



Chapter Nine

Planking up the inboard bulwarks of the quarter deck...

To begin, the bulwarks along the qdeck were planked at last. It will be so nice to get the last bits of the skeletal structure covered up. There are two laser cut pieces to make this easier. They are $3/64$ " thick. I added the aft section on both sides first. You should shape them for a perfect fit first. Each piece is a tad higher just in case there is some variation model to model. You also have to notch it over the margin plank along the transom. You can make life easier for yourself and paint these pieces while they are off the model.

Then glue them in position. Repeat the process with the forward half of the qdeck bulwarks. You can see the forward section for the port side laying on deck. (Photo above) That will be added next before moving on to the fcastle.

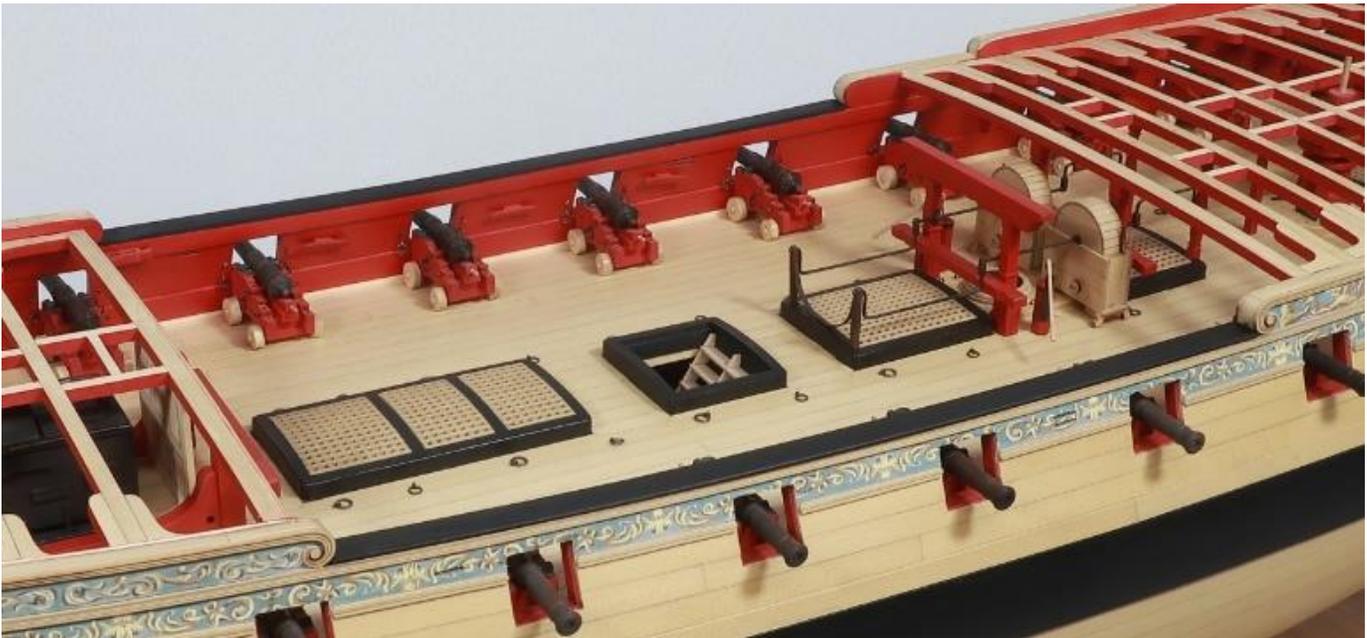
For the fcastle bulwarks there is no need for laser cutting. Just use a $7/32$ " wide strip cut to length and pre-bent. I suppose a $1/4$ " wide strip would work to and just cut it down to fit. I pre-bent the strip ($3/64$ " thick) and then clamped it in position. Then I traced the

proper height and trimmed it to fit perfectly in one length. But before doing so I added one short length against the bollard timber at the bow. This is a flat piece painted red before gluing it in position. Then you can use this to help position the long strip for the facstle bulwarks. Just sit the longer planks against the edge of this smaller piece. Get a nice tight joint.

I also pre-bent the long piece and once I had a perfect fit, I pre-painted this as well. It made for a nice clean edge against the deck beams although it wont matter because we will be adding the margin planks at some point soon.



Time to add the caprail. This will cover all the messy layers and finally close up all the framing so you will no longer have to look at it. So far I have only added the caprail along the waist. A $5/16$ " x $3/64$ " strip was used. I rounded off the outboard edge on top and bottom. This edge will look nice



this way above the fancy molding. Then I painted it black while off the model including the inboard and outboard edges. In fact those were most important. When glued in position the inboard edge is flush against the bulwarks with no overhang. The outboard edge should not have much of an overhang but will look nice being directly above the bright unpainted fancy molding.

