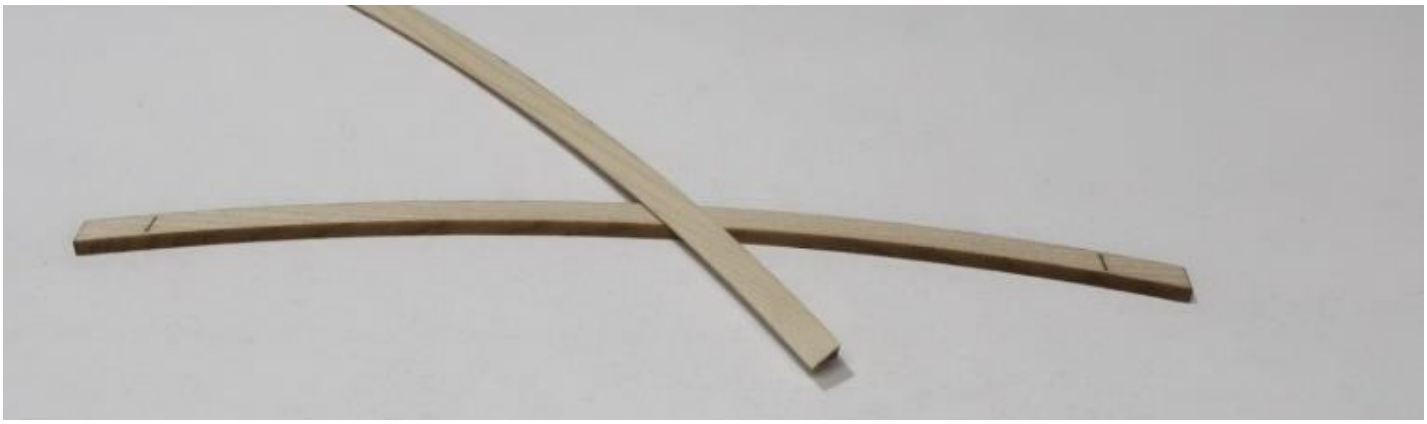
Chapter Four – Starting to work on inboard details, but first…

Let us add some stern details…

First up was to scratch/scrape some molding for the lowest one just above the square tuck. You guys have done this before. 1/8" x 1/32" strip of boxwood scraped with a razor blade which has the profile cut into it.

Then the frieze was cut out and glued on. I used the darker one for me of course to match the friezes on the side of the hull. I sit this flush onto the molding we just added.

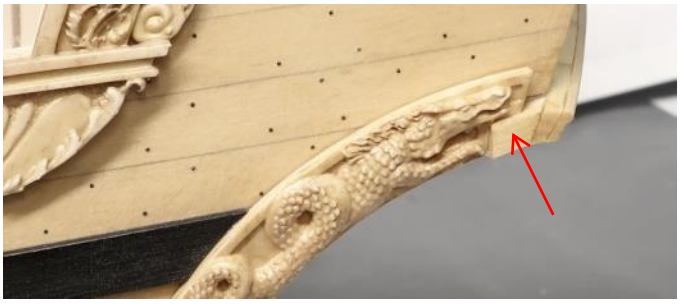
Then the upper molding above the frieze was added. It was done in two layers. I just found that easier. The first is laser cut for you on a curve to match the curve of the transom. There are registration marks to help center it etched onto the FORWARD side of the molding. This is the side that gets glued to the transom. The AFT side of this strip needs to be sanded with



an angle along its entire length. This helps establish the correct angles of the second layer which we will add later. The laser cut piece on the bottom is a non-sanded example just to show the laser etched lines that help you center it. Photo on previous page. The ends will hang over on both sides of the hull quite a bit. That is by design. But you can see the other example on top which has been sanded along its entire length on an angle, basically making it triangular in profile or wedge shaped. This can be glued on the model once completed.

Then you can scrape another length of 1/8" x 1/16" boxwood strip which can be glued on top of it. Using two layers is just a cheat to help establish the correct angles of this complex piece of molding.

Then the sides are completed and trimmed. But before you can do that, cut a small length of 1/8" x 3/32" strip (use scrap) and glue it onto the side of the hull. See it below just under the serpent's snout.



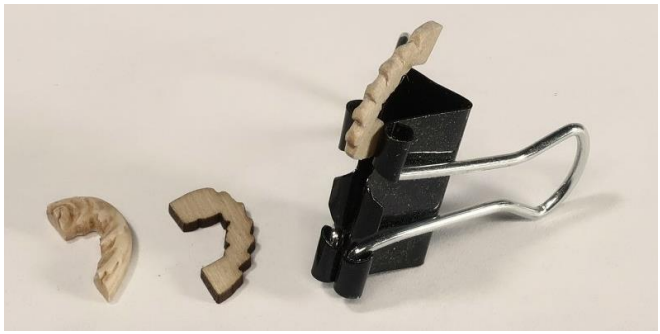
To complete this step...another small length of scraped molding is glued on top to finish it off. This creates a nice sized platform where the side figures will sit. You can shape to suit your own sensibilities and have the standing figure with you to test as you finalize this ledge. Its unclear on the contemporary model just how this is shaped but this was a good reconstruction. I filled any cracks with wood filler in preparation for the transom carvings next.

Next up was to paint the top of the transom before adding the actual carvings. I didnt have to paint all the way to the upper edge. I didnt want a painted seam to show afterwards. I also marked the lower areas so I knew where to stop the painting as well. You cant tell in the photos but its not black at all. Its a very muted brown black and even gray. I didnt want it to be too stark a black. I also dusted some blue on there as well. But you can use whatever color you like.

