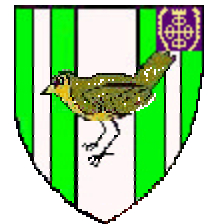
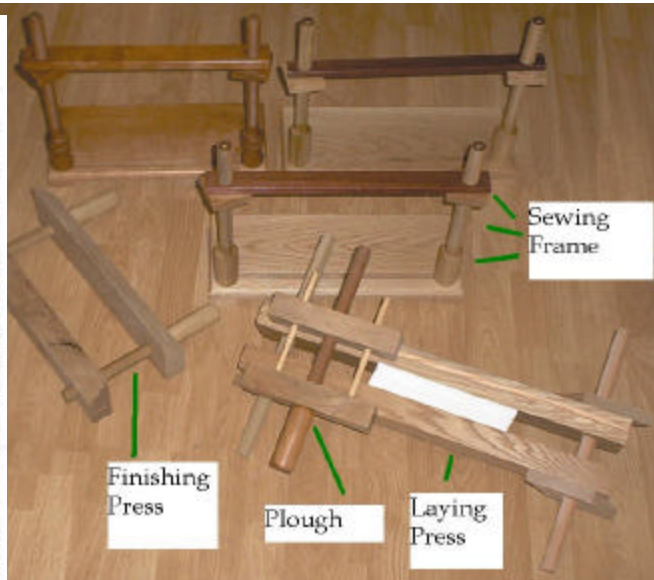
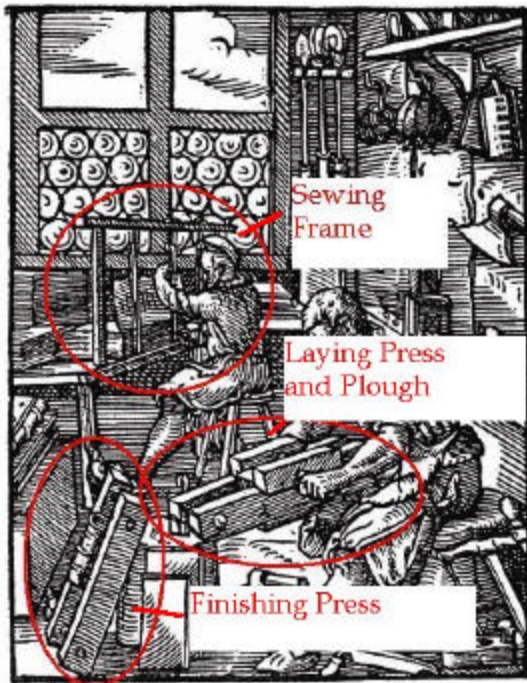


A
Collection
Of
Period
Bookbinding
Tools.

By
Master
Pavel



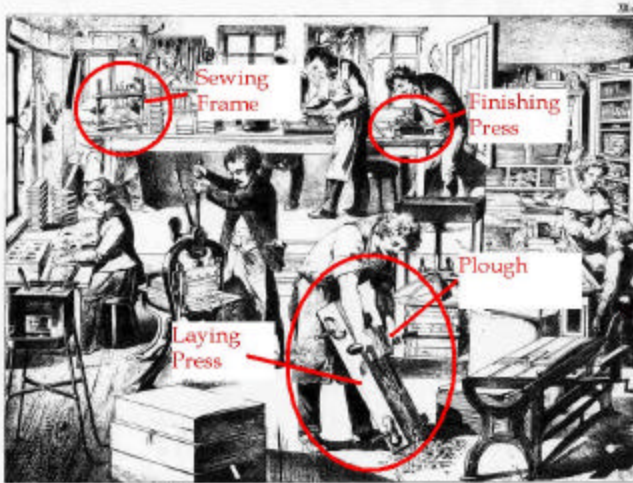
Der Buchbinder.



The 1585 wood cut *Der Buchbinder* from the *Book of Trades* outlines the tools and process of a typical book binder in late period Germany.

Books in this period were sewn to leather or cord “bindings” using a sewing frame to keep everything straight and tight. They were then cut even and trimmed using a laying press and plough or a laying press and a draw knife. After the boards had been sewn and glued on to the body of the book using a book press, (which I didn’t build for this group.) the leather or cloth cover was attached. The book was finished, gold leaf, leather tooled and otherwise finished using the finishing press. The Finishing Press conveniently held it for this type of work and provided unobstructed access to the binding.

The main wood cut I used as documentation and is a 16th century German work, there is ample evidence that these tools and processes were used through out late period Europe. These technologies existed almost unchanged till the 19th century, as shown by these 17th and 18th century illustrations of the similar workshops.



