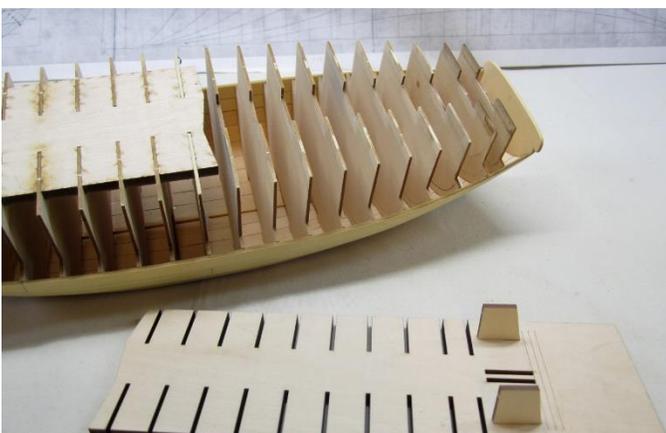


### Part 3 – Removing the model from the baseboard and starting the detail work

#### Preparing to remove the baseboard...

Now it is time for the fun part.....to remove the build board and break away the frame centers.

The first step was to remove the braces for the stem and stern post. At the stern post I just pushed them free from the bottom. Then I shook them out. See the photo above. The other braces that were glued to the build board can also be carefully snapped free. I managed to remove the baseboard without doing this but it's up to you. Also remove the two bracing pieces at the bow.



Turn the model over (actually right side up). Remove the tape holding both halves of the build board together. Then carefully and gently coax one half of the build board free. Don't rush this and

slowly pry it off a little at a time working one side then the other. It will be tricky to get it started especially on a humid day. But once it starts wiggling free it will come off readily. Do the same with the other half.

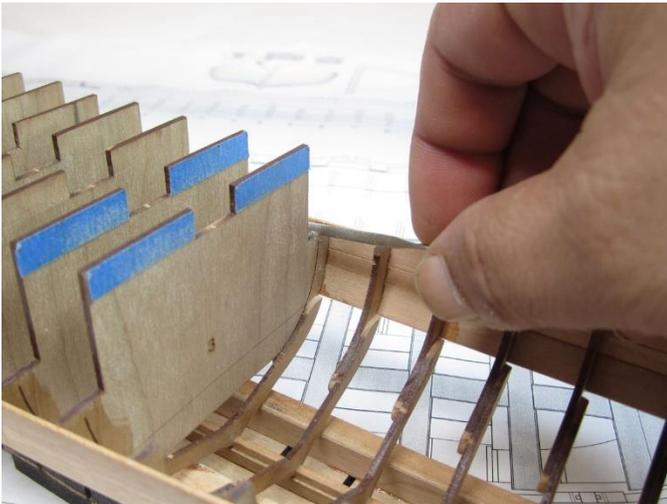
Before moving ahead, do a test "wobble" of each frame. You want to be sure that the frames are glued securely to the planking. Especially the top three strakes. If you wiggle the frames on each side and see that they one of them wasn't secured to the frame edge you should fix this before trying to remove the frame centers. If you don't, chances are that when you go to cut small tabs holding the frame centers, you will break the frame. I have seen this happen quite a few times. So add a drop of glue to secure the frames to the inboard side of any planks you find that need some attention.

Then using your special tool of choice (everyone has their favorite) you can carefully and slowly cut through the tabs on each side of the frame centers. Then bend them back and forth to snap them out. Do this one at a time. Don't worry about breaking any frames because that will not happen if you have glued the top of your frames securely to the planks. If when you start cutting the tab you see that the entire frame is loose and not secured to the sheer plank, stop and apply some CA. Let it "wick" down to glue the frame to the plank. Then resume cutting that tab.

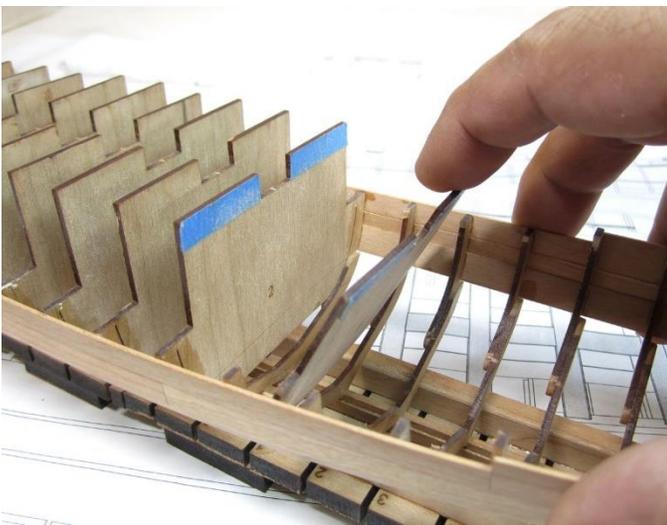
I used the thin saw on the left this time but often use a simple file as well. See the photo below. Use whatever you are comfortable with.