You can see the two standing figures being tested in position. Yes the aft foot does hang over the molding a little bit. This is OK. And the figure is leaned aft a bit as well. They were removed for now. It was just a test.

Then the actual carved transom was now glued into position. Once again this was after some initial cleanup and staining to make it match the wood color. Old masters gel stain (fruitwood) was used once again. Photo below.

With the transom carving secure it was time to focus on the forward side of the carving. Basically the thickness of the carved transom is thicker port and starboard. (Where it hangs over on both sides.) There is a little carved detail sandwiched in the center of this as well which can be seen on the contemporary model. My solution was to build up this area with two layers. The first middle layer is laser cut in boxwood. This layer was cleaned up of it laser char and then shaped a bit with some sandpaper and files. The edges were rounded off and I just had some fun with it. You can see my example being held in the clamp. You guys can do as much as you like with this piece. Photo is below. Then the most forward layer will be glued on as well. This forward layer is a resin casting.



When gluing the two layers on you must finesse them a bit. Meaning you may have to trim some of the hull molding etc. You can fill any cracks or seams with wood filler and generally speaking try to blend them all together. The photo on the previous page shows these two layers on the model. They were glued to the forward side of the transom.

Next up was to add the columns. This is pretty straight forward. All of these pieces are laser cut for you. The tops and bottoms of the columns are 1/16" thick. They were cleaned of laser char and filed to suit. Then glued on the transom. The long fluted columns are thinner but laser cut as well. The laser char sanded from these and the each column was sanded to length for a tight fit between the tops and bottoms we just added. This takes a while to do but isnt difficult. You may also notice some molding at the base of each window. They are between the columns bases. These are laser cut too. Just remove the char and round off the top edge like a quarter round. Then glue them in.

This only leaves those two standing figures to complete the stern carvings. Now this was all very complex. Every model will vary slightly even with all of these castings and laser cut parts. You can once again test the standing figure in position. You will have too much space above the figure at this point. That was by design. The figure should be angled aft which will of course lift the back foot off the platform. This is just fine. You see, there is one last fun little bit to make.

There are tiny laser cut bases made for the figures. These bases or the floor...rock...the ground...whatever you would like to call them need to be shaped. They are shaped like a little step. I did this rather than incorporate them into the casting. Everybody's model is slightly different. You can customize this base so your figure fits perfectly on your model. See the photo...

Just sand it free of char and file some bumps and grooves into it. Mine are hardly noticeable in the photo but they are there. Make it look like a stone or rock base. Using this keeps the nice run of the molding that wraps around the stern while covering the seams between all those layers we created. It covers up where

the figures will stand while creating the correct angle for the figure to match the transom. It will be hardly visible. Shape yours to suit.

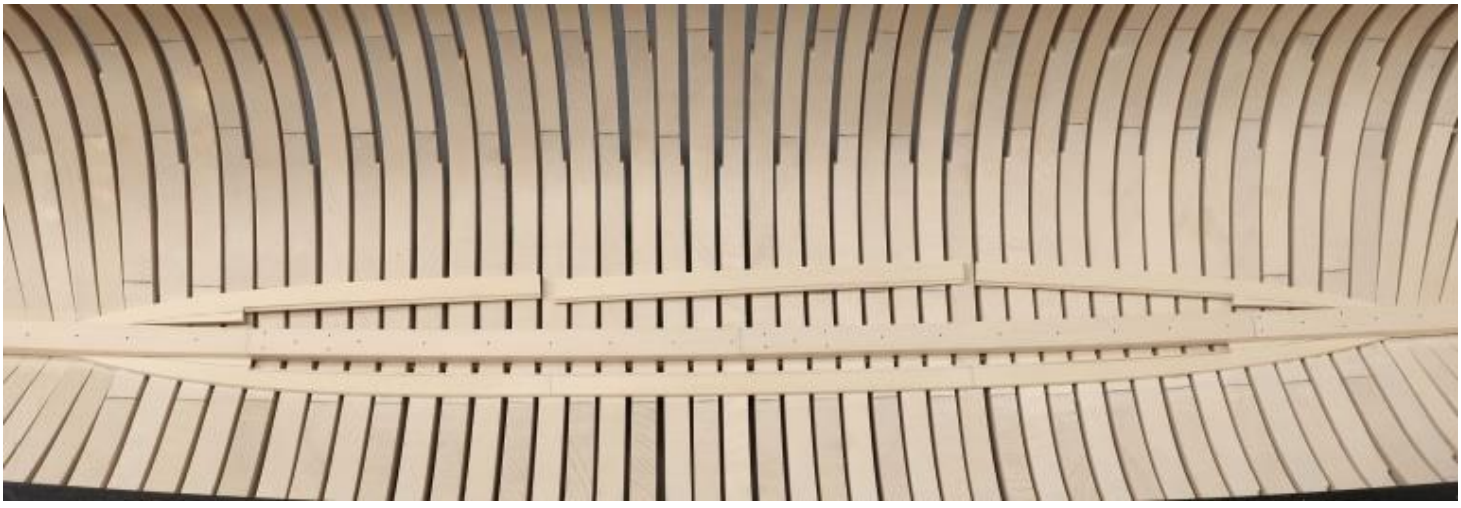
Here the figure is glued in place but not until after the tiny base was glued in position first. You can see the figure stepping on the small rock carved base. This pretty much finishes up the stern to the point where I want to be at in this chapter. Its for the most part complete except for some very small features we will add much, much later. I think it came out rather nice considering this is a kit. But my goal was of course not to make it look kit-like at all.