The bulwarks are widest in the waist at 5/16" ...give or take. If you have a need for a wider caprail that would be problematic. There is nothing worse than an oversized and thick bulwarks. It just means you didn't fair them down thin enough early in the project.

The bulwarks and caprail are slightly narrower along the drifts and quarter deck and the forecastle. These next pieces will be laser cut so the width of your bulwarks will matter. These pieces will have cut-outs for the timberheads.

Continuing on with the caprail....

The next stretches of the caprail are the drifts above the hatches working our way aft. The first piece is the one you see painted black in the photo on the top of the next page. All of these pieces were painted black off the model.

Make sure you orient this piece the correct way. There is a laser etched arrow on the *bottom* of each piece which points *forward*. This is crucial because there are notches cut out of the cap to accept the timberheads. The rail along the quarter deck is quite detailed. These are always a challenge to build and have look good. So I am using this system to locate the timberheads and uprights. So do not adjust the length of this piece or your timberheads and uprights won't line up later. Just sand it smooth and round off the outboard edge. Keep the length exactly as is.

Once that piece is glued in position so the inboard edge is flush with the bulwarks, you can assemble the rounded front edge. This curved piece (C1) is laser cut for you and is 5/32" wide. But you need a much wider piece to cover the cap rail. So glue two of them together side by side to make a really wide curved cap. You will want it extra wide...trust me!! You can see the laser cut sheet sitting on the deck frames. I am test fitting the curved part of the cap against the first length I added. Carefully mark the proper width on the bottom of this piece and sand it to fit the width of the (YOUR) cap rail. You want it the exact



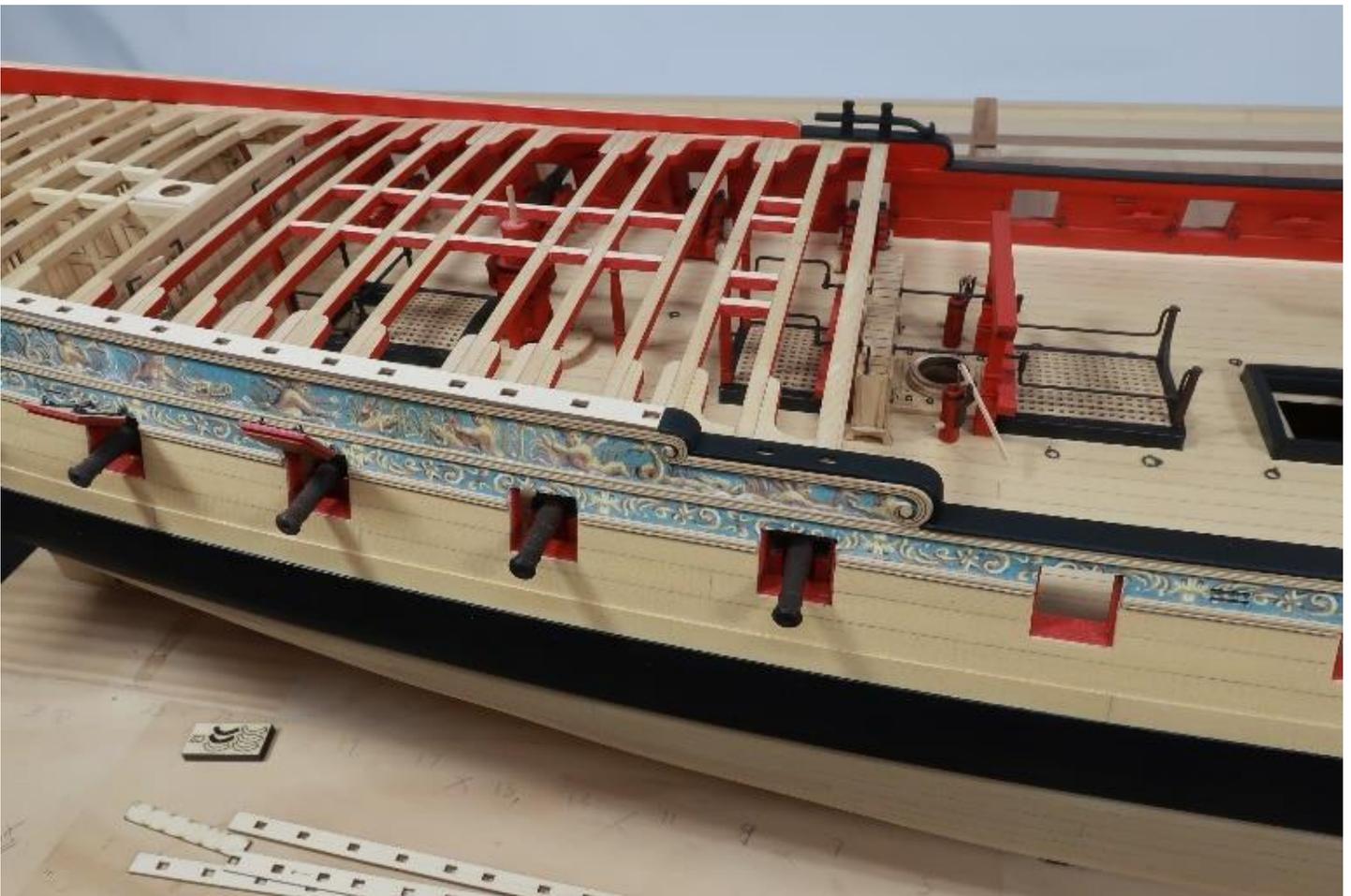
same width as the piece it is attached to so it looks like one continuous board. You can round off the outboard edge and glue it in position.