Below is a photo of a frame center on another project being removed. In this example a file is being used to cut the small tabs.



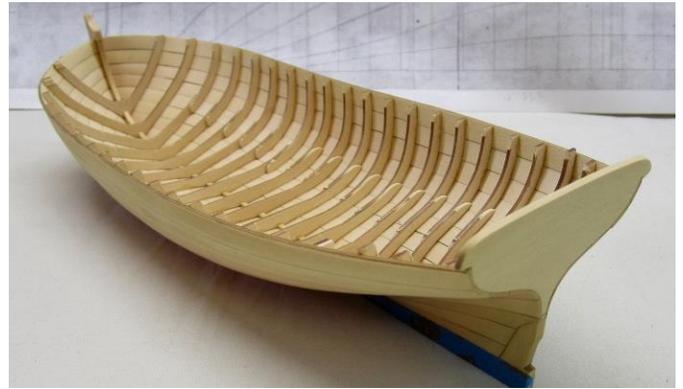
Then the frame center is gently bent back so it snaps free at the bottom and can be removed.



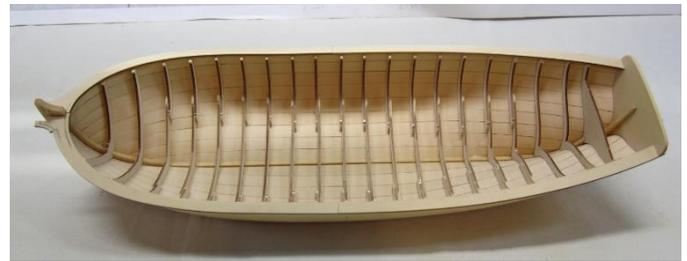
And finally, here are some pictures of the longboat model after removing all of the frame centers.



And one more photo ...

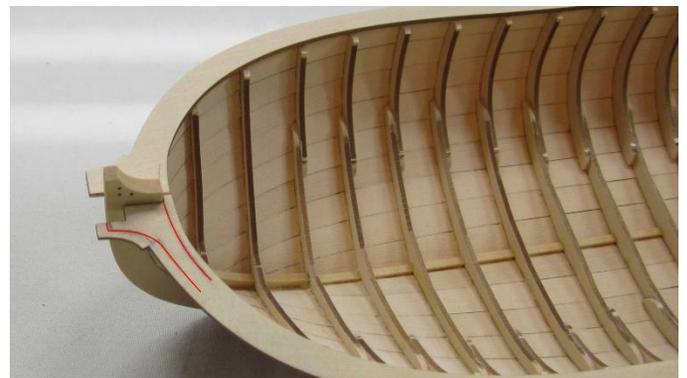


The next step will be fine tuning the sheer. Sand the tops of the frames down to the sheer and also sand the sheer so it has a good smooth run from bow to stern. You don't want any dips or high spots. These can be seen by viewing the hull head-on and stern-on at various angles. Once satisfied we will add the caprail which is laser cut for you.



Above you can see the 1/16" thick laser cut caprail glued into position. It is made of 4 laser cut pieces. They are made very over-sized and we will thin them down considerably later. But you want a decent overhang inboard and outboard to begin with.

One thing worth noting is the cut-away for the roller at the bow. This is on the port side only. So remember to put it on the correct side.



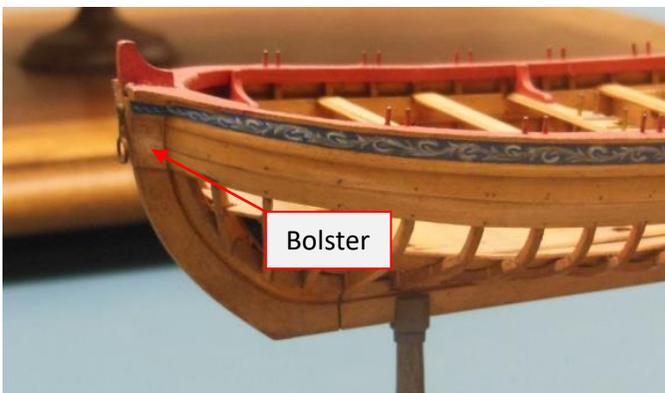
You will also notice in that same photo the red lines. These indicate how the cap rail at the bow will eventually be shaped. They will look like it is shown on the plans. You will need to create this curve outboard as shown in red.