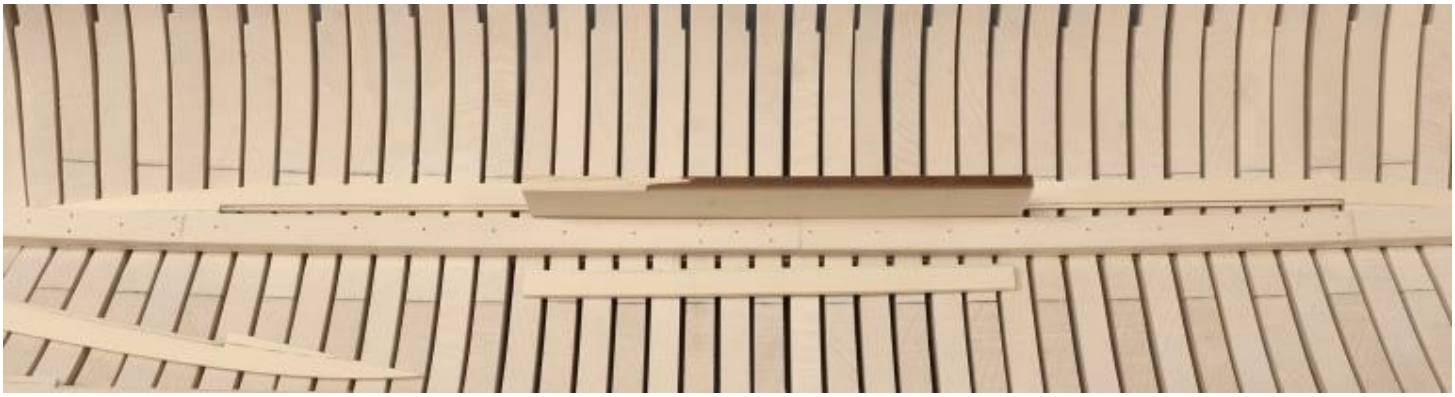
Interior works...

First up was to add the limber strakes. In the photo below you can see the completed limber strake below the keel. This was made up of three lengths. Above the keel you can see the 3 lengths not yet glued into position. They are laser cut for you and are 3/32" thick. There is a laser etched rabbet which runs along the inside

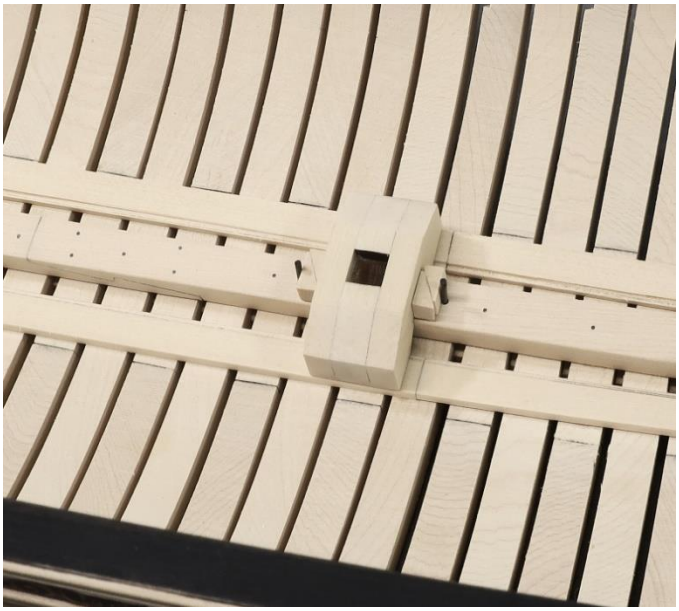
edge. Each of the three lengths were first sanded free of laser char. This included carefully sanding the rabbet more or less. But it doesnt have to be completely clean. This will be completely covered up in some areas with the lower platforms anyway. But do your best. You might also notice the little ....long, triangular pieces called Limber Fillers for lack of a better term. They were glued to each limber strake ahead of time. They are at the extreme ends fore and aft. Dry fit all three lengths in position first. This is important. Make sure they are lined up with the correct frames. You can take their positions on each end from the plans.

The center limber strake was added first. The ends are 5/32" away from the keelson. So it was just a matter of taking a scrap piece of wood 5/32" thick to use as a spacer when gluing it in position. This





is shown above. Once again...make sure you position it in the correct spot and use the plans to find which hull frames this should line up with. Its good practice because so many items moving forward need to placed in the correct spot...the hull frames are a great reference to start with. Once the center segment was glued in place the two end sections followed. Make them the same port and starboard of course. But you may also wish to pre-bend these before you glue them in position. Especially at the bow and stern sections. There is a little bit of twist to these and it is always better to not force them. It is so much easier to pre bend and twist so no forcing of the limber strakes will be needed to get them to sit flush against the frames.



