



Chapter Seven

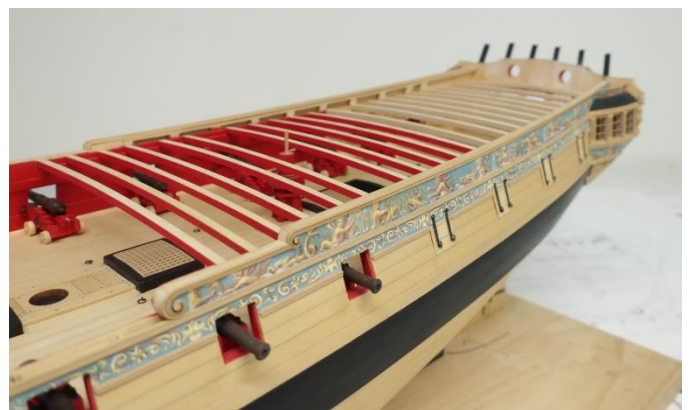
Fittings below the Quarter Deck...

A test for the deck beams. That's the first step of this chapter. Sand the laser char off the tops of every beam. You don't even have to touch the bottoms of the beams because they will never be seen. It's up to you. You don't want to risk making them too thin. The picture shows them all in place and left natural.

Then cut them to length so they fit in the deck clamp notches. I started at the waist and worked aft and did the same for the fcastle beams. I did this because if I cut one beam too short I could still use it further aft. So work the longest beams first. Cut them to length and test them in their respective slots. Cut a bit from each side of the beam measuring from the center to maintain a consistent round up for each beam. Number them as we won't be permanently positioning these for a while. In

fact we will be removing them and testing them quite a lot depending on what fittings we are working on below them.

Here is an image of the same beams with the front and side faces painted red. This was common practice on those contemporary models. It's up to you. But this will allow you to paint the knees red as well. It will tie everything together nicely. So choose now as



it will be the best time to paint these beams and get that out of the way.

Notice how I left the beams within the cabin areas bright and natural which was also common practice.

One of the benefits of not rigging the guns is they won't get in the way when you start doing other stuff. None of them are glued into position yet so I can remove them and also close the port lids so I don't damage them.

Time to tackle that last deck beam, the one that is up against the transom at the stern. See below.



This beam has the same round up of the others but also conforms to the curvature of the transom. It's a tricky beam to make. The margin plank will sit on this leaving a rabbet along the front edge to seat the Q'deck planks into. It is laminated from two layers of laser cut cedar.

Here is a look at the parts....or layers. Note that one layer is narrower. This is the bottom layer. These layers were glued together and pre bent at the same time before the glue dried. I used thick slow setting CA for this.



Hold the two layers together with the narrow one on the bottom. The forward edge of both layers is flush when stacked. If you bend them slightly to match the round up or camber of the other deck beams ...while the glue sets, it will hold that shape with the camber once dry. It only takes a few seconds so work quickly. BUT carefully.

You don't have to bend them too much either. There is only a slight round up to these beams. You should do a dry run without glue to see how much pressure to apply to bend them while together. You won't have to apply too much pressure.

I applied the CA and while both layers were together....I worked quickly to bend them to the same curve as the other deck beams.



Once dry it was tested on the model. Also note that I did open that last notch really wide in the deck clamp because it made testing the beam easier. No worries on any gaps you see because that will be covered later. The same is true with any gap along the transom. No need to bevel the back edge of this beam. You can see that I matched the proper round up needed really closely which can be tested by using a planking strip. Use this strip across the beams to test how well the plank sits on all of



the beams including this last one. If you bent too much it's OK....you will be able to bend the other way to lessen the round up. But try not to over bend it when gluing up the layers so it won't be necessary. Slide that planking strip port to starboard to see how well you did. The aft edge of this beam was also beveled to fit snug against the transom as you can see. This beam isn't glued in permanently yet but it will be very soon.



Lastly add the 3/64" thick top layer (the margin plank). See how it creates a rabbet or ledge for the deck planking. The last beam is actually a pretty good width and leaves a nice size ledge for the deck planking.

Hopefully this helps you guys visualize how it all will work once we start planking the quarter deck much later in the project. This top layer should have its back edge beveled so it sits tight against the transom with no gaps. I actually glued this top layer in position while the deck beam was sitting in position.

To finish the beam along the transom, I removed it from its temporary placement and



painted the inboard side of the transom red. But you can see where I stopped at the bulwarks. Don't paint the area above the q galleries.

You can also see some iron straps which form a right angle along the ends of the beam. These were laser cut for you from black laser board and glued into position in two pieces to simulate the strap. It really finishes it off nicely although the straps won't likely be seen after the quarter deck is planked.



Before adding the iron brackets however, I added a strip of 1/8' x 1/32" cedar to deck clamp between both beams to clean it up and make the deck clamp flush with the paneling below it. Then I added the strap section on top of that....I am referring to span between the deck beams.

Starting some deck details. The way I work the gun deck fittings is to start at the stern and work my way forward. I feel most comfortable doing it this way. You however may not. So you can alter the order in which these items are built if you like. But make sure you read through the entire chapter so you know what

work is lies ahead of you. With that in mind, the first thing to be done is the aft bulkhead that defines the great cabin. The aft few deck beams were permanently glued in position. But I left a few off so I could get my fingers in there while working the bulkhead sections.



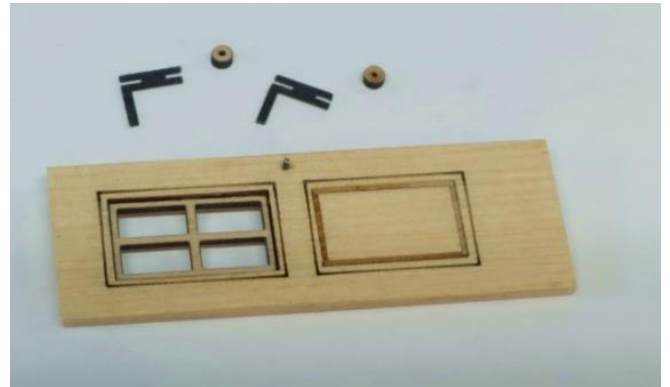
The bulkhead sections are all laser cut for you. This aft bulkhead will have all parts labelled as "G" when you get them. They are actually laser etched with the paneling on both sides so no need to glue two halves together or anything like that. The sections are 1/16" thick.

You start by centering the "center" section of the bulkhead under the beam and on the separating line between the checker floor and deck planking. I have cut these slightly taller just in case there are subtle difference from model to model. So sand a bit from the bottom and the top until you get a nice snug fit....