At the stern you will notice how the cap rail goes UNDER the *wings* of the transom. This is important to note as you are planking. There will be a gap between the sheer plank and the *wings* as I call them or tabs ....and that is normal and as designed so the cap rail will fit. It is 1/16" thick.

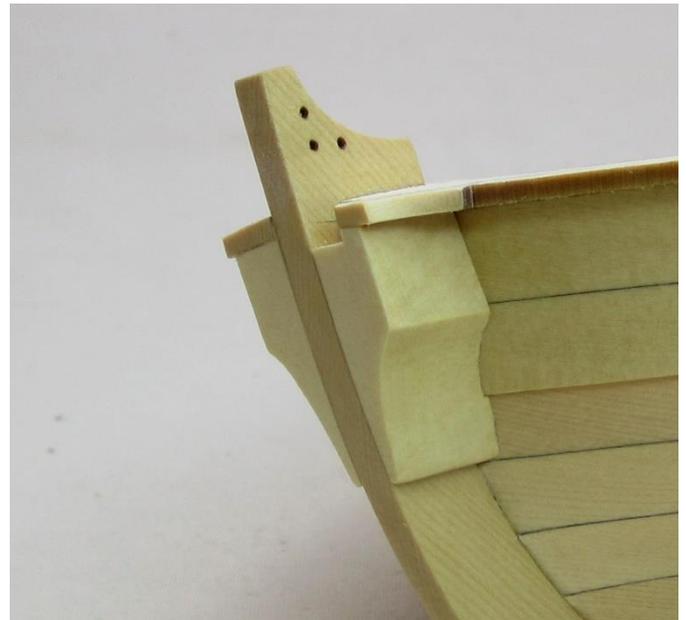


The reason why you can't just start thinning down the cap rail as usual is because this longboat has an interesting feature at the bow we must complete first. Normally we would sand the cap rail flush with the outboard planking. But before we can do that, we have to fabricate the bolsters at the bow. There are two bolsters on each side of the stem. This "beefs" up the stem and helps support the area with the roller. In addition, it strengthens everything up on the starboard side to help support the "bowsprit iron" and bowsprit.

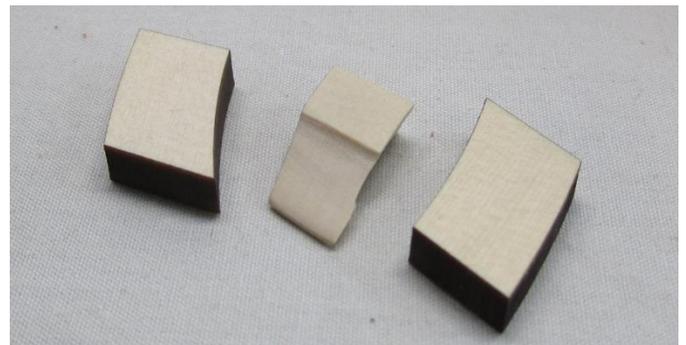
You can see the bolster in this photo of the contemporary model.



Here is what the bolster will look like on our model when completed.



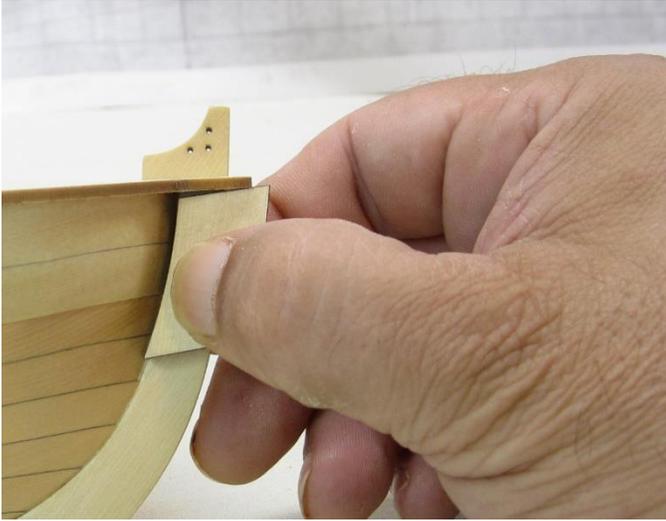
Every model that I make always seems to have at least one or two parts that are quite a challenge to make. On this model, it will be these little bolsters. There are many compound angles to consider. But if you plan it out ahead of time it will go smoothly. You will start with a laser cut blank. Because these parts have the potential for many attempts to end up in the trash....I will provide everyone with eight blanks in the kit so you will have enough for plenty of fun.



Let me try and explain step by step how I shaped these bolsters and hopefully it will be clear.