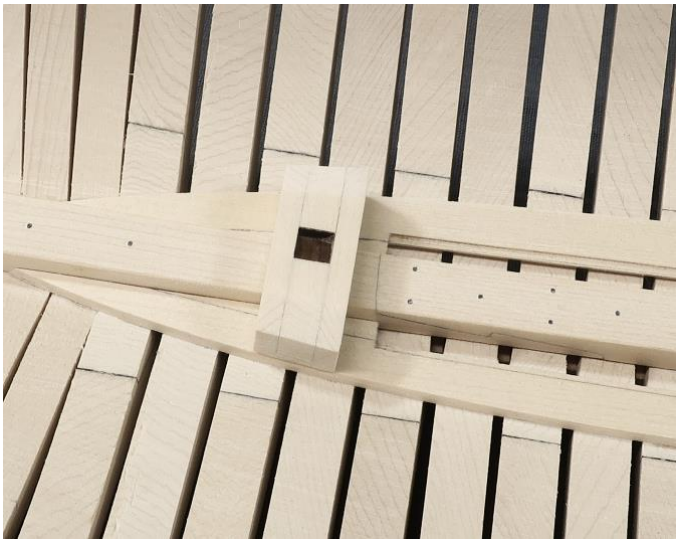
With the limber strakes completed, the mast steps can be assembled and installed. I would also note that I didn't bother treenailing the limber strakes because it will just not be seen. But you can do that if you feel compelled.

The mast steps are laser cut in three layers to make life easier. Glue up the three layers first and remove the laser char. Once they are nice and clean, check their fit over the keelson. You should get a nice tight fit and the sides should fit snug down on top of the limber strakes. Note how the outside edges of the mast steps follow the shape of the limber strakes. You should sand them as shown in the photos and plans. The main mast step is shown below. You can clearly see the three layers. Dont worry about the char in the mortice for the mast. Leave that as is. The main mast step also has little wedges fore and aft as you can see. These are laser cut for you. They were glued into the correct position on top of the keelson. This is important!!! place the mast step in the correct place or your masts placement will certainly become problematic.

A small length of 3/64 brass rod was used as the pin to "lock in" the little wedges after I glued them all in position.

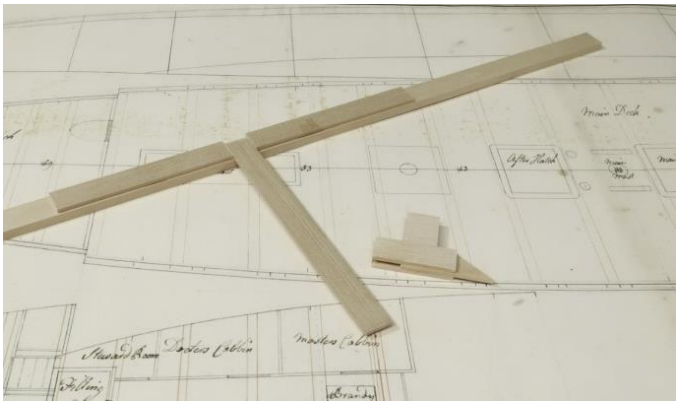
A look at the mizzen mast step (next page)...no issues here other than the fact that the sides of the mast step have more shaping here. They also follow the outside edge of the limber strakes. I have not applied any finish inboard at all up to this point. I actually might not

apply any finish. I will wait to see how things develop first.



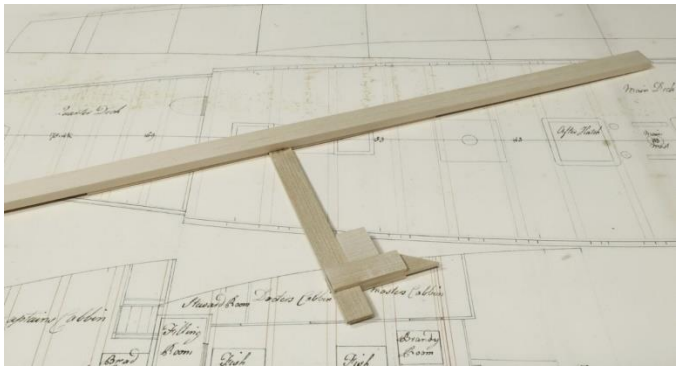
Before I can begin placing the beams for the lower platforms, I must make a height gauge first. There are many ways to do this and a system will be very important to have moving forward on this project. Greg describes one method in his books on Speedwell. I have decided to go another way. I prefer to make a depth gauge of sorts.

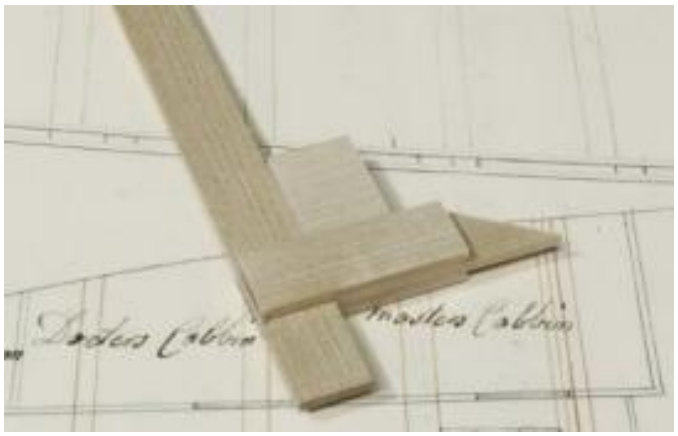
Here is a photo...you folks can of course select any method you prefer. I am fond of this one and such a gauge can be made with readily available scrap strips...Note how the pointer is a separate it to be slipped onto the lower shaft. It is basically a very large T-square. I used 3/32" thick strips but they are fairly wide so they wont bend or flex. The center of the "T" is thinner at about 1/16" thick.