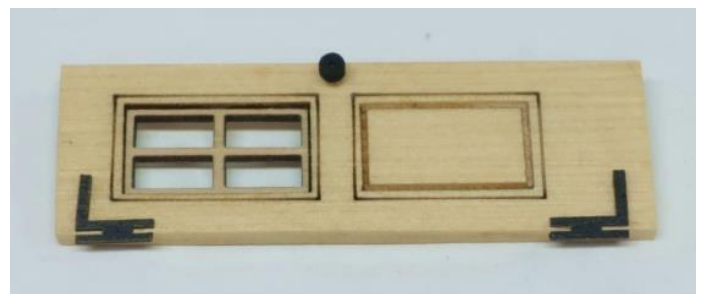
But not so snug that you can see beam raise up under the pressure. The beam must stay where it is so don't force it under there or you will suffer later when you try and plank the qdeck. That beam should not flex at all. Remember to face the correct side facing forward which has a laser cut reference line for

another panel that spans the gap between the two bulkheads and create two cabin spaces. Check out the plans for that detail.

In that same photo you can see two doors that will go in next. But first you have to build them. Its laser etched on both sides but you still have to add the window which is thinner.....and add the door knobs and hinges.



First glue the 1/32" thick window into the opening so it's uniform and shows the laser char evenly around it on both sides of the door. Don't remove the laser char because these were cut with care to fit perfectly in the opening. You can also see above that I stuck a short length of 28 gauge black wire through the door knob hole and clipped it off so it sticks out on both sides. You will be gluing the door Knob on this wire. So ensure it sticks out on both sides. Push it all the way through the hole and clip it so maybe 3/64" is sticking out on both sides. Note the knobs and hinges as well ready to go.



The door knob is carefully placed on the wire but don't push it against the door. Let it sit proud of the door a bit. Then paint it black. These are laser cut for you also.

The hinges are laser cut from black laser board. Glue these on but make sure you allow the other side to hang over the edge. That part of the hinge will be glued to the bulkhead panels and hold the doors in position. Make sure you evenly space these so they are all at the same height across all the doors or it will look awful. To finish the doors add the small acetate window panes on the aft side of the windows. Or you can just leave those off the model as they tend to be dust magnets.

Finally glue the one door into position but only by its hinge. The one that gets glued to center panel section below. But then place the second door in position only so you can mark the deck and beam with a light pencil reference line. You want to know where the hinged side of the door ends so you can shape that last panel against the bulwarks to fit perfectly. Remember that the doors are also slightly taller just in case. Sand them to fit nice under that beam. After you mark the end of that second door for reference, set it aside.



Finally the last outside panel needs to be shaped and fitted. This laser cut shape should be pretty close but everyone's model will vary slightly. It depends on how much you faired the frames before you planked the

bulwarks. That curve of your bulwarks may vary....

This last panel is a bit wider and taller so you can shape it to **first** fit tightly against the bulwarks. Match the curvature of your bulwarks first. Then sand the top and bottom so it fits under the beam. Last you can test it to see if that second door fits alongside of it to close the gap tightly. You can show the door open or a variety of open and closed. It's up to you. I prefer them closed.

Here is a look at the finished bulkhead wall spanning across the entire deck.



With this bulkhead completed, I can glue a couple cannon in permanently now and move forward to the work on the mast coats and then the next forward bulkhead. I will slowly work towards the waist in this fashion....slowly adding the beams and knees as I finish making the fittings that will go under them.

Moving forward towards the waist....the fitting on deck that needed to be done next was the mast coat for the mizzen mast. I decided to do all three mast coats and get them all completed. These are laser cut for you in boxwood. The mizzen mast coat is only in two layers. The thicker top layer should be rounded off on the top edge and then

glued to the really thin disc which is slightly larger. The laser char was carefully removed while paying attention to keep these round. I didn't bother with the inside because this will be painted black or dark gray. Making these in layers is a great way to avoid using a lathe. I just sanded and shaped them by hand.



The main and fore mast coats are made in three layers. Basically another thin layer is added on top after rounding off the TOP edge of the thicker center layer. If that makes sense.

The main mast coat also has some eyebolts along each side which were added. See the plans for details. These were made using 24 gauge black wire.



With this completed, it means I can now build out that forward bulkhead next....

The center section was added first just like before but this was worked in conjunction with the panel that spans both bulkheads. See below. You want to position both and shape

both to fit. Dry fit them and when satisfied glue them into position.



This next part is optional because you won't see any of it after planking the q'deck. But I went ahead and did it anyway. To avoid having a gap above that cross panel once the q'deck is planked....I added some 1/16" thick laser cut pieces between the beams. These are laser cut for you on a tiny sheet in you chapter parts package. The beams above this panel were placed in position only temporarily. Then the strips were glued to the top of the panel. You can see the last one ready to be glued in position.



Then you can remove the two deck beams and it will look like this.





I removed those beams so I could build out the rest of the forward bulkhead. It makes it easier to get your fingers in there. You can proceed to build out the remaining panels for the forward bulkhead just like you did for the aft version. Build the doors and then add the outside pieces. See the picture above. Once done you can absolutely glue the other two deck beams into position. You can also add the 3 lodging knees on both sides. There are no hanging knees here. Sand them to fit snug and make sure they face the right way. You can simulate the bolt head pattern on these if you want. But on my model they won't be seen at all so why bother. I would use 20lb. black filament for the bolts if you want to show them in the knees. Don't forget to glue your cannon in permanently so they won't come loose. Otherwise break out the tweezers because it will be hard to work under those beams should anything come free or if you get any debris down there.

Refer to the diagram at the end of this chapter for all of beam and knee locations. They are numbered so you know which laser cut knees to add under and against each beam.

Moving further forward....I needed to make one column next. All together we will eventually need 4 of these. I pondered how best to make them for a while. You see all manner of columns used on contemporary models. Round turned wood columns, metal pillars of various sorts. Some are made of ivory, while others are left natural wood or painted red.

In the end I opted for wooden pillars left in the square profile. Mostly because I know most of you don't own a lathe. But this is something you can change to your liking as well. I did manage to laser cut them to their basic shape and etch some details on both sides for more reference points. But you must still sand away the char and also use some files or even a #11 blade to shape the flat sides. In the end it makes into a respectable column. I am very happy with them. I even like that some of the char remained because it helps define the details more. These are laser cut from boxwood by the way. See the photos on the next page.



Finally I added that next deck beam. This is where we will start adding those with painted red sides. If you look closely I also added the knees which were called for. These will now also have their sides and bottom painted red. The column isn't glued in yet but I will do so before moving on to do more work

I am also trying to decide on the capstan.....shall I paint it red as it was seen more often on contemporary models or leave it natural? Tough decisions...You will need to think carefully about your color choices.