First, I recommend starting with the starboard side which has no roller. The blanks are all the same so it doesn't matter which ones you choose. Below you can see that if you hold the blanks against the

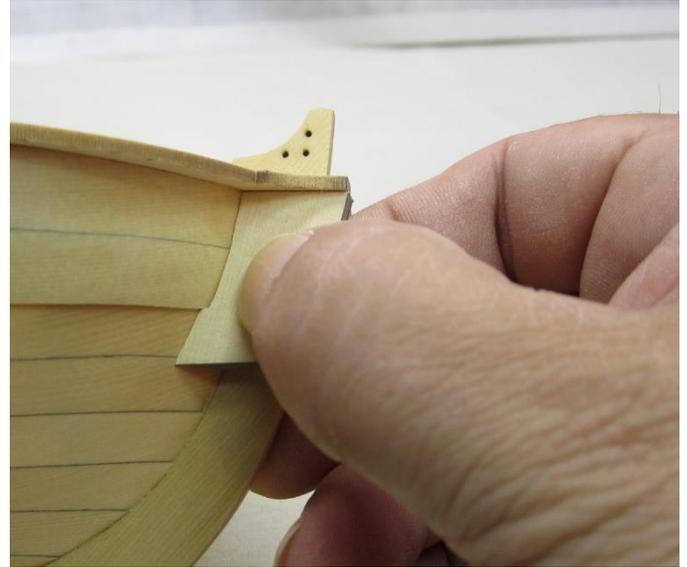
stem tightly that the aft edge will need to be beveled quite a bit so it sits flush against the hull planking. This is the first thing that you should do and don't worry about any gaps at the top edge where the bolster sits under the cap rail. Just concentrate on the getting a snug, tight fit against the planking first. The angle of the bevel changes down the length of the bolster.



I have *gestimated* the amount of bevel required before I started, marking it in pencil. Note how there is more of a bevel towards the bottom of the bolster. You should do the same as it is good to have some sort of guide even though you are just guessing at this point.

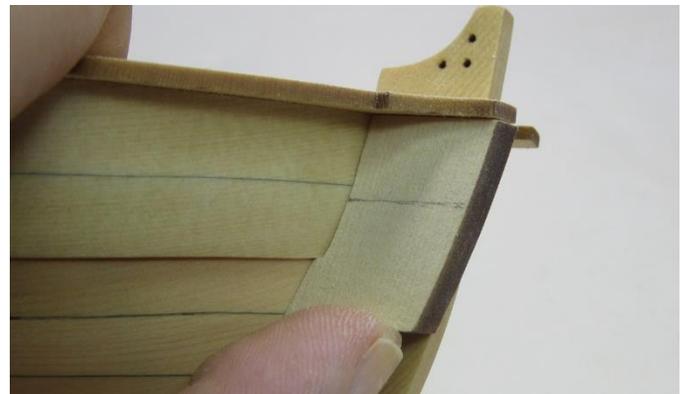


I used sand paper and files to create the bevel. I stopped and tested how it fit dozens of times as I continuously tweaked it. The photo below shows that I almost have a good fit. There was plenty of meat on the blanks so you can sand and reshape quite a bit. So just keep going until it fits well against the planking.



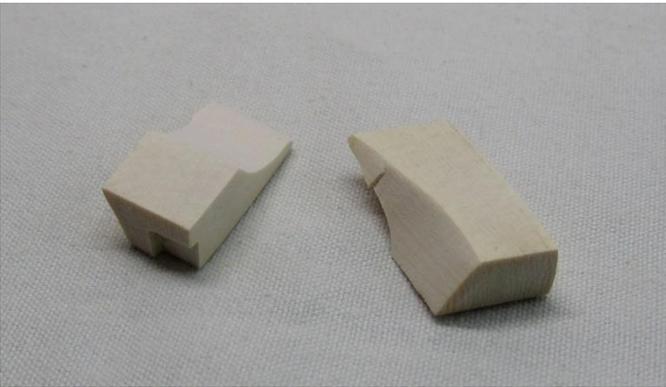
Once you are satisfied, you can do the same thing with the top edge and see how it fits under the cap rail. It should also be a tight fit here. In the previous photo you can see it fits pretty well without any tweaking. But I gave it a few tweaks anyway.

Next you want to draw in the line that represents the concave shape of the bolster on its outside face. It will taper down to just 1/32" thick at the bottom. This line should follow the run of the sheer and planks. You should place the line even with the bottom of the first plank. I placed mine a bit low in the photo...so adjust yours to be even



with the plank line or at least a bit higher than I show it.

