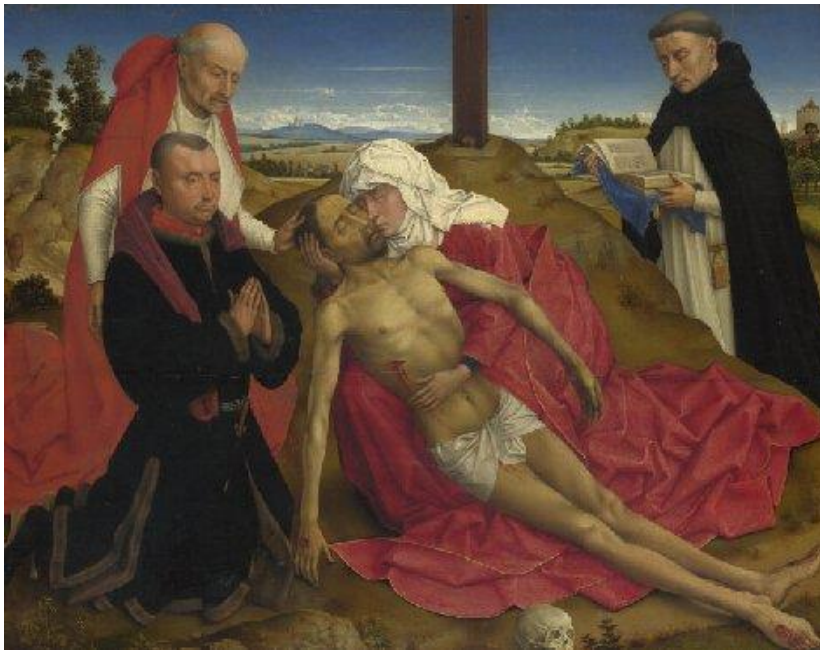


Pen/paintbrush case of the Medieval Period

This paintbrush case is taken from the style used by scribes and illuminators. There were a variety of styles, from metal to wooden to leather, but they all had several characteristics in common. They were long and narrow boxes with a top that could slide on and off, suspended on a cord. Many had an inkwell attached to the cord. After observing many of these cases, I decided to make this one similar to the one in Rogier van der Weyden's *Pieta* (circa 1465) shown in the painting below, which appears to be of wood.



Pieta, about 1465 (Weyden, 1465)

Close up of brush case

However I decided to make it longer, to better accommodate paintbrushes, like this Italian one made in the 14th century, which is made of molded leather, now at the Wolfson Gallery, seen below.



These cases appear in numerous pieces of medieval art.



Materials: I chose cedar wood for the project, because of its anti-insect properties, which can damage brushes, as Cennino Cennino warned about in his treatises. (Cennini, 1922).

This was made using medieval tools and methods as much as possible.

Frame saw -



The frame of the saw is build up of three pieces of wood, loosely fitting together in an H-form. The sides of the H-frame could either be straight or curved. The bottom of the H holds the saw blade, while the top has a twisted rope to keep the saw blade under tension, which was secured by a wooden wedge (Morgan, 2014)

I was unable to find a medieval style frame saw, so I used our modern equivalent. A frame with a blade between the two ends, of the "H", but instead of the top having a twisted rope for tension, mine had a lever system and a handle added to one end.



Chisels – Chisels have been used since the Stone Age, but they really came into their own in the Bronze and Iron Ages. In the medieval times a chisel was called a "former", and it was broad and flat and was

used to carve rough timbers into shape. They had handles of wood that could be pushed by hand or hammered upon with a hammer (LIPINSKI, 1999).



Wet stone – to keep the tools sharp. Sharpening stones have been found dating to the prehistoric times, and have not changed during that time. It is an abrasive, flat stone that will scrape the edge of the blade to remove burrs and make it sharp. I used a modern stone for this project

A sharpening stone thought to come from Telemark in Norway. A similar one has been found in an excavation in Nottingham and dated to 14th century (Allen, 2017).