But if left natural I fear it will just get lost under the deck beams and will be very hard to tell its even there once the qdeck is planked. In the end I will probably paint them all red. You can choose which ever you prefer. I also carefully opened one of the doors for this photo. A red column below.



Moving forward...

The stanchions and railing around the companionway. There are many ways to do this. Contemporary examples show wood rails....metal stanchions etc. You guys can choose once again. Painted versions are either red black or white ...even a combination of those colors.



I chose wood because I don't like messing with metal work. I turned these using my dremel. Just like I do when making belaying pins. They are only about an inch long so you don't get any wobble in your dremel and they don't take much time to make. You only need four of these. Try your best to make them identical. I started with a 1/16" x 1/16" boxwood strip. I marked the breaks in shape in pencil on all four sides so I can see them as its spinning. It's basically just the center that's rounded. I leave the top and bottom square. I also shape a small ball on the very top. But you can make these as fancy as you wish. You can even buy some commercially made but these tend to be awful and out of scale. Give this a try please.

Then I painted them black and cut the bottom of each away so they were all the same height. Use the plans as a guide. I pegged them into the coaming using some 24 gauge wire. The rails between these stanchions are just 1/32" x 1/32" boxwood strips painted black ahead of time. The segments were cut to length and

added between the stanchions. I took care to get them level while not pushing the stanchions out of alignment. They are just glued in with Tite-Bond. Then I touched up the paint after finishing each segment. It's slow and methodical work. You have to constantly check that each rail is level etc. These pieces are thin so they don't look out of scale. I see so many rails around a companionway that are so thick and out of scale it will ruin an otherwise well-crafted model.



Now to add more beams and knees as I move forward...

The hanging knees are laser cut just like the lodging knees. BUT you have considerably more shaping to do. Yes you must tweak each to fit snug against the bulwarks while sitting against the deck beam. But there is more to it. Everyone has the deck clamp along the bulwarks but it may be a slightly different height or even width on each of your models. So the knee is laser cut without any notch for the deck clamp. You must temporarily place the deck beam in position so you can hold the knee in place to test its fit. Then mark where the deck clamp should be so you can file the notch in the hanging knee. This will allow the knee to sit flush against the bulwarks.

The pic below shows the next two hanging knees for this deck beam. I filed those notches in the knees to fit around the deck clamp. This required a lot of frequent testing and re-testing for a tight fit. Then I painted it red but kept the top natural with a clean unpainted area.

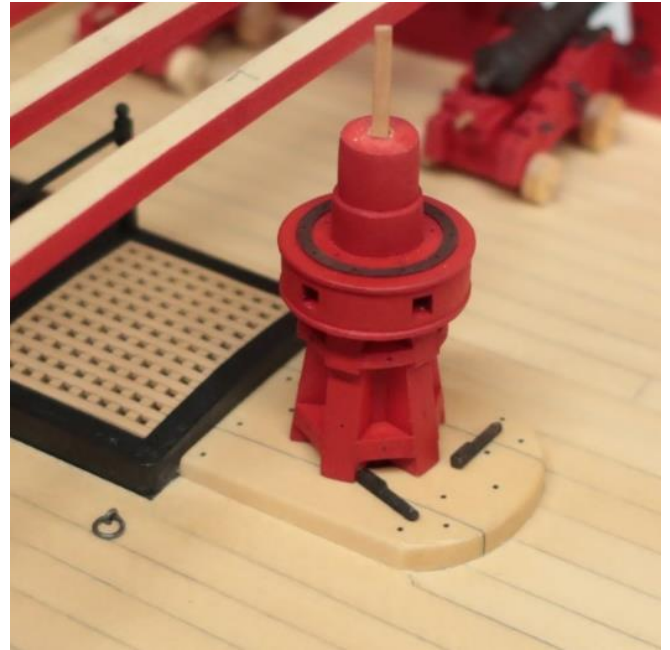
NOTE: You also have to round off the inboard end which you can see as indicated by the blue arrow in the last photo. Do this ahead of time as well. You can add bolts if you want before gluing the knees in position but they will hardly be seen at all.



The hanging knee is glued against the aft side of the beam as you can see below. I added two on each side so far. The deck beam was only glued in position just before adding these pre-shaped knees. You can see the lodging knee sitting on the deck beams ready to be glued into position next. The hanging knees go in first. Then the lodging knees are placed between it and the beam behind it. Note that blue arrow which shows how you should round off the end of the hanging knee so it mirrors the end of the lodging knee I just placed behind it. I hope that makes sense.



pawl. I painted them black along with some weathering powder and glued them on. Notice how I sanded the back of each pawl thinner so the part that engages the capstan is thicker. Don't mind all the dust!!!



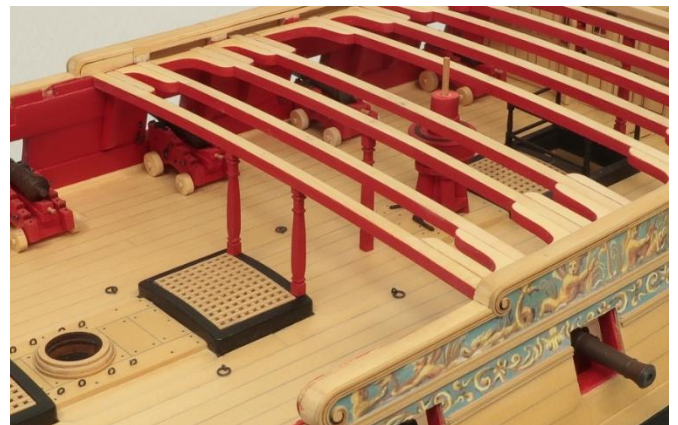
Then I continued forward adding beams, lodging knees and hanging knees...

UNTIL I reached the area you see below. The beam is permanently installed. But the two columns are not. These are just temporarily positioned. Do not glue these two columns in yet. Note how they sit on top of the coaming. If you must shift the deck beam first slightly one way or the other to do this that will be fine. But not too much.



I will now move forward and place another deck beam and shape the lodging or hanging knees for it. I proceed to work one beam at a time after the deck fittings are finished below them. Slowly I am working my way forward to complete the quarter deck framing.

