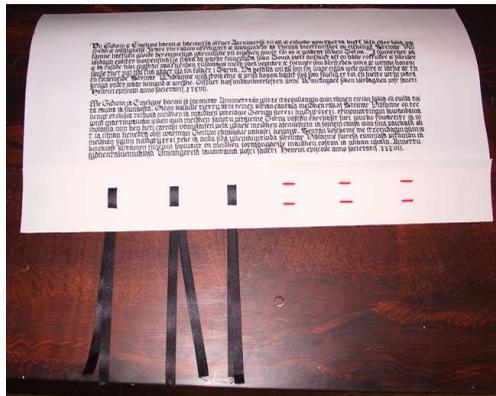
### Safety

It is also good to have an fire extinguishing blanket ready, if the worst happens when handling the molten wax. (Wax ignites) Also, the pot should have fitting lid at the reach. You can also extinguishing the fire with the lid by placing it on the flames. If you are in doubt of how to handle a possible fire, find some information of that from you local fire department!

### Scroll and ribbons

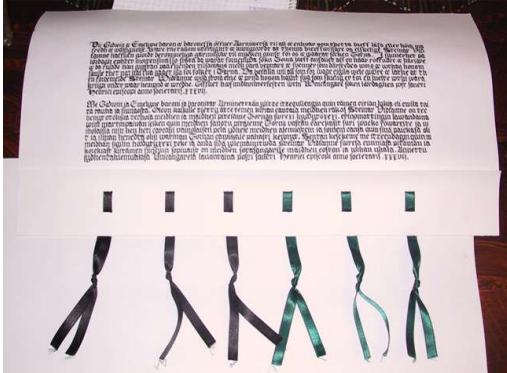
Have the scroll and ribbons ready for work in place, where accidental spills of wax cannot spoil them. It is easiest (and tidiest) to prepare the scroll beforehand, prior any wax is

worked with. The process is simple. Cut two (or more) slits close the edge of the paper, large enough to allow the ribbon pass through them. In this scroll I folded the bottom of the paper in two, to make it stronger for the weight of 6 seals it would be holding. Ease the ribbons through the holes. I used a dentists tool to get the ribbons trough the holes. Thin wooden stick would also be good for pushing the ribbons through the holes. If the ribbons don't fit, just cut the slits little bit wider to prevent tearing up the paper. The holes are marked with red in this photo to make them more clearer.



*Picture 1: First three ribbons attached*

After you have all the ribbons in place, tie knots on them. The knots will be inside the seal, and prevent the seal from slipping off from the ribbon. When you have the ribbons ready cover carefully the scroll, leaving only ribbons visible.



Picture II: Ribbons with knots

This will hopefully save your work if for some reason you would spill beeswax on table, or on the scroll itself. I used plain paper attached on the scroll with painters masking tape that has relatively weak glue.



Picture III: Protecting the text

This kind of tape is easy to remove, and it does not destroy the paper. Leaving it on something for long periods of time might change the consistency of the glue, so do not leave it on for

extended periods of time. Use big enough sheets of paper, that the edges fold under the scroll, just to be extra sure. After this, your scrolls are ready for the seals. Now it is time to start the messy work – making the actual seals.

### Making seal impressions

Making seal impressions from seal lacquer is quite simple. Just have an baking paper sheet on smooth surface, stick of seal lacquer, an heat source and the seal matrix ready. Candle works well as a heat source, but if you need to correct the impression, small gas torch will be perfect for the job. When working with the mini torch (or fire in general), be careful not to heat anything else than the pieces you are working with! Drip the melting seal lacquer into correct sized pool (somewhat larger than the matrix) and after breathing on the seal matrix, press the impression on molten lacquer.



*Picture IV: Melting the lacquer and applying the seal matrix*

Breathing little moisture on brass or metal matrix will prevent the matrix sticking to the lacquer. Then gently pry off the seal matrix before the lacquer hardens too much and becomes

brittle. If the impression comes imperfect, you can re-melt the lacquer with mini torch and re-apply the matrix on the lacquer.



*Picture V: Broken seal impression*

Also, if the lacquer breaks, you can re-use the pieces in next attempt. Tweezers might be handy in handling small pieces of lacquer into the new lacquer pool. Trying to repair the broken impression will not give good result. It is better just to re-use the lacquer for making new impression.



*Picture VI: Storing the ready impressions*

When the seal impression is correct, place the cooled piece into a box with some tissue as an padding. Make several impressions as a reserve in case you need to make several scrolls with same seal, or as in my case, you need to make several attempts to make one complete seal.