Gimlet – it is a tool used to make holes. Basically it is a pointed, spiraled metal prong (like a drill bit) turned by hand (Hill, 1984). They are still used today. Two examples of a gimlet in use. I had to order mine from a woodworking shop in the UK.



Sharks skin – used to smooth the outside of the wood. Shark skin was commonly used to finish wood, just as we used sand paper. The rough surface of the skin can be course or fine, resulting in a smooth finish to the wood (Diehl, 2012). I was able to acquire some sharks skin from my son who lives in Okinawa, he knows local fishermen who were able to get it for me.

The Process:

The cedar plank was cut into two pieces 8" by 2.4". The wood plank was approximately $\frac{3}{4}$ " wide. A second piece of wood was set aside for the top piece.

Using a chisel the each of these two pieces was hollowed out, leaving sides and bottom that was $\frac{1}{4}$ " thick, and 6" from the inner end of one long side to the other. The remaining was hollowed out only about $1\frac{1}{4}$ inches wide and only about $\frac{1}{2}$ " deep. Next two corners were removed. This was done using the frame saw.



The piece was turned over so the hollow section was down, and a $\frac{1}{8}$ " or so of wood was chiseled off the back side of the "neck".

This was done to the other piece of wood so there were two identical pieces. The inner surface was smoothed as well as I could do it with the chisels, I did not use the sharkskin on this portion since it would not been seen, and I did not have very much, so I conserved it for the outside of the box.



The piece of remaining wood was 3 ½" wide and 6" long. I chiseled out to a square area 1 ½" tall and 2" wide, leaving ½" of wood on one side and ¾" on the other. I chiseled it to a depth of ½ inch for the top 1", and only 1/8" for the bottom ½".



Then the top and bottom were sawed away, leaving ½ inch of wood at the top, and the bottom was cut along the chisel line to leave an opening. The extra ½ " long the side was also cut away. Two of these were made.

Next each of the two matching pieces were glued together (with the hollow spaces facing inside. The wooden pieces were secured with cord to hold them in place.

The next day the outer surfaces were sanded with the shark's skin, and the sharp edges rounded. Some additional chiseling was done to allow the lid to fit over the neck of the box.

Finally the gimlet was used to drill holes on both sides of the top. These went from the front towards the back – I did not want to drill in the center along the glue line, and felt this arrangement would best balance it out. Two holes were drilled, one on each side of the bottom piece, towards the front side.

A leather strip was cut and waxed with a candle.



It was fed through both holes in the top, then into the holes in the bottom part, and knotted on the inside.



Part II

Using Cennino Cennini's instructions (Cennini, 1922), paint brushes were made.

Materials

Red fox fur, raccoon fur, Jim's hair, thread, small sticks I had on hand from another projects, feathers and cheese glue. These were made the same day the wooden pieces were done, since the glue had to be used in a short period of time.

The fur was trimmed away from the hide, and the undercoat was removed with a comb.



The long hairs were assembled into a small bundle and tied twice with thread.



The clear quill end of a feather was cut off, about $\frac{3}{4}$ " long. The ends of the threads were pulled through the quill, and then a drop of glue was dripped into the end near the hairs. The threads were used to put the hair bundle about half way into the quill. The narrow end of a stick was rolled in glue and inserted into the other end of the quill. This was done for each of the hair types.

A feather was then used for the last brush. Feathers were used by illuminators for fine details. (Almond, 2012). While it is known that they were used, I could not find information regarding how they were made. I decided to make them the same way the hair brushes were made. The hollow quill was cut off, as before. A bit of glue was put into the hollow quill. Then the tip of the feather (about 2") was cut off of the feather, and pushed into the quill leaving about ½" out. A stick had glue applied, and then was inserted into the other end of the quill.

The following day all the brushes were tested and then rinsed. The hair brushes were "seized" but coating them in gum Arabic. The feather was not.

The brushes were put into the brush box. Boom Done!

Have fun.

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