You saw the capstan in many photos. That can be built now and is sold separately. It has its own set of instructions that can be downloaded. All I had to do was make the two pawls and then I could complete the deck beams above the lower capstan. I just used a strip of 3/64 x 3/64 boxwood. I cut them to length....shaped them as shown. The arse end being rounded off. I drilled a hole through that end so I could insert some black fishing line to simulate the bolt or pin on the

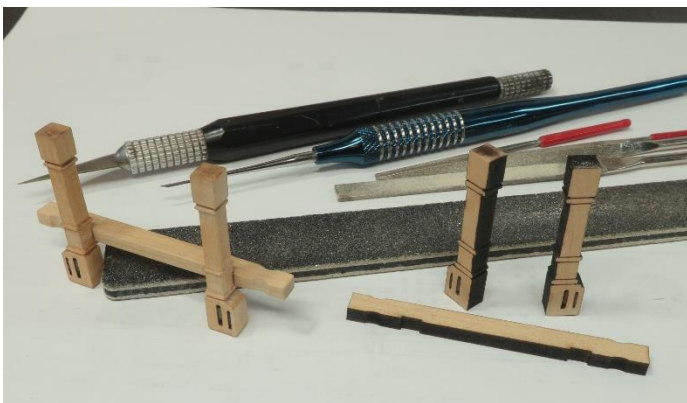


These two columns will need to be lined up perfectly with the Main jeer bits.....and gallows and chain pumps. The crank handle for the chain

pumps will run through all of these elements and they won't be glued into position until after the chain pumps are made and everything is test fit together. That will come soon. So just position them like this without glue or set them aside.

In fact....the next two (the last two) deck beams shouldn't be added permanently yet either. They will not be glued into position until after we have the chain pumps, jeer bits and gallows all finished with those crank handles installed. But you will be testing and repositioning those beams while you build all of those elements...

...time to make the Main jeer bits. These actually sit directly under the forward most deck beam or breast beam.



They are laser cut and just like the columns, the uprights are etched on both sides for reference. These are boxwood as well. You will notice some heavy char on the sides of these because they are very thick at 3/16" thick. Rather than just sand or file off the char from the sides of these, I scraped the char off first. I used a number 11 blade. That should initially remove most of it so whatever remains can be cleanly and easily sanded away. Boxwood in this thickness requires much more laser power to cut through and thus more charring.

Notice how the front and back of the uprights are flat without any dimension at first. You

have etched reference lines but you must still use some blades, chisels, files or whatever you are comfortable with....to mimic the profile laser cut on both sides. These take some time to shape and do properly but they aren't difficult. As you can see they clean up beautifully and make some really nice jeer bits. The two sheaves are all laser cut for you on both sides....how nice is that??? You could round off the sheaves if you like for extra credit.



The jeer bits were painted red and positioned beneath the Breast beam or that first qdeck beam. Nothing is glued in yet....these are just tests in preparation for completing the chain pumps. It rests right against the coaming behind it. The cross beam is on the aft side. But I will mention....



This is important, the Breast beam is actually wider than all of the other deck beams. Its 3/16" wide. In addition, you must scrape a

decorative molding and glue it the fore side of this breast beam. Two deck beams were laser cut for you for this purpose. The second will be used at the end of the f'castle. So clean them both up and paint the sides red like the other deck beams.

The molding was scraped from a 3/32" x 1/32" boxwood strip. The same as the other fancy moldings on the model. The deck planking and margin planks will over hang this breast beam and look very nice. I don't know if you can see or make out the molding on the beam in these photos but I hope you can. The jeer bitts are tested under it. It is starting to look good now that more fittings are being added to the model. Next up the gallows which is almost the same as the jeer bitts but has a fancy top. It is positioned just forward of the main mast.

The gallows....they are basically the same as the main jeer bitts. The uprights are a little shorter to accommodate the top of the gallows which has that shape you are all familiar with. The height of the gallows is equal to the top of the breast beam. It is also only shown temporarily in position. I will be starting to build the chain pumps next which will allow me the ability to tweak all of their positions to align the crank handles and permanently install them. You can see I removed that second beam as it will only make tweaking all their positions trickier.

See the gallows in position temporarily at the bottom of the page.

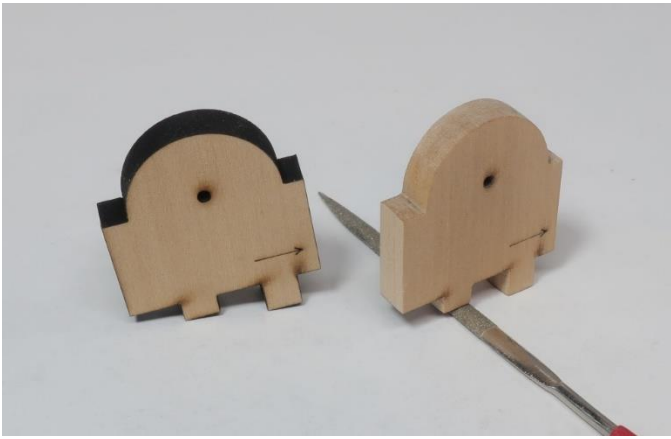
Making the Chain Pumps...

All of the wood parts are laser cut from boxwood. You will get all the parts for the port side on one sheet and the starboard on another. So just build one at a time. The first part that needs our attention is the 7/32" thick core.

Step one-

Sand the laser char from all of the edges. Take your time and keep the edges straight and flat. Dont bother sanding the front or back face as these will be covered up. They will remain nice and flat if you dont touch them. In addition....dont clean the char from the bottom of the piece. Keep that flat as well. But all of the edges including those two pump tubes at the bottom should be clean of char. You can see one core that has not been cleaned of char yet. Note the arrow...this will be important.





STEP 3 ...Glue the larger side panels onto the core. Sit the bottom edge of these side pieces right down on the base. Don't sand the char from the edges yet. Make sure the arrows are pointing in the right direction. They follow the arrow on the core. The important thing with this step is to line up the center hole for the crank shaft. That is crucial.

Because these layers are so thin they will bend and warp with titebond. I used titebond so I can slide these pieces into position. One side layer at a time. Use clamps to prevent the layer from warping....trust me it will lift up if you don't clamp it. It is slightly over-sized all around except the bottom edge. Just line up that hole!!



After both of those initial layers are in position you can sand the char from certain edges. Allow me to explain. The photo below shows the sides sanded FLUSH with the core and clean from char. But leave the rounded edges of the top and don't sand that at all. But the little edges on either side of the rounded top should be sanded flush with the top of the core. Note the back edge of the floor or base is now sanded as well as the back side is all flush with the core.

In that same photo you can see the next layer added to the back face of the pump. This is there to show you why you must sand the ends

REALLY IMPORTANT: For this mini kit you will see me call only for certain areas to be sanded free of laser char. This is important for many reasons. It has to do with the build sequence and keeping the parts properly sized and shaped. Keep that in mind when you read through this and don't jump ahead and clean off all the char on every piece. I will let you know when you can do so. The results will be much better.