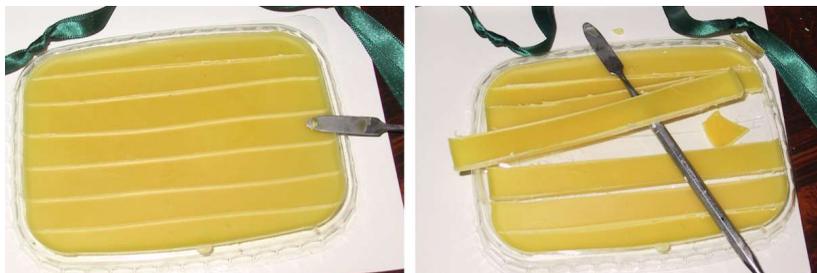
### Making wax parts

Get an dispensable plastic box lid with smooth surface, and place it level on table. Melt the beeswax on low heat (no rush here, I really, really mean low heat), and have the lid of the pot ready. If the wax ignites, quickly place the lid on the top of the pot to suffocate the flames. It is also good to have an fire extinguishing blanket around just for safety. Pour molten beeswax on the lid, filling the whole surface with 2mm layer of wax. Let the wax harden a bit, so the wax loses it's transparency.



*Picture VII: Wax cooling in a simple mold*

After the wax has hardened a bit, cut it gently to slices that will be used as the seal walls. Gently pry the strips loose from the lid. Make some extras, now. You can always re-melt the wax if you have too many strips.



*Picture VIII: Cutting the wall strips*

### The base of the seal

Cut an piece of wax also for base of the seal. Shape the base according the impression it needs to incorporate. You have to make the seal base big enough for the walls and the seal

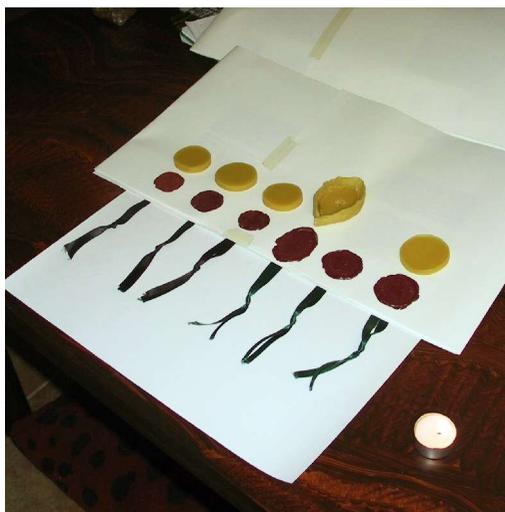


*Picture IX: Carving place for the knot*

impression to fit on it. Another way to make the seal base is to cut a strip of paper and tape it to circle, thus forming a mold for wax. Then place it on box lid and pour some wax in it. Some wax will leak under the edges of the strip, but not much if you are careful. After it is partially cooled, pry off the paper and break off the excess wax that has leaked under the edges.

### Assembling the seal cake

When you have all the pieces you need for assembling the wax cakes, it is a good idea to have all you need spread out ready for easy and organized working. Seal impressions, wax parts, heat sources, all tools and some tissue to wipe the tools clean. You should also bear in mind where you want to have the certain seals to go. In these particular two scrolls two colours of cords were used for two different groups that were signing the deed.

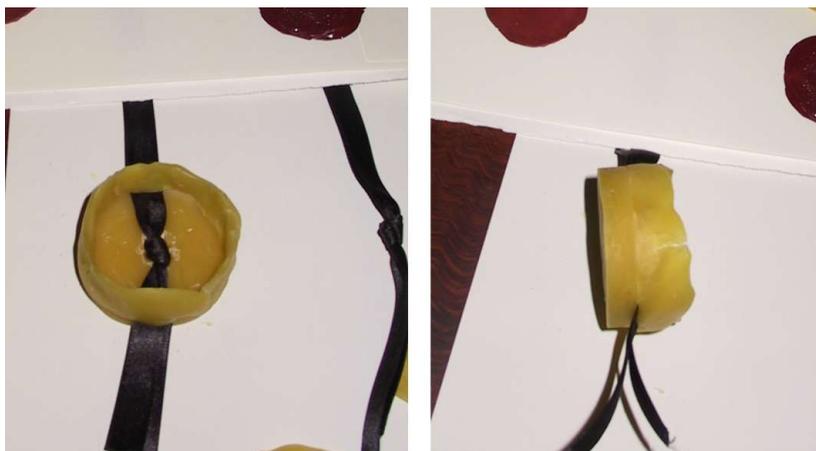


*Picture X: Organized pieces ready for assembly*

Heraldic order of importance was used when seals were placed, just as one would have shields of arms arranged on the wall certain way. Small touches just add more in the piece you are making.