If you look really hard at the picture you can see the two halves glued together. The angles are trickier than you might think and you will thank me for providing these two halves

making a much wider piece. It enables you to get the proper skewed shape you will need. You will see what I mean about slightly skewed or angled when you try and fit it before marking it for the final width.

Glue it in position and do your best to completely hide the seam between the two pieces. Apply wood filler if needed and sand it smooth. Then touch up the paint. Once again this complex curved piece was painted black ahead of time but after sanding and filling to hide the seam some paint touch up will be needed. You can see the results in the next picture...below.

You might also see that I was testing how the fancy rail would work and fit together on the port side. You can see some timberheads and a rail being tested. It worked out pretty well.



Anyway...back to the caprail. We will continue working our way aft. Another curved section is made up of two halves...laser cut pieces (C2). Same as before. Don't sand the aft edge too much. A really long piece of caprail will be placed against this curved section as you can see in that same photo (previous page). If you alter the length of the curved piece it will change the location of all of those small square holes for the timberheads. You might have a little wiggle room...but not much. You will want the qdeck cannons to appear between the gundeck cannons below them. Check the plans for the locations of all timberheads and uprights and you will see what I mean.

This long length of caprail doesn't go all the way to the transom. It stops short about 1" or 2" from the transom. You will be shaping another short length to finish off the cap rail along the quarter deck. Make sure you hide the seams nicely and take your time with this. That last small length needs to be beveled which is why I made it a separate section. This way we can now control where all of the square holes for the timberheads where be located.

It makes a big difference to see the model with a black painted cap rail. Below you can see I finished the cap rail along the qdeck bulwarks.

Just like along the quarter deck, the cap rail for the fcastle is laser cut for you for the bow. The outboard edges were rounded off and each section was painted black off the model. Then the forward-most pieces were glued on the model first. This is very important.



Then a laser cut spacer (looks like a small pointed arrow) the width of the catheads was used to help position the next longer piece on both sides. This is an important step. Its easier





to widen the slot later and not so easy to make it smaller so be cautious here. Then the hance caps at the aft end of the fcastle were made as before. The two halves glued together so we have a nice wide piece. The hance caps were shaped and sanded for a snug fit. Then care

was taken to eliminate any seams between it and the cap rail.

The margin planks on the qdeck and fcastle can now be added. The first planks to add are those along the breast beams at the waist. I





used a 3/16" x 3/64" strip for this. The overhang edge on both were rounded off. There is only a slight overhang along the breast beams with these planks which should leave you with a nice rabbet on the other side for your deck planking which we will start adding shortly. The rabbet was about 1/16" wide on the other side.

Fcastle margin planks shown... previous page. Then the templates can be used as a starting point for the actual margin planks along the bulwarks. Just like you did for the gundeck below at the bow. Use the template as a guide and starting point to make your margin planks. I cut them from a 3/64" thick sheet. Then I added the waterway along the bulwarks just as we did on the gun deck. A 3/64 x 3/64 strip was used and one corner was rounded off down its length to create a quarter round profile. Same as for the gun deck....you dont have to create scarph joins if you dont want to. They are tricky. You can simply butt them together if you want to simplify this.

Then the same was repeated on the qdeck. Start with the breast beam plank.....then the waterways can be cut from a

3/64" sheet.....and then make the waterway from a 3/64 x 3/64 strip. See the photo above.

I decided to plank the outside bands or belts of the fcastle and qdeck. I wanted to break up the task rather than have to do all of the remaining planking at once. I can't plank the center band until I make all the coamings and gratings etc. What I did do however was select all of the wood for the planking now so it all was a good match in color and lightness. I set aside all of the wood for when I do plank down the center.

You have a few options here. I will let you decide. You can rip some strips and bend them to the curves needed based on the template. Thats fine, especially for the qdeck planking. BUT, I decided to just rubber cement my template for the fcastle planking on some 3/64" thick cedar sheets. The curves are more pronounced on the fcastle. Then I just used a sharp #11 blade to cut them out. I stayed outside of the lines and then sanded them to fit tightly. There are only four planks on each side of the fcastle so it isnt too bad. Just use the template first as a paper guide and make any tweaks for your model before cutting them



from wood. No laser cut and etched decking here folks!!