STEP 2 -

Glue the bottom base of the pump into position. Note that the extended, curved side is on the end of the pump where the arrow points. Also note that I have NOT cleaned the char off of any of the edges yet. That will come later. But if you want...you can sand the top surface clean before gluing it in position.



flush with that first layer in position. This next outer layer won't be flush and you will never get clean and neat otherwise.



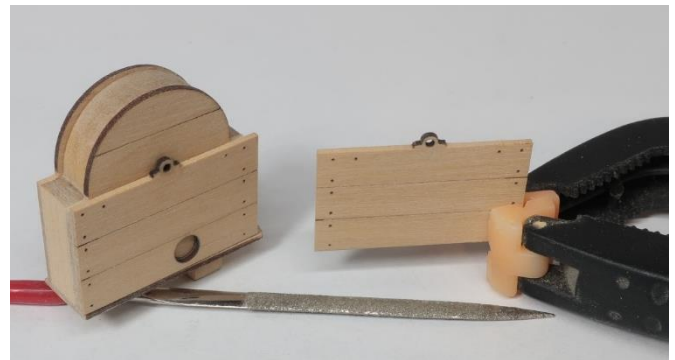
The same is true for the other side....Note how the first layer you put on is sanded flush with the edge of the core. AND the top is also sanded flush but the rounded section is left alone. Don't remove the char on that. You want the rounded hood to be perfectly shaped. Leave the char on it. This is important again because the next layer will extend forward. You can see it also added in the photo below.

You can also see that the floor or base is still not cleaned of char except for that one side which is all flush with the core.



STEP 4...

That next layer you saw in the previous photos can now be glued on the model. But you should absolutely clean the char from edges of these before you do so. Clean the edges before gluing.

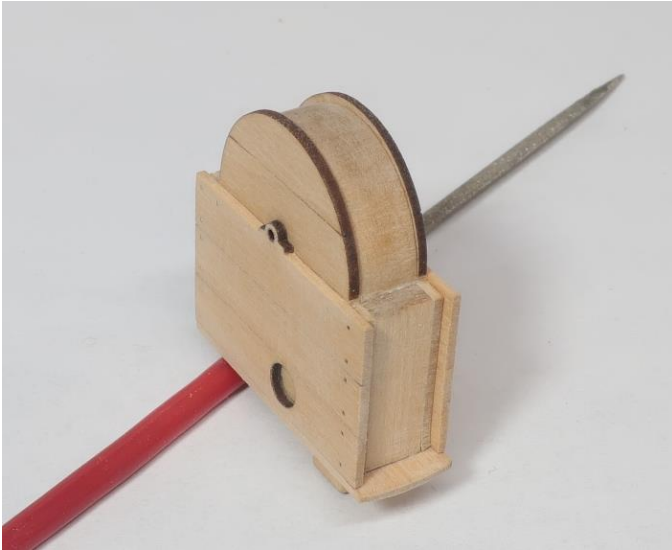


But as you can see....only clean the side edges and the top edge. But leave the clamp/iron strap in the center with the shaft hole alone. Don't bother cleaning the char from the edges of that detail. It is fragile and leaving it as is will look great. Don't sand the bottom edge either because then the hole won't line up with the other layers. It will sit too low. You can see how the back end of the pump is all flush....but this last layer will extend forward on the other side. Start with the layer showing

the cut-out for the plug first. That should help you get the alignment correct.

You can see the other sides layer ready for gluing.....all the edges you need to clean are sanded nicely

Step 5...



As the photo above shows....now you can sand the edges of the base all around to clean up the char. The front and back edges are sanded flush....nice and clean.

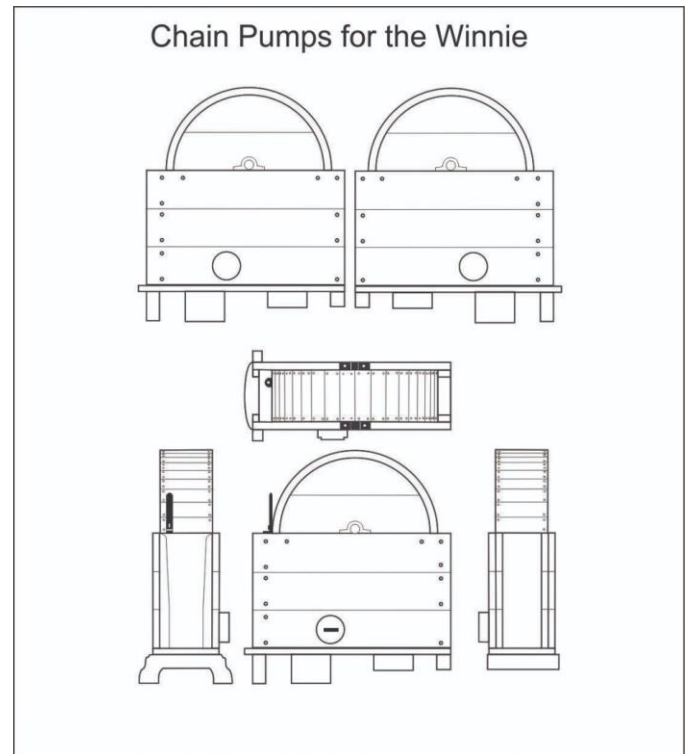
The extended side of the floor is also finally sanded clean. It's starting to look like a chain pump now! Now the fun parts...just a few more little details to add.

STEP 6...

In this step you will be adding the two legs. The fancy legs are cleaned of char and glued to the bottom side of the base. Just remember to put it on the correct side. One side is longer because of the mast partners. The fancy legs go on the side shown. Then do the other side which is sanded flush all around. You can also glue the drain plug into position. I left the char in place as it

looks good that way. It will stand proud of the chain pump box.

Then there are two long skinny pieces that are glued on the inside where the outside layers extend beyond the core. You can see them on the chain pump plans. Just clean them up and glue them on.



Step 7... in that same photo you can see that the round hood for the chain pump has many thin boards that need to be glued in position. This isn't difficult but they are small pieces. You should bevel the edges slightly so

they fit tightly against each other. If you don't bevel the edges the seams between each plank will be too wide. I just lightly sanded a bevel by eye. No need to measure and obsess about the angles.