Construction; Materials and Methods

The main bodies of the presses are American White Oak, This Oak a lighter in color Oak than commonly found in Europe but readily available in the US. The presses were shaped out of a White Oak billet using hand chisels and planes till a square surface had been formed. Once the billet was “Squared” using hand tools analogous to those used in period, (Metal soled and transitional planes instead of wooden soled.) I used a table saw and radial arm saw to form the “blanks” for the presses and Spindles.



My hand and eye are not steady enough keep the spindles true to the tolerances using a wood lathe. I choose to cut the spindles on a small metal lathe to get the tolerances fine enough. I then used a free hand wood threading jig to make the threads on the screws.

In period I would have rough shaped the spindles with a fro to get octagonal shapes then run them through a pole lathe to rough form the spindle. The rough form would have then been “screwed” through a floor scratch to form the threads.

Many of the examples of period spindles and screws have much more ornamental curves then the ones I went for. My skill level dictated the simpler shoulders and spindle shapes.

For a few of the screws and other small pieces I used some exotic woods. The screw in the plough is made of Red Heart. This is a hard wood from Central and South America. I chose it because of its beautiful wood and because I had a small stave of it laying around the shop. The same is true for the Purple heart cross piece seen on the sewing frame. In Period Ebony, Cherry, or other exotic woods would have filled the same level of stature and beauty.



This photo shows how the spindles are mounted to the base of the sewing frame. Dry mounting the spindles allowed me to measure and mark where the slot went so the bindings would hang at the 90 from the work table of the sewing frame. I am not sure how this was done in period, but the “Try and Mark” method worked for me.

The sewing frame seemed to be a straight forward piece of engineering, until I tried to make the “Keys”.

The keys are the parts that hold the bindings under the work surface on the sewing frame. In period they were either brass, bronze or wood. After destroying quite a bit of stock trying to reproduce these, I relented and purchased commercial keys that appear period. The “H” shaped ones are for the leather or ribbon binding straps and the other shape is for the end cords. The leather bag was largess from Valens and Susanna’s 5th coronation.



The Finishing Press was the easiest tool in the set to make. It was simply two large (2”X3.5”) blocks of White Oak cut with a 45 degree angle face, which were then drilled and tapped for the spindles. In my research I could find no reference to how the screws were attached on their “free” end. I chose to let them travel freely. I applied bee’s wax on all screws as a lubricant. The 45s are so that the finishing tools could be used from almost any angle to tool the leather cover of the book. I chose to have my screws press from either side. This makes it easier to use your whole body to tighten the press. The illustrations and wood cuts of this tool show this configuration as well as the screws being on the same side.



The photo on the left shows a Laying Press (or Cutting Press) and a Plough. In earlier periods the Laying Press was used with a draw knife to cut the ragged end of the bound book even. However, this produced ragged cuts and sometimes destroyed the work. Sometime in the 16th century the Plough was introduced. The introduction of the Plough called for a modification of the Laying Press. The plough allows for a more accurate cut due to the addition of the “rail”. It serves as a guide for

the plough. This rail along, with a matching slot in the sole of the plough, allows for a smooth and clean cut of the edge of the bound book. I chose the nut and screw tightening method as it gives more control to how well the book is held.

The hardest piece was the Plough. The Plough replaced the earlier draw knife and was a nice little piece of engineering. Not having a period example to examine, I studied several reproductions of early ploughs to design mine. It is basically two blocks of wood with a screw and two guides to keep them parallel and true. A blade is mounted to the bottom of the Plough to cut the paper. After each stroke the screw is turned to advance the blade. The blades were made out of steel and mounted one of two ways, Either in a keyhole slot and pegged or with a pass through screw and furral. Not having the skill to make that precise of a key hole, I used the pass through and furral method. Master Kazimer donated the brass furral on this one from a foil he was working on. It was turned on the same lathe as the spindles and screws. The blade is made from an old plane blade cut to size and sharpened.



The Laying press can be used as a loose tool by sitting with it and resting it's foot on something and cutting. But the set of tools was made for Her Excellency Rhiannon of Ansteorra for her birthday. (Rhiannon has a skill at book binding that deserves good tools. The devices painted on the tools are hers) I had the "bucket" (the open table they are sitting on.) made to her height to help with her back while using the tool.

The tools were scraped with cabinet scrapers to provide a fine surface finish, then treated with a hand rubbed oil to seal them from the elements. Significant effort was not invested in the finish, as they are tools, not museum pieces. They were made to be used.

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And the tools of allied trades

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