For the outside belts on the qdeck I just ripped some 1/4" x 3/64" strips. Then I tapered them to match the template. I made sure the butt joints fell on a beam. Try for some nice tight

seams here.....and dont forget to simulate the caulking down one edge of each strip with a pencil or whatever method you prefer.

You can see that so much of the gun deck is still viewable and this will be a nice method so





all those details and hard work aren't hidden away below deck.

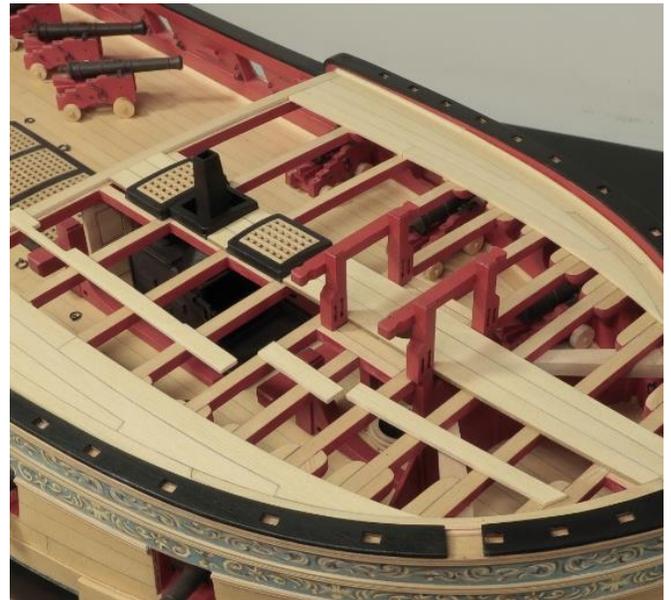
Coamings are completed on the fcastle with gratings just like those on the gun deck. There is one that is for the stack which will have some cover boards. Note that this particular coaming sits against the one aft of it. So the aft edge doesn't have the corners rounded off. Rather than repeat the coaming making process I will just say ...don't forget to use your 3/64" thick right angle jig when making them. Also use that to round off the corners leaving a sharp edge corner where the planking will be done around it. This is the exact same thing we did with the gun deck coamings.

With these completed you can start planking the center strip down the fcastle.

BUT FIRST...

This is an important picture (left) as I plank down the center. Note that the center 3 deck planks were cut using the template as a guide. These are glued in first. Then the two bitts we made in the last chapter are glued into position in front of and aft of the fore mast

hole. It would be very difficult to cut and add those three center planks with the bitts in position already. Once they are glued into position the two remaining strakes of deck planking on each side can be completed. In the photo you can see that I have already cut and shaped the three lengths for the next strake.



The photo on the next page shows the fcastle planking of the bow completed.



The belfryall the parts are laser cut and etched in boxwood.

As I explain how it's built refer to this photo below for details.

The belfry roof...

The roof is laser cut in two pieces. Nothing terribly difficult about it. You could just glue the two halves together and sand it to remove the char. BUT....the goal here is to make the seam between the two halves as invisible as



you can possibly make it. So before gluing it together, thoroughly clean the edges that will be glued together. Keep them flat so there will be no gaps. You may even want to scrape the char from the top surface where the seam will be. Use Tite-bond or similar glue. Don't use CA. You want to be able to position all the parts for the belfry carefully so they are lined up. With CA once it cures instantly if the two halves are not aligned....it will look awful.

Then clean the char off the top and bottom of the roof. I started by using a sharp number 11 blade and scraped the bulk of it free before using sandpaper. Then I used various grits to finish it up. But the corners where the round top meets the sides was problematic. So again I turned to my #11 blade. A new one that was very sharp. I literally shaved the corner. I sliced a microscopic layer of the charred wood in that area away to really clean it up. This alone took a full 45 minutes to one hour.

I rounded off the outside edges slightly and cleaned the char from the sides. Note how clean you can get these pieces with some time and care.

The uprights...

Step one...For these you have a laser cut and etched center with a simulated raised panel. This piece needs to be cleaned. There is another thin strip with two etched flutes that will be glued to the side of these pieces. So you need to clean the char from the sides of the center piece. This is so the seam will again be nearly invisible. Keep the sides flat to avoid any gaps. The two thin pieces are wider than needed so use the tite-bond to glue them on before you remove the char from the edges. They will overhang the edge of the center column on both sides so you can sand it smooth and remove the char from the edges at the same time. Just remember to try and

center them so the flutes are in the center of the finished piece.

Use a very fine sandpaper....say 320 grit to finish all four sides. See above. There is one finished upright. You can also see the unbuilt parts.