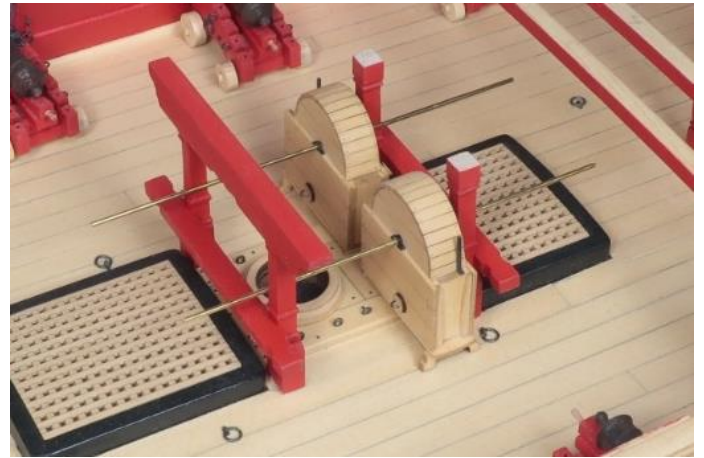


Now if you are afraid the math won't work out and when you get to the other side and you will be left with a larger or smaller space...fear not. I also included two wider planks just for this occasion. When you get close to planking the whole top of the hood...test a few dry fit planks to see how much space needs to be filled. I did this when I had four remaining planks to add. Turns out I only needed to adjust and use one wider plank. You can't even notice it. Sand the sides of the hood flush so it's nice and neat when they are all completed. They are initially just a hair longer than needed.

To finish up the chain pumps...add a tiny length of 28 gauge black wire for the drain plug handle. Then add the tongue. That's the long metal piece on the front end of the pump. I used a small length of 1/32" x 1/64" brass strip. Just bend the end and round them off. I blackened it and glued it in position.

Apply a coat of Wipe on Poly to bring out the nail patterns and you are all done!!!!

Positioning the chain pumps is finicky. No silver bullet here as an easy shortcut. I positioned and glued the gallows in permanently first. Then I carefully inserted a 1mm brass rod through the chain pumps. I guess each length was about 5" give or take. This will help me position the pumps so the brass rod touches the inside edge of the gallows uprights. Once I am satisfied, the chain pumps were glued into place permanently. The brass rod was pulled back so I could repeat the process with the jeer bits. You can slide the brass rod back and forth to help you line things up. Then I glued the jeer bits in position.



With those elements finally glued in I can now make my Rhodings. You only need four so you might as well make some nice ones. No need to rush these after spending so much time on the other details. You can use wood or brass. Brass would be best. But a hard wood like boxwood works well too. I used a 1/6" x 1/16" boxwood strip. Just take your time and file them to shape. These should be about 5mm long when



done. Make sure the 1mm brass rod fits as shown

on the photo above. It should slide under the rhoding easily. Paint them black and glue them on.

BUT...when you glue them on...use the brass rod through the pumps to guide you, but make sure you can still slide it back and forth freely. We will need to remove these ultimately to shape proper crank handles later. You don't want to glue the rod in permanently. It's just a guide for the height and placement for the rhodings at this point.

The rhodings were glued on permanently and then the brass rod was used again to help align those two columns on the aft side of the hatch gratings. A hole is drilled through them as shown. Use a #59 drill bit. But by sliding the brass rod up against the column first you can mark the location for the hole before you drill it. Then glue it into position....keep them straight and vertical and all lined up. I pulled the rod out of the column so you can see how it was used as a guide first.

Note the painted rhodings on the gallows and bitts.



The *crank handles* are next but I needed to make the forward stanchions for them first.

You can make these all out of brass if you prefer. Like so many other parts, they can be made using boxwood if you're careful and

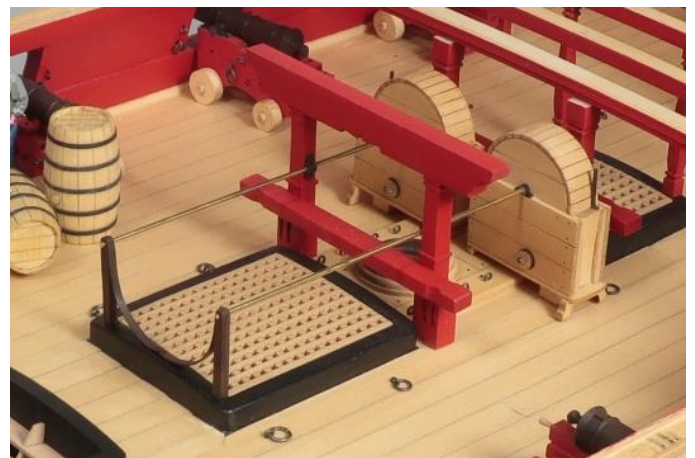
neatly build them. It becomes all about how you finish them or paint them once they are made.

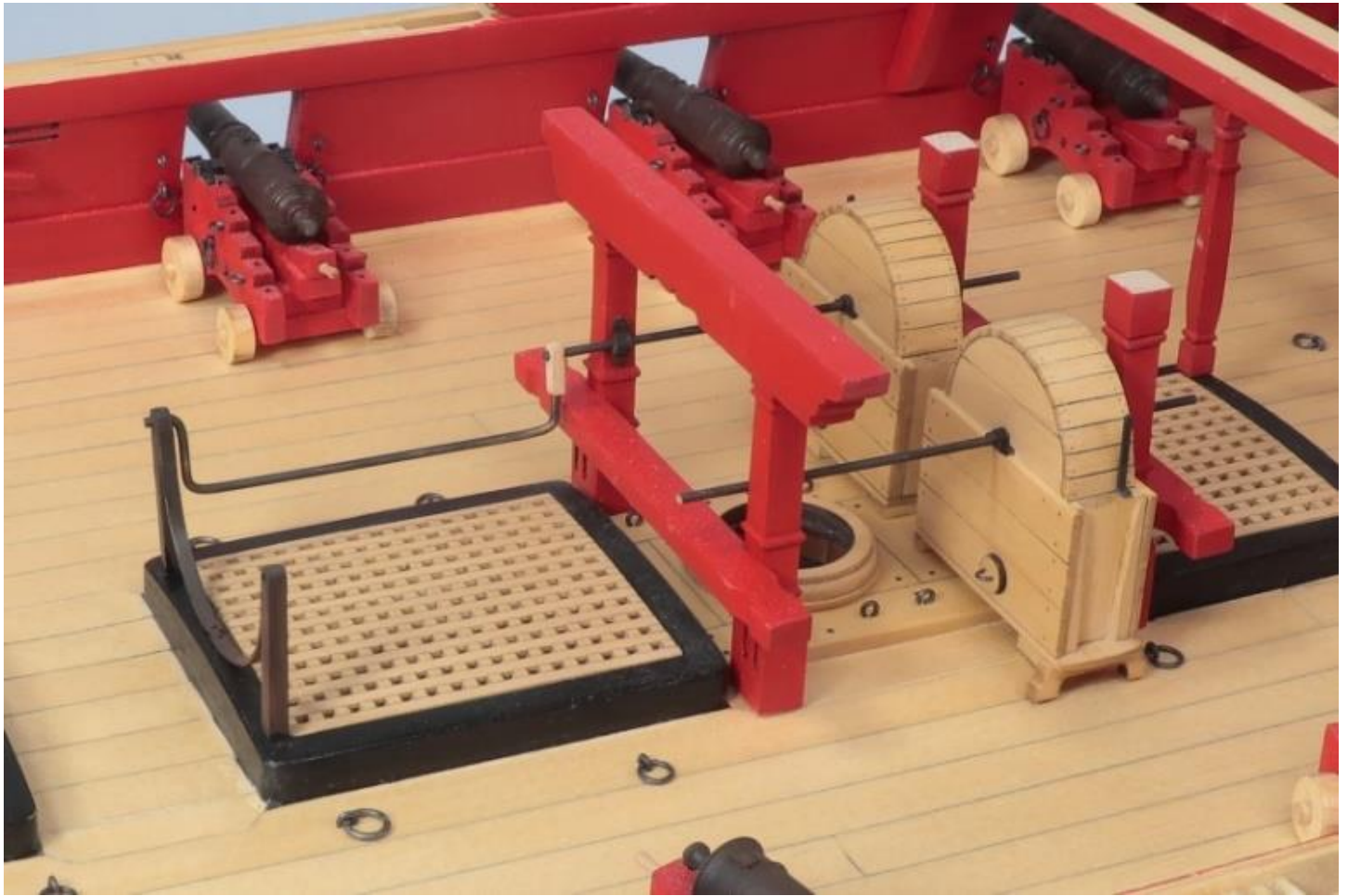
I used a 5/64 x 1/16" boxwood strip and shaped it as follows (right side of photo). Attached to this will be an actual brass strip that was bent to the curved shape needed and blackened. But first I have to determine the correct height for the wooden stanchion. I determined the height of the stanchion by using and sliding the 1mm brass rod as before. Then I marked that location and drilled a hole for the crank in the top of the boxwood strip and rounded off the top.