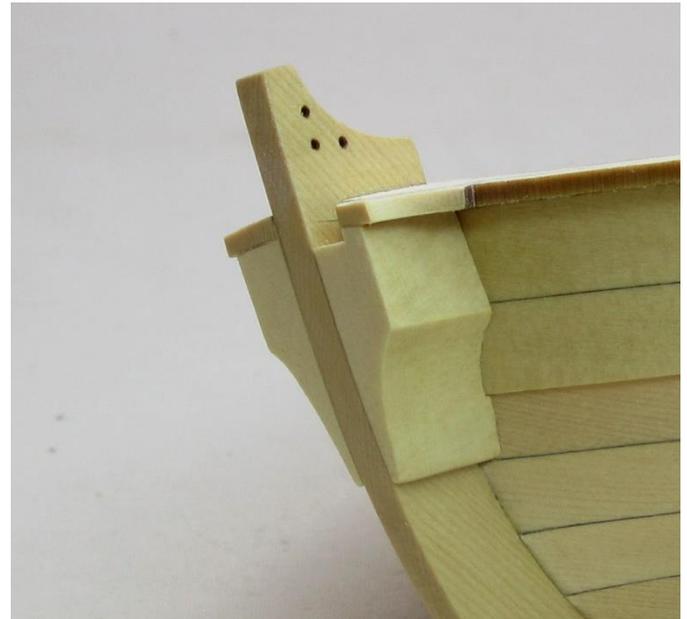
Once completed the two bolsters will look like this below. And after you create the concave shape you can trim the bottom so it lines up with the bottom of the third plank. It's over-sized and will need to be trimmed. In addition, the front edge will eventually be sanded flush with the stem. But right now it hangs over quite a bit. That is OK. Just deal with shaping them and trimming the bottom edge right now.



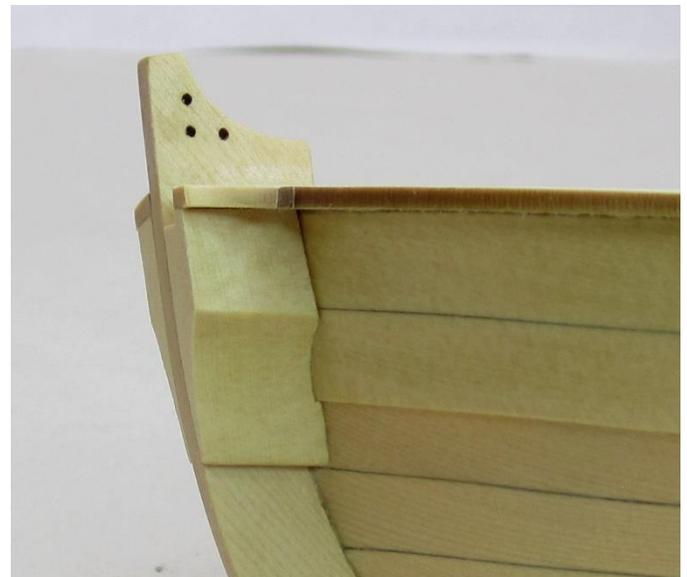
Note how you will need to make a matching pair of these. The only difference is that a small notch needs to be carved out of the top of the one for the roller. You can see that in the photo above. It adds more room for the roller. It's shown on the left.

Glue them into position and then sand the front face of both flush with the stem. That's all there is to it.....easy-peasy right???

Don't worry it's not too awful to make these. Just go slow and take your time. You will be able to



adjust the shape a bit after it's glued into position as well. This will make it easier to get a matching pair, port and starboard.



The outboard edge of the caprail was thinned down...for me, it was easier to do this while holding the hull upside down. You want to leave 1/32" overhang with the cap rail. But that is a bit excessive but for now it is good to leave it a bit more. The top of the cap rail will be painted red. I will inevitably get paint on the outside edge which should remain bright, so once the cap rail is painted, I will sand the outboard edge nice and clean and make it less of an overhang. See the photo on the bottom of the previous page.



In the photo above you can see how the cap rail was finally sanded to shape. Note how the inboard edge against the stem is flush. This is important as you will be adding a knee against this to further shape the cap rail behind the stem.

Now it is time to fair inboard which always makes a mess. The goal here is to carefully fair the frames so they get gradually thinner as they work their way to the sheer. In our case, the goal is to reduce the cap rail to a minimum width of 5/32". Any wider would look way out of scale. If you can manage a bit narrower that is even better. You can see in the photos what mine looks like and its 5/32" wide. There will be one strake inboard that is 1/32" thick and sits against the cap rail. So that would make the overall width 3/16". So after I install this, I will sand it a bit thinner then paint. Then I will sand outboard edge again and the results should leave a cap rail that is just under 3/16" wide. The same photos show the interior after I completed fairing it.

I used 220 grit sand paper to fair the inside because anything coarser could possibly grab the frames and break them if they weren't glued to the planking securely. Slow and steady is the way!!!



When you are satisfied with you fairing inboard, you can add the inboard sheer strake.