Step two...The top and bottom of the uprights will have a molding placed on the three sides. The inside of the belfry is flat and doesn't get a molding. This is the important part....the molding should have the corners mitered. If you don't miter the two corners, the end grain will show much darker and the profile of the fancy molding won't carry around the entire piece. So take your time here. The molding is laser cut for you. You must clean the char from the top edge of the molding before you start using it. This is the thin edge will show once glued on the upright. The molding along the bottom of the upright is wider than the molding on the top. You will have more than enough to cover both uprights. Again the molding is only on three sides.

Step 3...The molding is flat and the same thickness. But after you just finished gluing it on the three sides sand the top portion a bit thinner. Just the fancy part of the molding needs to be carefully tapered thinner. I mean really thin towards the top edge of the molding. It will give the proper angle to the finished uprights and look much better. I hope that makes sense. Look at the following photos.

The bell...

Carefully sand and file all the char from the wooden piece that the bell will be glued to. Then use 1/64 x 1/32" brass strips to make the straps that are glued to it. Just cut tiny

lengths like shown on the plans. The strips are not included so you will need to get some. There are 3 strips on both sides. Easy enough.



Then make the handle from the same brass strip size. Bend it as shown and glue it to the top of the wooden piece. Next, remove the cheap clapper from the small bell. You won't want to keep it. Then glue the bell to the bottom of the piece. Make sure to center it.

Note how the little pegs on the side of the wooden bell stock were carefully rounded

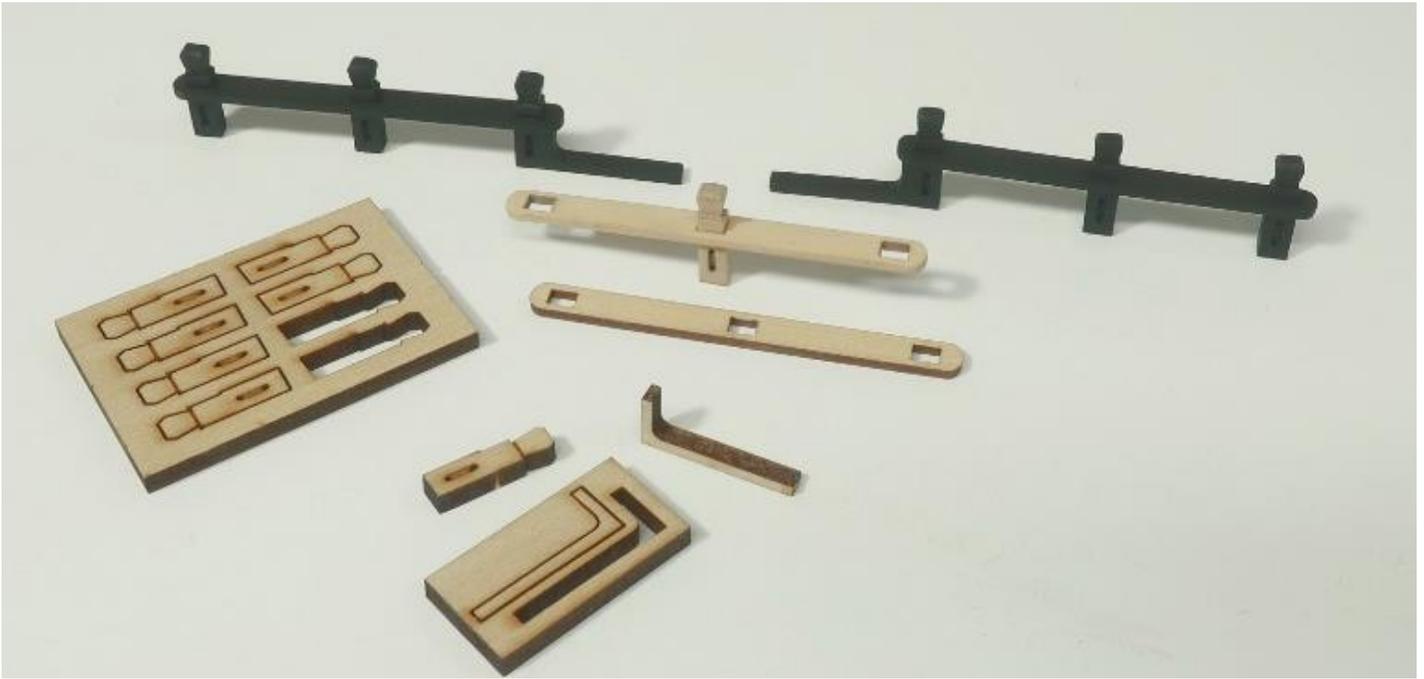


off. Drill corresponding holes on the flat sides of the belfry uprights to accept these. Don't drill all the way through. Just make little indents. Assemble the bell between the uprights and then glue the roof on top.

That's it!!! The most important thing is to make this a clean fitting. Clean the char. Make the seams as invisible as possible. Take your time. Fill any gaps. You can build this in 20 minutes or you can take your time and spend a nice afternoon making a really impressive fitting that will be prominent on your model.