Once the height was good I glued the bent brass strip....1/64" x 1/16" brass strip to the wood stanchion (left side above). It's the same width so it will all look like the same piece if carefully sanded and painted and weathered.

Here is what it looks like on the model. This is also how I determined their height.



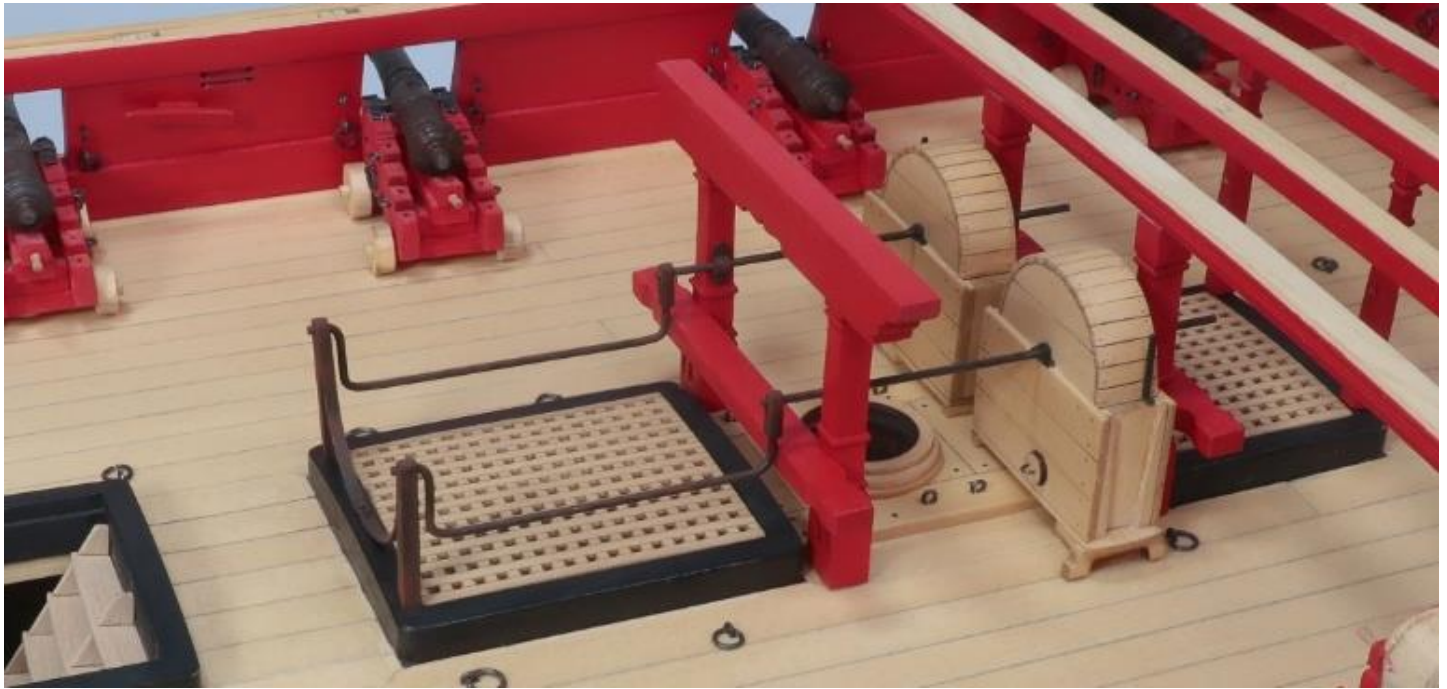


Then it was time to make the crank handles. I cut the center brass rod to length and blackened it. It was cut so the crank handles would clear the horizontal cross timber on the gallows. Basically the brass rod overhangs the horizontal timber of the gallows and jeer bits on the other end. See above.

The crank handle was bent to shape from the same size 1mm brass rod. But the square connector portion (same photo) was once again made from boxwood. I left it unpainted in the photo so you can see it. I used the same 5/64 x 1/16 strip. I drilled one hole for the main shaft and another for the bent crank handle into the end of the piece. I glued it onto the end of the bent crank handle. It's a very simple concept. Once painted black and brushed with some weathering powder it will all look very convincing....I hope.