When you have suitable sized base cut out, the you can carve small depression to it in order to incorporate the knot in the ribbon. Press the ribbon firmly on the seal base. You might want to heat the base little with mini torch just to make the ribbon stick.

After this, you build the seal walls on the top to the base. The bees wax strip should be pliable enough to be bent gently to the right shape. When you have correct diameter wall ready, have the ends against each other. Then heat an thin metal tool next to the candle flame, and ease it between the ends of the wall.



*Picture XI: Seal base with the walls attached*

If you heat the blade on top of the candle flame, you will get black soot that messes up the clean wax. Just heat it up next to

the flame, or wipe it clean of soot by tissue before applying the blade on wax. Then gently press the partially melt ends together. This should weld the ends firmly together. Re-heat the blade and work over the lower edge of the wall and quickly press it to the base. The wall should be now attached to the base. If there are some places that are not attached, work carefully around and between them with heated blade to correct the problem. Add some wax chips and melt them in if there are holes in the joints. In this way you should have an solid cup of wax with a ribbon running through it.



*Picture XII: Protecting the area for possible leaks*

After this, level the top edges of the seal walls, if you have used uneven strip of wax as in picture. You can also groove the base of the seal little, to make more “grip” for molten wax that will be poured in. It is an good precaution to have small piece of baking paper, partly torn placed under the wax cup. This will protect the scroll from the possible leaks in next step of the

process.

Before you pour hot wax in the seal base, you might want to check if the impression will fit the seal base. Gently fit the impression inside the walls. If it does not fit the seal base, then gently scrape or file some of the edges off from the lacquer. Be careful though, since the lacquer is quite fragile, and it will break easily. Avoid having the shavings of the lacquer messing up the beeswax base, or the scroll. After the impression fits in well, take it off from the seal base.

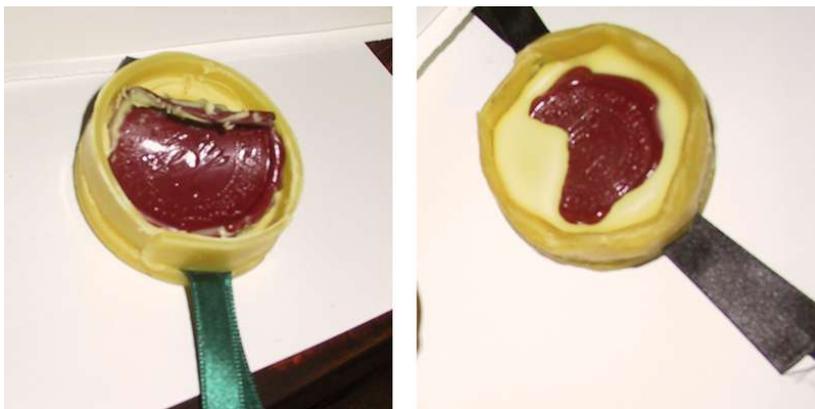


*Picture XIII: Fitting the seal impression*

Now, take a paper cup and take small amount of hot wax in it from the pot. Pour hot wax in the seal base – just enough to cover the knot.

Let the wax cool enough before you press the impression over

it. The hot wax might spill over the impression, or have enough heat to distort or partially re-melt it. Below you see examples of both. If this happens, you can carefully remove the ruined lacquer impression and try with a new one. Beeswax is easily repaired, carved and molded with heated blades if you need to re-shape the seal base.