Moving on to the belfry rail. This is pretty straight forward. All of the parts are laser cut for you. I carefully removed the laser char from each piece and then glued each rail together. One thing worth noting is that the tops of the rail uprights are shaped like the typical timber heads you have all seen. But they can only have the shape laser cut on two sides. You will need to sand or file the shape on the front end of each. I just used a sharp #11 blade actually to cut in the angle for the top. There is a laser etched line already on the



piece to act as a stop-cut. So I just sliced the angle back towards the etched line. You can see one that has been shaped before painting in the above photo.

Another detail that needs mentioning is the fact that the castle deck has a roundup or camber to it. In order to ensure these uprights for the rail are actually vertical, the bottom of each of them is laser cut at the appropriate angle for you. Just make sure you face them all the correct way when you insert the uprights

into the rail. Insert them top-end first into the underside of the rail as I also laser cut a small stop into the bottom half of the uprights so you can keep the height of the rail consistent along all three.

There is also a small "L" shaped piece that is glued to the inboard end of each rail port and starboard. Make sure you glue it to the correct side...otherwise the rail will not sit properly and will lean to one side because of the angled bottoms.





These "L" shaped pieces once glued to each rail also help position it on the fcastle. It makes it impossible not to center them on the fcastle edge properly. The one side of the "L" actually sits against the belfry. It butts up against the belfry sides.

Oh and I almost forgot...you can round off the sheaves on the rail just like on the other fittings you made from laser cut parts like this. Paint them black.

Breasthook...

I added the breasthook at the bow. This was straight forward. It is laser cut. Unlike the one on the gun deck at the bow I laser cut this one in one piece. So you may have to adjust and tweak it to fit snug and tight against the bulwarks at the bow. Don't forget to chamfer the top and bottom edge on the aft side. That is customary. Unlike last time, you see I also added some bolts. There are four on each arm or "side" of the breasthook. I used 30lb black fishing line for this. Photo above.

In the same photo above you can also see the cathead I made. But most important in that photo is the slot for the cathead. Note how it has been notched out with a sharp chisel and blade. I did so on the inboard side right down to the deck. Take the INBOARD side down to the margin plank. Remove the waterway as well. Do this carefully. You will need sharp chisels or blades. Careful not to mar the deck.

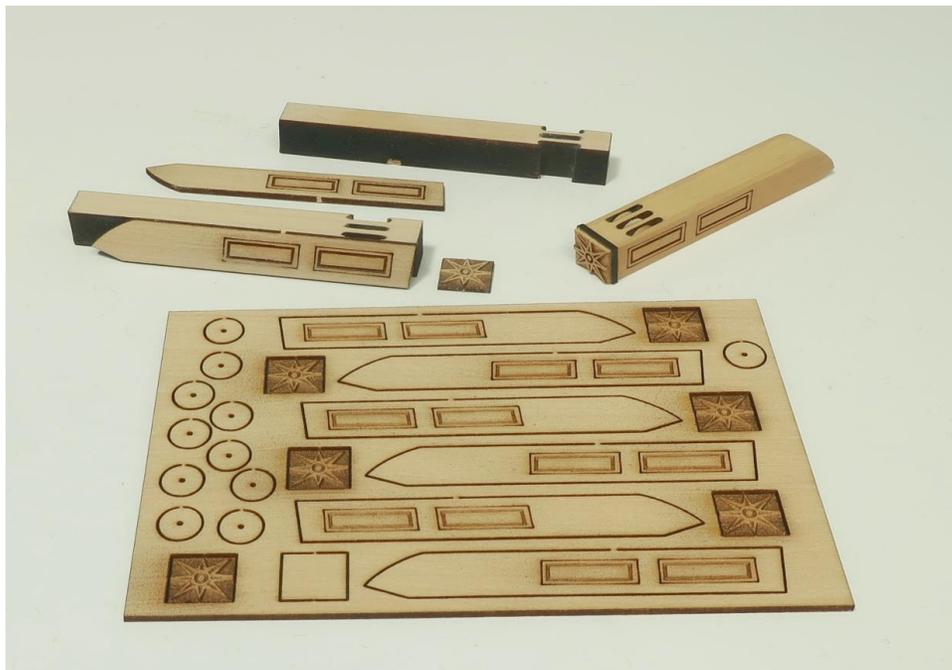
On the outboard side it is a bit different. See the photo on the next page. I only notched the outboards side down to the top of the frieze.....OR better yet described, remove the fancy molding where the notch will be. Then deepen the notch down to the bottom edge of the molding that remains. It's not as deep as the inboard side. This is what will give the cathead its proper angle.



I hope this makes sense so far...

The catheads...