It is 5/32" wide and really finishes off the cap rail. You should start with the bow section on both sides of the hull. The top edge of the sheer plank should be flush with the top of the cap rail. Then cut the aft sections to length so they fit snug and you get a nice tight butt joint where they meet mid-ship. Sand the top of the cap rail and the inboard sheer strake smooth and be sure to fill any gaps between the two. You will be painting the inboard sheer strake red along with the top of the cap rail and it is best if you can't see a seam between them.

Then rather than paint the top of the cap rail red which would have been smart, I decided to add the friezes along the side of the hull. I would highly recommend that you not do this and instead paint the top of the cap rail and inboard sheer strake first. Once completed, you can glue the frieze strips along the side of the hull. Cut them out carefully and glue them right up against the bottom of the cap rail overhang. Take a look at the photo on the top of the next page. Note the inboard sheer strake completed.



The friezes are provided already shaped like a pre-spiled plank. They should conform to the hull well enough. Try and hide the seam between the two halves mid ship as best you can and match the pattern like you would when you hang wallpaper. Then cut off any excess length at the stern flush with the transom. There is also a small length of frieze on your sheet that should be added to the bolsters at the bow. Cut off any excess flush with the front edge of the bolster.

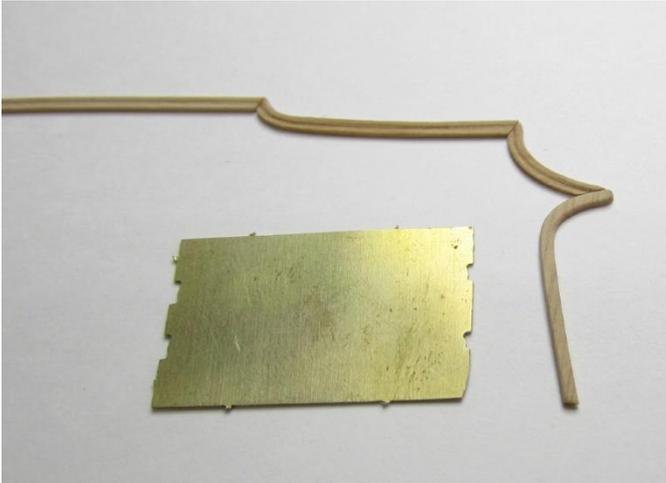


Use the bottom edge of the frieze to align the molding strip below it. The molding strip is  $1/8'' \times 3/64''$  and it is scraped to a simple profile. You were provided with boxwood strips for this in the kit.

I find it is the best material for scraping moldings. But if you look closely you won't see any real difference in color or appearance in the boxwood strip in comparison with the yellow cedar planking. They work really well together.



The last photo shows the profile I chose for the fancy molding below the frieze. This can be created in the usual way. The profile was filed into a thin piece of brass or you can use a razor blade. Then the scraper was lightly run over the boxwood strip until it created the profile you see in that photo. You can see a similar scraper below which was used on another project to create the fancy molding profile. This was done the same way.

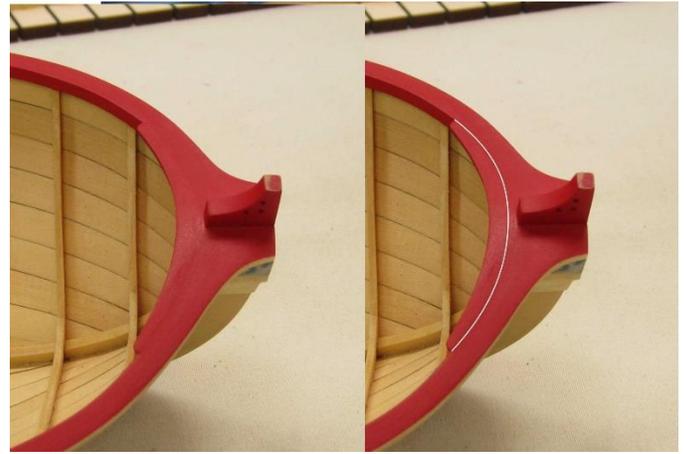


Adding the knee inboard at the bow was next up on the agenda. This is pretty straight forward. The knee will need to be curved to match the sheer at the bow. The top edge of the knee should sit flush with the top of the cap rail. Once painted, you don't want to be able to see any seam between the knee and the cap rail. This means you will have to bevel the edge of the knee also so you get a really tight seam between it and the cap rail.

The knee is laser cut for you but be careful!!! To help you bend it to match the sheer, the wood grain runs across the knee in a way that will make it very fragile. I have provided you with a few pieces just in case one breaks.

Once again...if you haven't already done so, you should paint the cap rail and inboard sheer strake red first *before* you add the knee at the bow.

The photo on the top right shows the knee in position. Note how the seam is completely hidden after painting it red. I have added a white line to that same image to show you where the seam would be before painting it red.