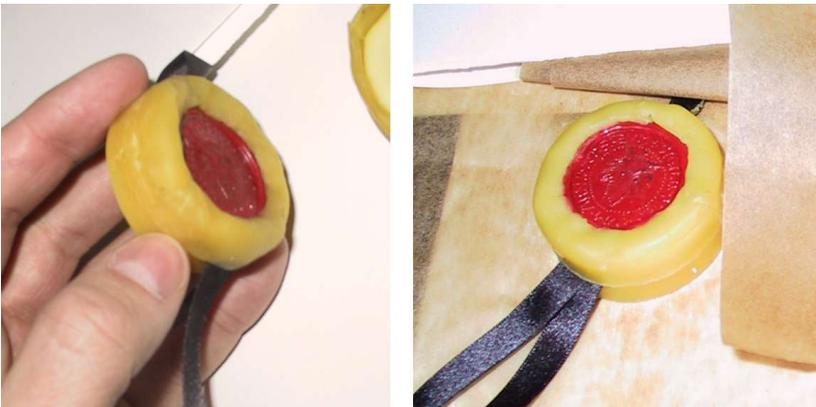
*Picture XIV: Partially melted and sunk impressions*

After the wax has cooled enough, place the impression on top of it, and gently bend the edges of the walls towards the impression. The heat of the wax has also softened the walls, so they should be easy to form.



*Picture XV: Bending down the edges*

Start from one side and proceed simultaneously both ways around the edges to the opposite side. Press the edges firmly but gently around the lacquer impression to get a nice, even edge that holds the impression tightly at its place.



*Picture XVI: Assembled seal with bent edges*

You can see the seam between the wall and the base of the

beeswax construction. This can be disguised with smoothing the edges of beeswax cake with heated blade. Just remember to keep the blade next to the flame, not on top of it, if you use candle as heat source. The soot from candle will mess up the



*Picture XVII: Finishing up the seals*

clean wax with nasty black stains. By scraping and smoothing the edge with heated blade, and also some gentle work just with your fingertips will help you to achieve nice, smooth surface on edges of the beeswax.



*Picture XVIII: Ready seals from the back*

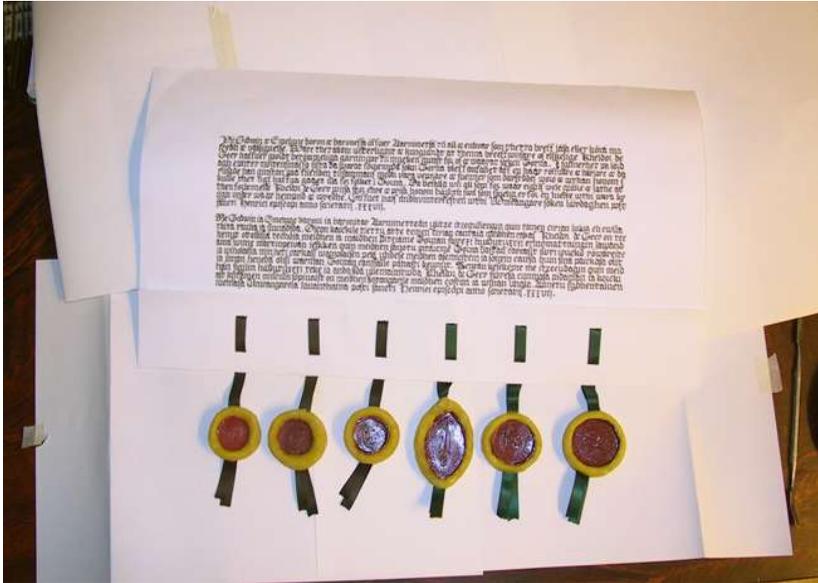
It is good idea to clean and finish up the back sides of the wax cakes as well, to give the seals finished appearance. Also, if some wax has spilled to the ribbons, you can gently scrape it off with heated dull blade. Be careful not to cut the ribbons when you clean them.



*Picture XIX: Ready seals from the front*

### Finishing up

When you have all your seals ready, it is time to take carefully off the protective paper sheet and see how it turned out. Be careful when removing the tapes in not to rip the paper of the scroll. It is also good idea to clean up all the debris, put down the candles and generally tidy up the workspace before you remove the covers.



Picture XX: Final checking of the scroll

If everything looks correct, and the scroll is ready for the receiver, it is time to pack it carefully. I made separate cases to each of the seals from paper with some tape, and also covered the text again with the protective paper.



*Picture XXI: Covering up the seals*

When all the seals are covered, as well the text, it is a good idea to write down the name of the receiver on back. You don't need to start opening up again the package to know where it is supposed to go. If however, the scroll should be waiting the receiver for a long time, it is good idea to have it stored without any tapes attached to it. Tape might give out some of the glue on the paper and make nasty stains.



*Picture XXII: Packed and ready for transportation*

Handling of the documents with seals attached needs more care than just papers with no seals hanging from them. Suitable sized cardboard box with enough room not to have the seals compressed would be quite good for transportation.