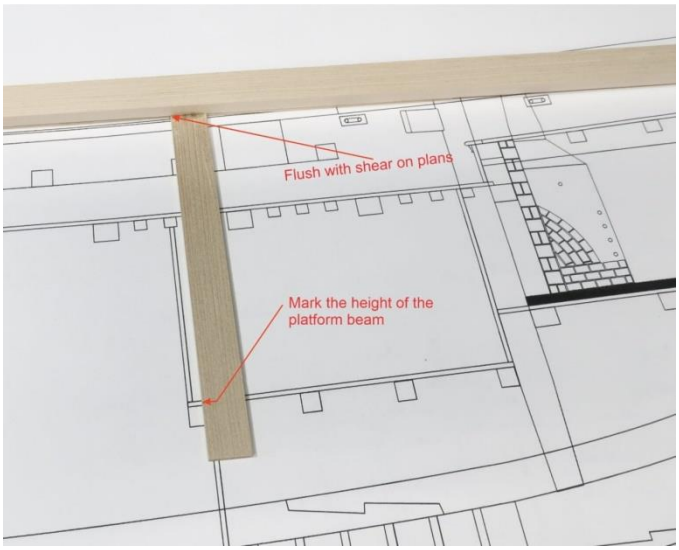


The pointer is meant to be slid onto the center shaft of the "T". Everything is squared up and at perfect right angles. Nice and neat.

Basically take the measurements from the plans to find the depth of any beams etc. Like the forward platform beams. The underside of the "T" is set flush with the sheer on the plan. Then I mark the top of the platform beam on the center shaft...without the pointer on it. Just a pencil tick mark.







Then the pointer is added to the shaft and lined up with the tick mark. The pointer must fit nice and snug so it doesnt shift around. Its a very tight fit on purpose. Then the depth gauge can be brought to the model as shown. Repeat on both sides for each beam end. I am marking the height for the tops of the beams. Find where that beam should be and mark its height on the model. Repeat this process for every lower platform beam end. Then connect the marks to find the proper height for the platform. Basically repeat this on both sides. Hope that makes sense.

I am basically trusting that my sheer on the model is correct and even on both sides. I am confident...

But if your sheer is off you have bigger problems anyway. No matter what method you choose there will be issues. This is just one method that can be used. I did this for all the lower platform beams which are 3/16" x 3/16" cedar. That is except for the most forward platform which has 1/4" x 3/16 beams just under the stove. Check your plans carefully. The beams have no roundup and are just cut from strip stock. They are carefully measured and shaped to fit snug. Placement is important here.

In fact the placement of the first 1/4" x 3/16 beam of the forward-most platform is very important. It is exactly 5/16" away from the beam aft of it on the lowest platform. So a small jig was laser cut to help find its location. This will be provided. It sits on the lower platform beams which went in first. It has laser etched marks to help you place that first beam in position correctly at the right height and the right distance from the lower platform beam.

Once all seven of the forward platform beams were in place I tested my placement with the a cutout of the plans. Everything is level and the plans fits pretty darned good.

Photo on next page.

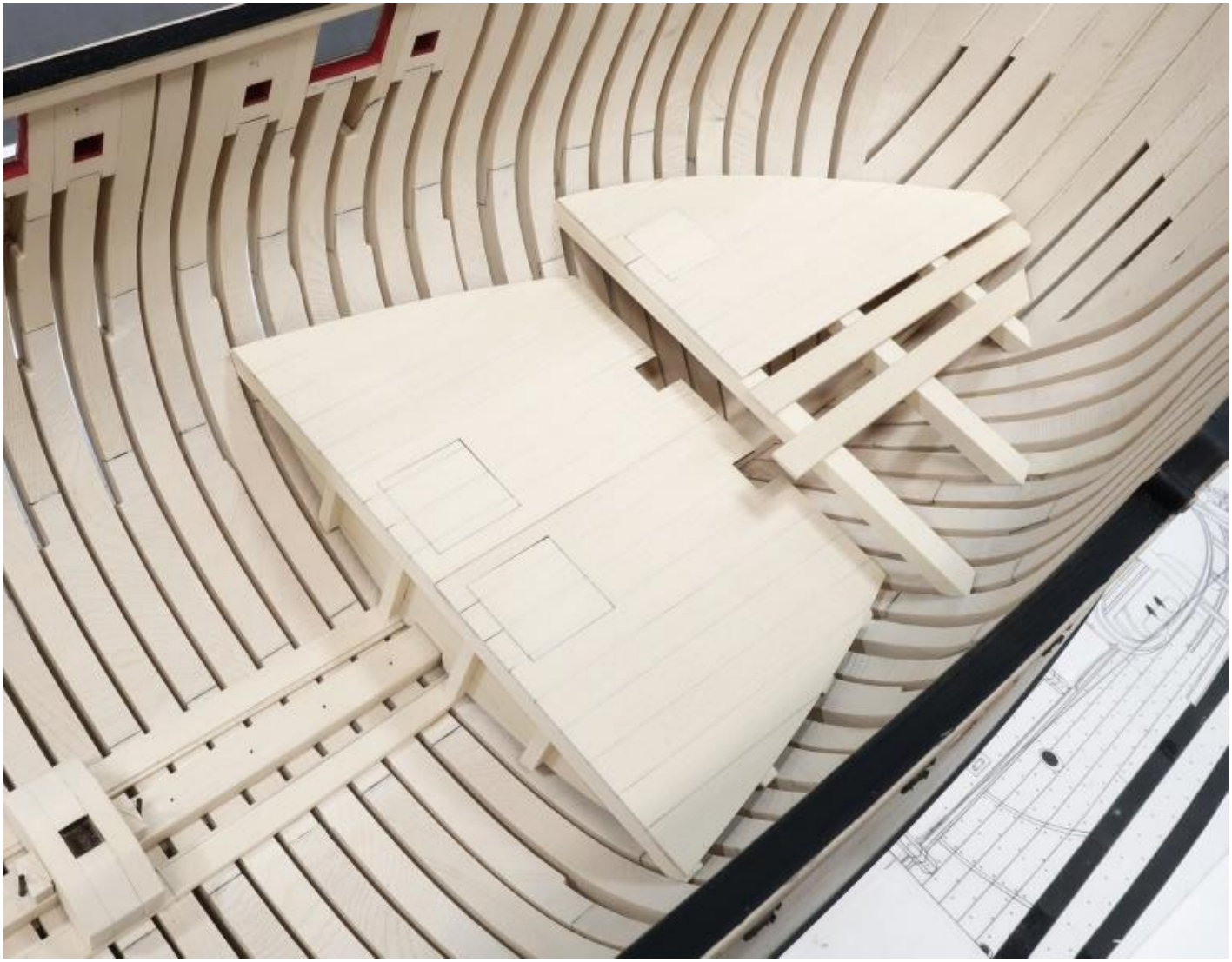
The next step was to create the bulkhead on the lower platform. This was laser cut. All I had to do was cut some 1/8" x 1/8" strips to simulate the vertical beams. I just cut them to length and glued them on. Now this piece may not actually fit your model perfectly. There are just too many variables. It all depends on where you placed that first platform beam. It also depends on how you faired the interior of the hull. But I sure it could be tweaked in most instances. If you had to, you could use this as a starting point template to make another. It isnt very difficult to do.