These are pretty easy to make but don't rush it. The main cathead is in three layers. The two outboard layers define its shape. They line up with the front or OUTBOARD end of the cathead. But this is very important. The goal here is to not show the seams between the three layers if possible. To minimize this, you MUST thoroughly clean the char from the edges of the center piece. Its 1/4" thick



boxwood so there is a lot of char. Don't be afraid to scrape it and sand it. I compensated for this and if you don't clean it well enough, the two outside sheaves of the cathead will be too wide. So do go ahead and sand away!!! Also test the sides periodically to check the width of the two outer sheave slots.

Glue the layers up with tite-bond. Make sure you line everything up and center the side pieces up and down. Then sand them smooth top and bottom. But also sand the center to

the shape of the outside layers. That shape is very important. Note the finished cathead in the photo above. Use a sharp chisel to get most of the heavy stuff off and when you get close to the shape switch over to a sanding stick. Sand it to match the shape....test it in the slot on the model. **ONE MORE NOTE:** the front side of each cathead is NOT at a 90 degree angle. It isn't supposed to be. It is a much steeper angle actually and that is a detail not usually



shown in models. The angle of the front of the cathead is important and before you glue the star onto it you should make sure its flat and shaped appropriately. Look at the laser cut sheet and I think you can better see the actual shape of the cathead on the side panels. I made sure I gave you guys an extra cathead just in case.

The front piece is similar. It has that wonderful star pattern etched onto it. Sand the four sides flush. But also try and scrape some of the char away from the perimeter of the star. I used the tip of a #11 blade to scrape away a good amount of the char around the outside of the star. It cleaned up really good. I found it easier to do after I glue it onto the cathead.

Test it on the model...

In this photo above you will also notice how I added an iron band around the outboard end. Its very thin. I just used some black tape

for this. Don't make this too heavy and wide. Just a really thin band. Use the seam from the star piece as a guide. Cover up that seam or at least put the band right up against it. It really finishes it off wouldn't you say?

When positioning it...the inboard side is also very, very important. Remember you want it to look like one piece with the cat tail under the beams. Do your best to line them up assuming you positioned all that stuff carefully enough early on.

See photo next page. We are just trying to simulate the cathead and cat tail being in one piece. Do the best you can. Its a very difficult part to make otherwise. Especially with a cathead as detailed as this one. Oh and yes there are laser cut sheaves for the cathead as well. You can see them in the photos. Just glue them into the slots for them.



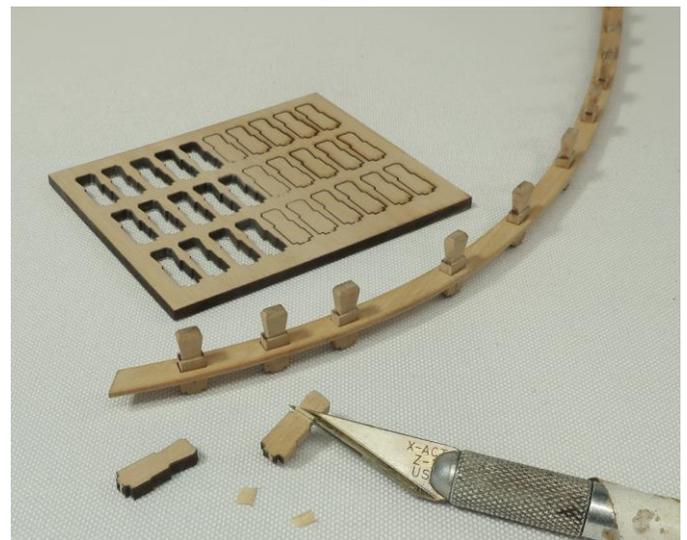
Time for the Fcastle rail and timberheads.

There are twelve timberheads per side. That's quite a few. And then let us not forget the many along the qdeck. The qdeck will be completed in chapter 10 however.

These have been laser cut for you and yes there is a lot of char. Now I know that some of you will start to see these wonderful details being added which make the whole project special. And the more details like this the easier it is to lose your "will to slow it down and you start cutting corners". Because let's face it, getting these details on the model makes a huge difference and you want to see them on the model as quickly as possible. I suffer the same affliction, trust me.

BUT...lucky for us, we do not have to go crazy here removing the char from these timberheads which are quite small, with lots of inside corners for the char to hide. You will still need to give them a good cleaning to smooth

out the surface for painting. I use sanding sticks and 420 grit sandpaper. The surface must be prepared but don't try and remove it all. You will distort the shape and also make the timberheads too small to fit snug in each hole of the rail. You can see how clean I made those timberheads. They are still pretty clean with just a light swipe of the sandpaper.



So you will save some time here which is good news because....

Because, I strongly urge you not to cut corners on the next step. You should certainly take the time to shape the timberheads on all four sides. Many of you will be tempted to just use them as is. That might be quick...but it would be a mistake.