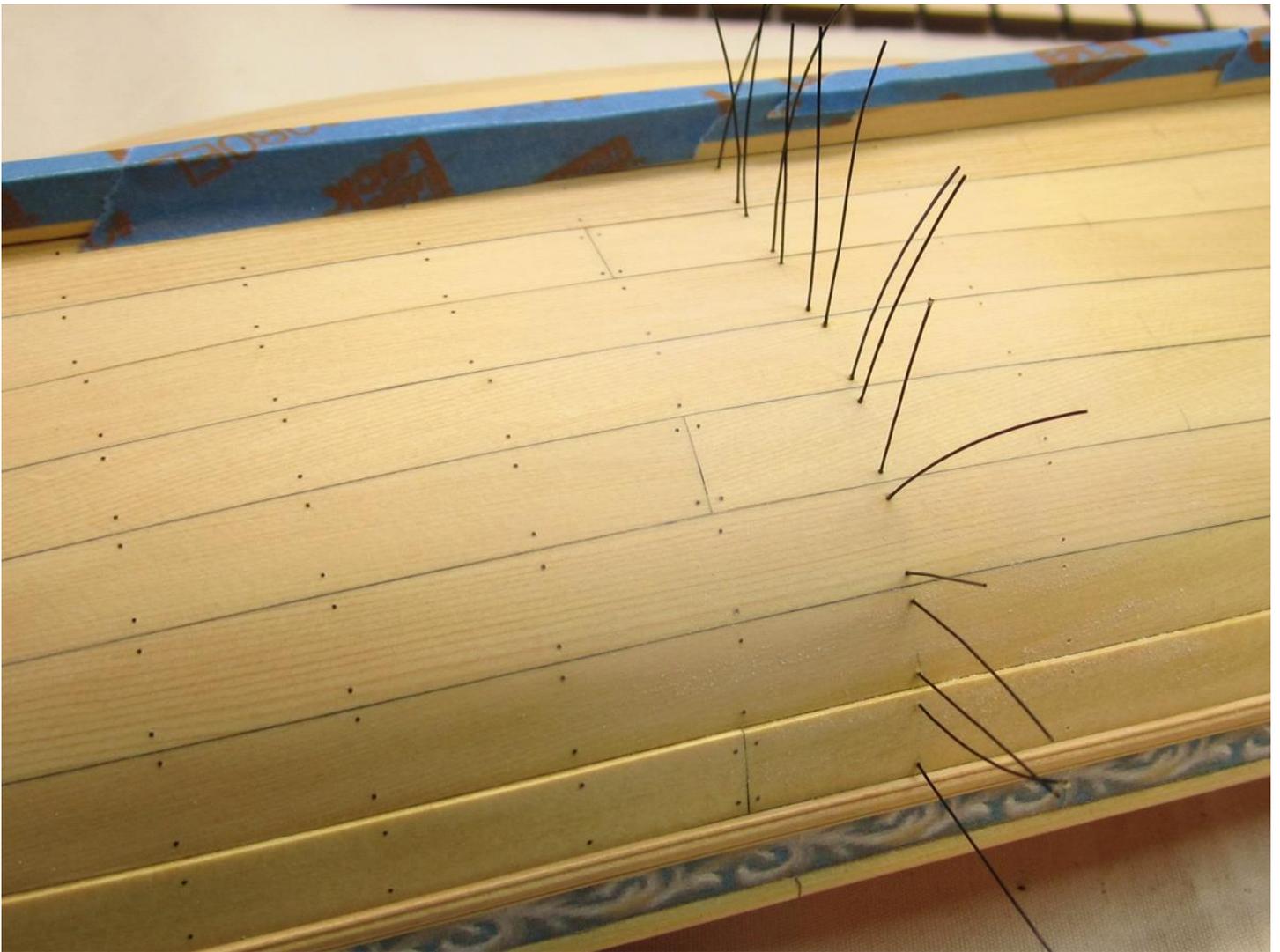
Finally, to complete this chapter, I glued the paper frieze to the transom. There are several sizes and shapes available to you. This was done because depending on how you faired your hull the shape of your transom may be slightly different than mine.

Cut the frieze so you will have a nice consistent border all around it. You can see in the photo above that the external planking creates the border



along the sides of the transom. You can also sand the top of the transom to help you achieve a nice border around the frieze along the top. Before you glue it into position you may want to use a blue pencil to hide the white edge of the frieze which probably showed you after you cut it from the sheet. Don't use marker or paint if you can avoid it, this has a tendency to bleed into the paper and ruin the frieze.

One last thing.....