This is a picture of the bulkhead glued in position. It is glued on the forward side of that first platform beam. The templates are there to help me during the next step. I will be adding the carlings and ledges. They can be taken right from these templates which are on the plans.

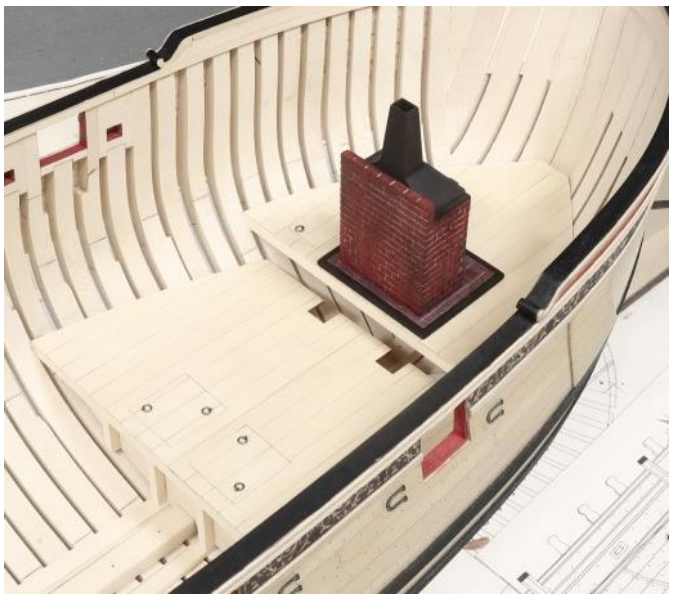
Here is a photo of the ledges and carlings completed. These will support the scuttle lids once planking is finished. I plan on planking the entire platforms. I think it will make creating the various cabins a lot easier.

Planking is underway with 5/16" x 3/64" cedar strips. I am not too concerned about getting up close to the sides of the hull. Depending on how fairing went, this could sometimes lead to a weird shape along the edge of the platform.

So I concentrated on making a nice shape with the outer edge of the platform deck planking since the sides of the hull inboard will not be planked. I am getting close to the side though and creating a consistent shape port and starboard. It will be impossible to see the sides of this planking when done. Once I get this done I will add the metal work (eyebolts with rings) for those scuttle lids. Then its onto the two aft platforms which are done in a very similar way. Also note the two cut-outs for the legs of the riding bitts. The planks were cut so I could slip the riding bits down into those slots...hopefully!!! Photo on next page...



The scuttle lids were finished up with rings and eyebolts and the fire hearth was tested in position on the forward lower platform.



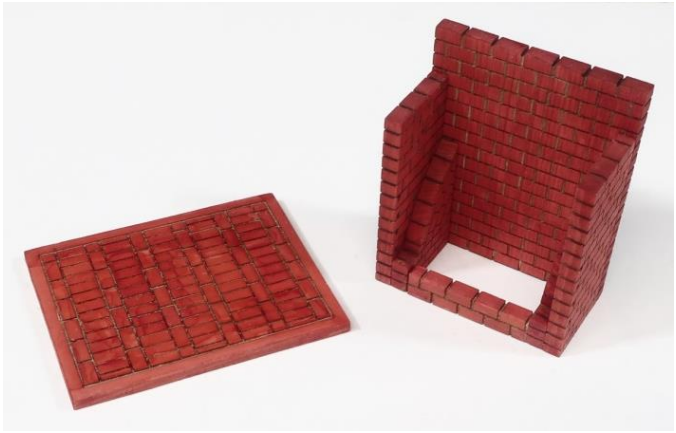
So lets build a fire heart…

Step by step
1. Laser cut cedar brickwork. Lightly sand the char. But not so much that you remove the etched mortar lines. Just a little. Especially on the edges of the pieces. Many have bricks etched on both sides.

Apply wipe on poly when finished...this is important to seal the wood a bit.