The reason why this is so important is because they will appear much too heavy otherwise. Too many kits have ridiculously heavy and thick timberheads. It looks too kit-like. By chamfering all four sides at the top of the timberheads they will appear slimmed down and in scale. In addition, the angled front and back sides... You will need to slice down towards a "stop cut" to create the proper shape. See the photo previous page. This will make a huuuuge difference. So yes it's ok to cut corners on the char here. But please do shape each timberhead carefully.

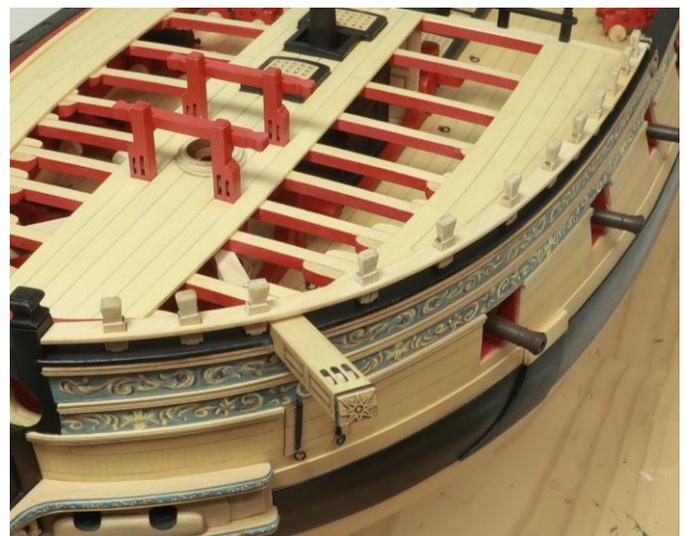
I also sanded the rail itself smooth and softened the four corners along its length. As I finished each timberhead, I slid them from the bottom into position along the rail. I have created a small "stop" ledge on one side of each timberhead. If you didn't over sand them and remove this detail, it will keep the rail level and at the same height across all of the timberheads. I hope that makes sense. In addition, this "stop ledge" detail should always face forward when you slide the timberheads onto the rail. This is important.

When all the timberheads are cleaned and shaped, test the rail in position. The laser cut tenons on the bottom of each timberhead are not as wide as the holes in the caprail. So you should have wiggle room to adjust the timberheads and rail. Don't glue the timberheads into the rail yet. And don't glue the rail onto the model. While test-fitting in

position, you need to add the fancy end piece. See below. Just glue it onto the end of the rail and let dry.



When dry, remove the entire rail from the model. Remove all the timberheads from the rail. I numbered the timberheads but that probably wasn't necessary. Then do your best to fill the seam between that fancy end piece



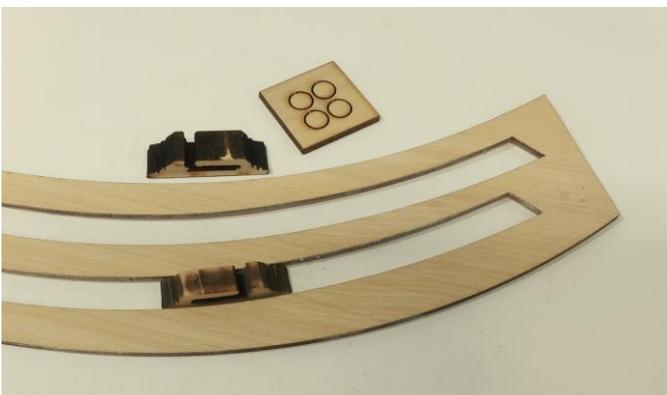
and sand it so you cannot see any trace of the seam before painting the rail black.

Some other rail details...

I finished up the fcastle rail on the starboard side. That left only a few fittings to make which are all added to the fcastle rail. These include the spanshackle cleat. This is made in three laser cut layers. It will be painted black and positioned on the rail following the plans. Under this cleat are two posts to help support the rail.



There is also the "cat block". This is laser cut and is 1/4" wide. But you will need to sand a curve into it that matches the curve of the rail. If you saved the laser cut sheet for the rail this is perfect for tracing the shape. Then sand it carefully to match. Insert the small sheave and paint it black.



The last remaining fitting is another sheave as part of cleat...I am having a brain fart and recall its name currently. It is positioned along the bulwarks on the inboard side of the spanshackle cleat. This has been laser cut also and all you need to do is add the small sheave disc. Then paint it black...but below the caprail it should be painted red.

You can see it in the photos below.





Its hard to see in the photos, but you should examine the plans...there are two short posts or uprights under the spanshackle cleat. Don't forget to add those. They are easy to overlook.

To finish off the ninth chapter....

Add all the eyebolts and the spanshackles. The spanshackles are made from 22 gauge SQUARE wire. If you can't find any square wire you can use regular 22 gauge wire. Use the plans to find the locations for the eyebolts and the size for the spanshackle.