### To treenail or not to treenail....

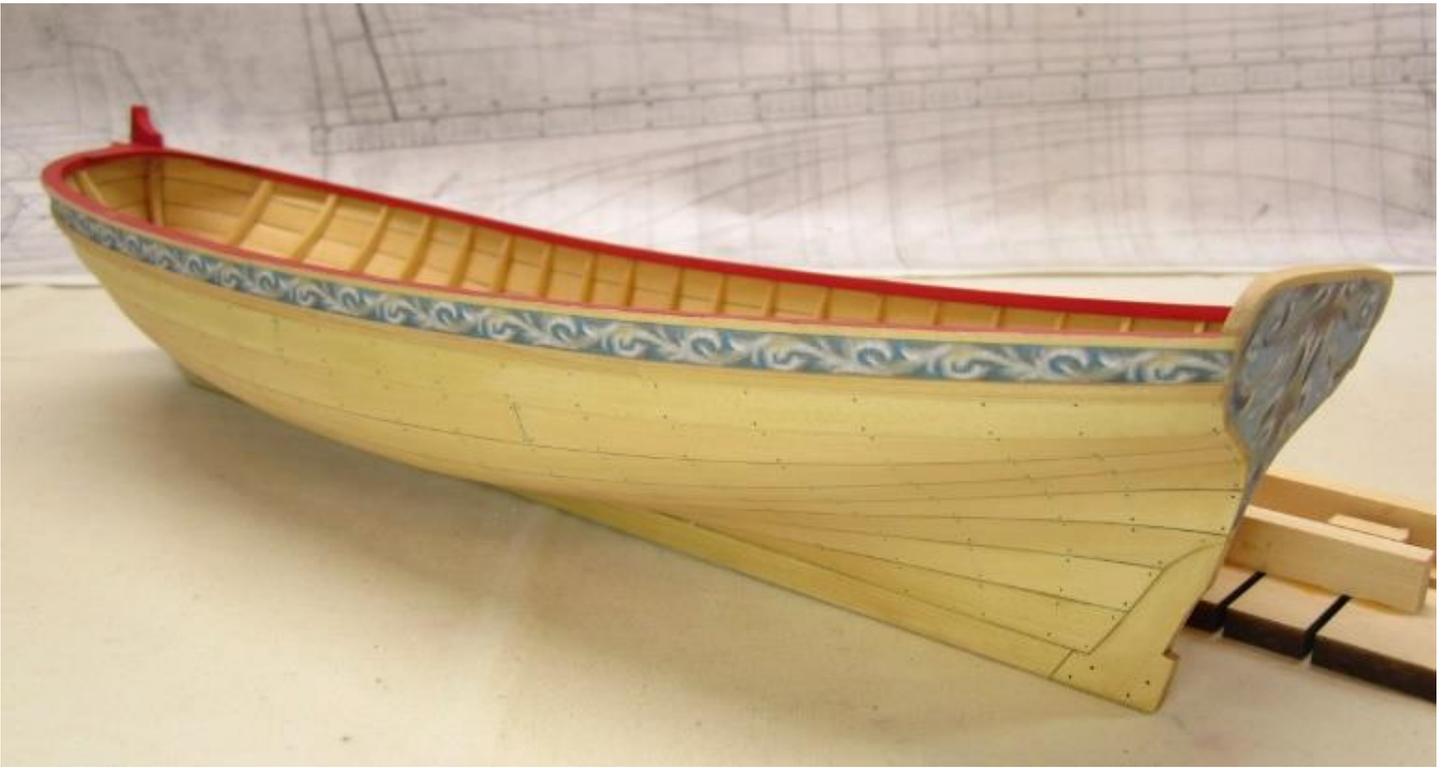
The external planking was fastened to the frames with tiny copper nails. So you really can't call them treenails. But the same principle is used to simulate their appearance. Tiny holes are drilled at each frame and you can insert copper wire or in my case, 10lb black monofilament. I don't like the look of raw shiny copper so the kit comes supplied with the black fishing line instead.

I held the hull up to the light so I could accurately mark the locations for the frames. The planking is thin enough that you will be able to see the locations for all of the frames pretty clearly. I placed some pencil marks on each plank where the frames were seen. Remember that the floors for each frame shift over slightly so remember to mark your frames accurately. Otherwise when you drill

your holes you are likely to miss the frame and then you will see the holes and nails on the inboard side. This should be avoided.

For nails I used 10lb black fishing line. Holes were drilled with a #77 drill bit. Then a sanded the holes lightly to remove any burrs from drilling. The fishing line was dipped into titebond (yellow glue) and inserted into each hole. I worked on one frame at a time as shown. Once dry they were sliced clean away with a straight razor flush with the planking. Then some light sanding. That's all there is to it!!

Note the blue painters tape added to protect the keel from dirt, scrapes and dents.



How she looks at this stage of the project.....