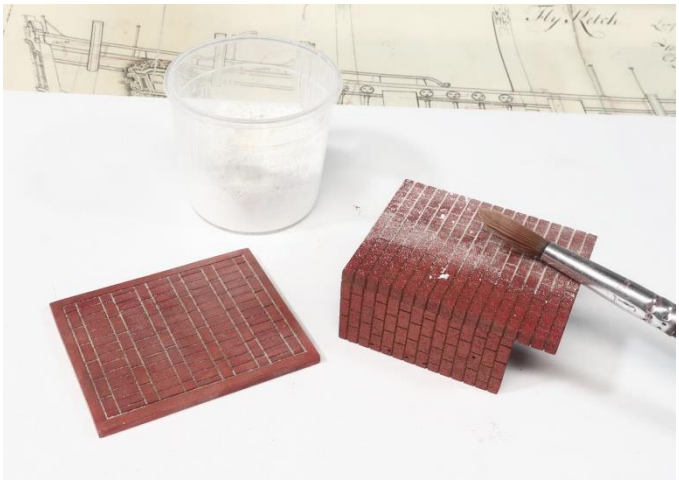
2. Yes its bright!! But this is just the initial steps. I used a red promarker, you can see which color to add the base coat of red to all faces of the brickwork. Yes you can just paint it red also with acrylic paint. Also note the two pieces that make up the sides have been glued together. Make sure you have the holes and pieces facing the correct direction.

3. Glue the sides to the back wall. Keep nice right angles. Also add the front piece. This is left a bit long and you will have to trim it to fit. DO NOT glue to the base. This will be done much later in the project. Much, much later.



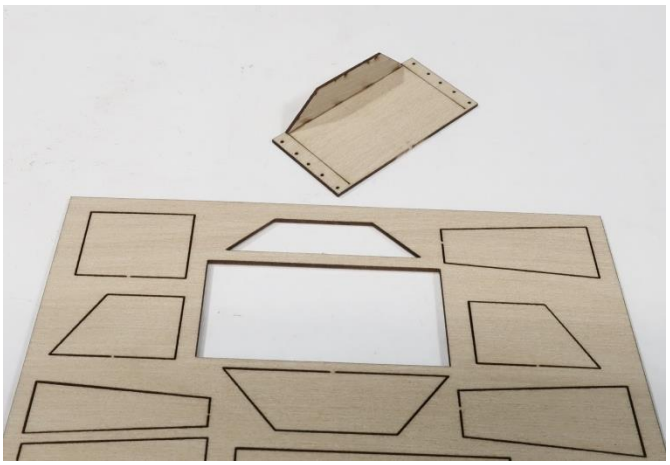
4. Using weathering powder add some red/brown colors and dark browns to suit. It depends on how weathered you want to go with the fire hearth. You will see this at the end. Spray all the pieces lightly with some matte spray fixative when you are done. And yes…you can use paint washes or other techniques instead but this is my preferred method.

5. This is where the magic happens. You could use white weathering powder but that would also pigment the bricks. You dont really want that. So instead use regular white flour. Brush it on and push it into the mortar lines which are made pretty deep for you. Dont go for a perfect even coverage here. Experiment a little. Push it in the cracks with your finger....pack it in there. Then brush it off the brick faces with a light touch. Experiment for the look you really want...use some additional weathering powders if you want to add soot and ash. Make it a used hearth or a relatively new one!!! Also note the frame on the base was painted black. Dont spray with fixative. The normal humidity in the air will fix the flour in position on its own. It may take a day or so depending on the weather.

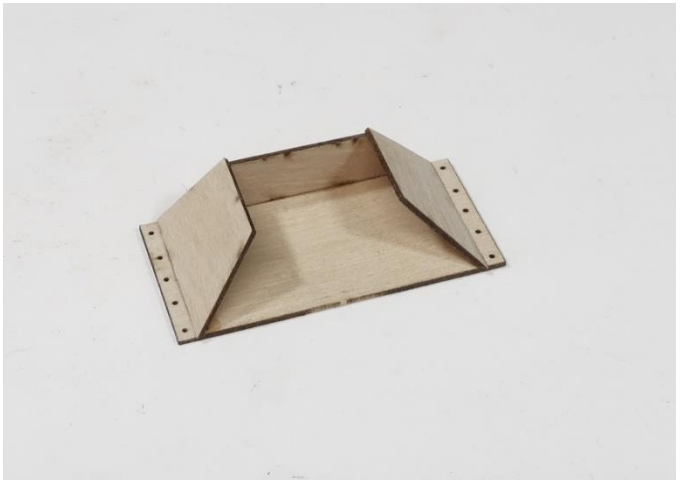


6. 1/32" brass wire/rod (not included) were blackened and added as shown below.

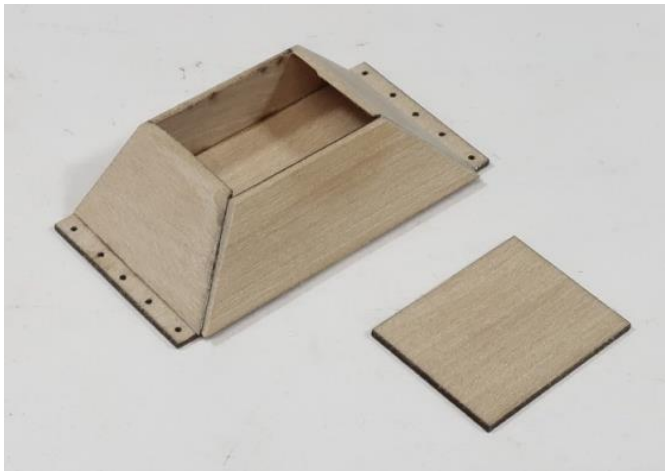
7. The hood...laser cut from 1/64" thick boxwood. Glue the shorter back piece on the base first. It should be at a perfect right angle vertically and centered. Photo on next page...



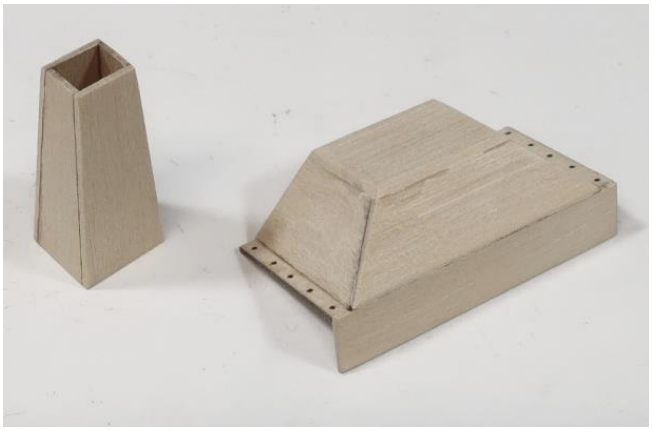
8. Add the two sides. You will need to bevel the bottom to sit flush on the base.



9. Add the front piece...which is taller than the back piece. Note how the front hangs over the the front of the base just a bit. That is done on purpose. It is correct.



10. Finally add the top and front pieces. apply filler to all the cracks and sand smooth for painting. Also build the stack the same way and prepare for painting. The stack is just for pieces glued together. Easy-peasy.



11. Hinges are laser board. Construct them in the sequence shown above...left to right. First add the bottom half of all the hinges. Then the hinge pins are glued along the top edge. Use 24 gauge black wire for that. To finish that up, set the top half of the hinges above the wire. An eyebolt is also added in the center. You can see that in the photos below of the finished fire hearth. There are two of them shown...

A beat up used and weathered fire hearth....and a shiny almost new hearth is shown below. Have fun with it and weather to your preferred tastes.

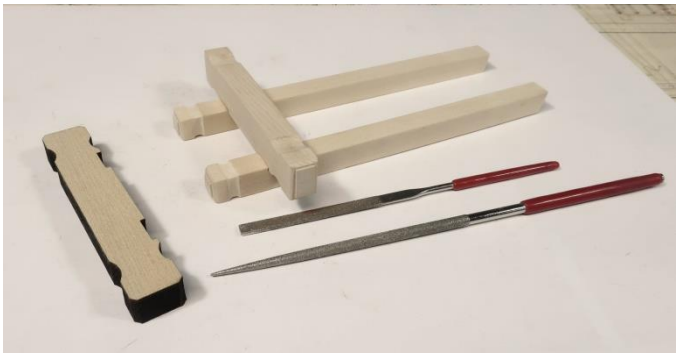
IMPORTANT NOTE....the hearth is NOT glued to the base yet. And the stack is NOT glued to the hood yet. It is best to keep them separate for now.

To finish up chapter 4 and the forward platforms, the breasthooks were made. There are two of them. These are laser cut for you in two halves. Its just easier to work with them this way. I usually shape one half and lightly tack it in position. Then I shape the other half and fit it in next to it. At this point they can both be removed and joined together. Do a

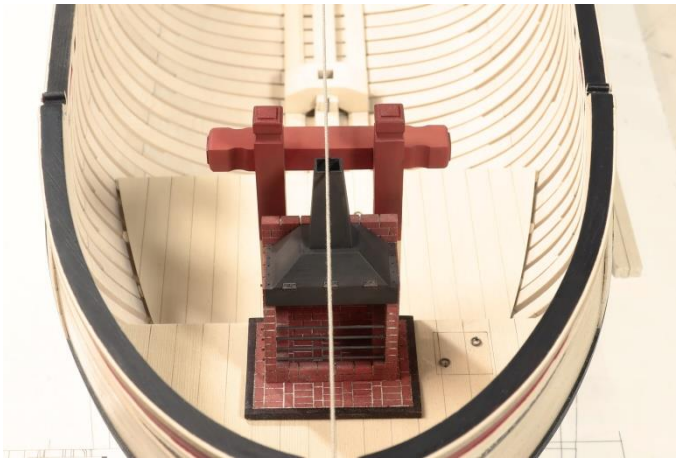
quick sanding to refine everything and add the bolts. The bolts are 30 lb. black line.

The lower breast hook has etched bevel lines because the side that fits against the frames needs to be beveled. Its just a start because everyone's model will be slightly different.

Lastly. To finish off this chapter I made the riding bitts. Like the fire hearth, this wont be glued in position yet. But its good to have at the ready. We will need it before framing out the rest of the forecastle deck later. So the cross beam is laser cut for you. Just clean it up and shape to suit. I just used some needle files, etc. The uprights are basically made from 5/16" x 5/16" strips. Measure against the plans and shape the tops to suit. Use the plans as a guide. Nothing earth shattering with these.



I will paint the riding bitts red above the gun deck. I used the plans to determine where that break would be. Here is what it looks like after being painted and test fit. Note the string...this is good to get in place now too. Its glued lightly to the center of the stem and then taped to the top of the stern post. It will help guide you when setting fittings along the center line. It helps a lot!!!



The fire hearth is not glued into position yet. But it does look good test fit on the model.

The same is true for the riding bitts. I have set both aside for now so I wont damage them while working on the aft platforms.