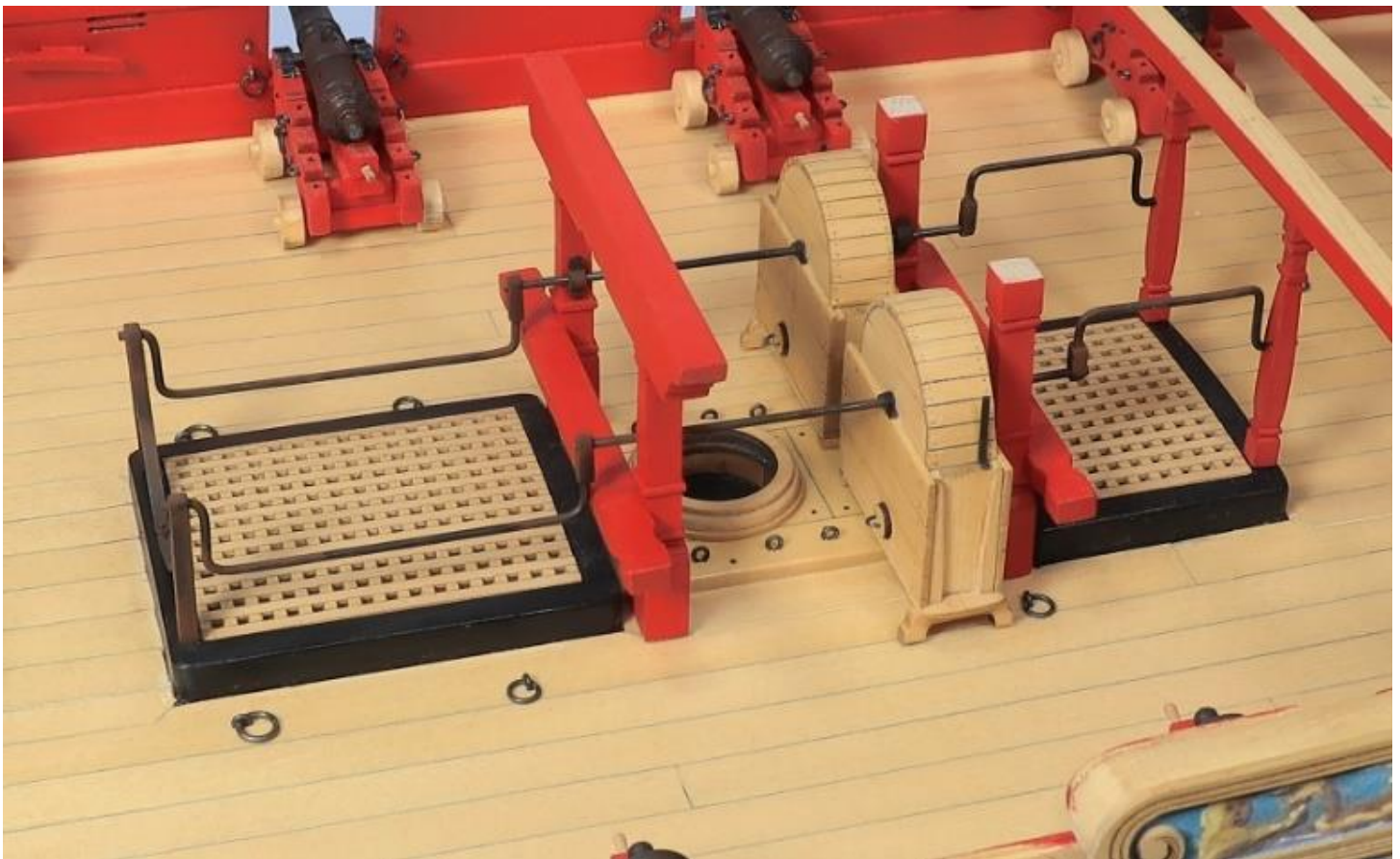
To position it, slide the wooden end onto the main shaft first. But the crank handle needs to be in the "up" position. Just rotate it so the bent crank is on the top. This will allow you to clear the cross beam of the gallows. Slide it on and then insert the forward end into the "iron" stanchion on the edge of the grating.

Below both crank handles are completed and painted....with some weathering powder. Next I will repeat this for the bent crank handles on the aft side of the chain pumps. I think it turned out pretty good for a low tech assembly.



I finished the crank handles on the aft side of the pumps. They were done exactly the same way as the forward crank handles. See below.

Then those two remaining qdeck beams were permanently glued in position along with the lodging knees. It feels good to get all of those done.



To complete this chapter the elm tree pumps need to be completed.

Making the elm pumps is pretty straight forward. Same as those for Cheerful and other Syren kits.

1. You can use a 7/10/7 ratio to transfer lines to each side of the 3/16" square pump tube. This will help you turn the 3/16 x 3/16 x 5/8" boxwood strip into a neat octagon. But it's such a short piece that like me you may be able to eyeball it and sand it to the octagon shape with a nail file. Carefully file the tube to an Octagon using the lines or your eye as a guide. Drill and bore out the top of the tube to a depth of about 3/8". Carefully use a bit that will leave the pump tube walls not too heavy.

2. File and shape the bracket for the handle. The part that sits against the pump tube is tapered thinner so it fits on one facet of the octagon. Use a slotting needle file 1/32" thin or less to file the slot in the top to a forked shape. This will accept the handle.

3. Place a 1/16" x 1/16" strip in a dremel to round it off for the spout. Using an emery board this takes only a minute. This will become your pump spout. Drill a hole into the end before parting off a 5/64" long spout. Glue it to the pump tube. All pieces can be painted first.

4. Using some black tape or even painted black paper, cut it into thin strips about 3/64" wide. This will simulate the iron band at the top of the pump tube.

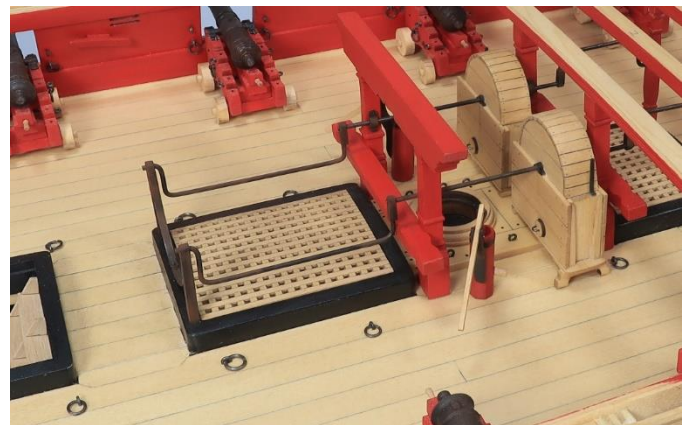
5. Glue the bracket into position. You could paint it black like I did or leave it natural.

6. Insert a length of 24 gauge black wire into the hole on the end of the handle. Like an eyebolt. Insert the end of this long wire into a pre-drilled hole in the bore of the pump tube. Adjust the length of the wire until the other pivot-hole in the handle sits in the bracket nicely. The handle should be in the downward position to be correct.

7. Finally insert a small length of 28 gauge black wire into the bracket hole and through the handle to lock it in position. Snip it off on both sides so it stand proud of the bracket's surface just a little bit.



Finishing all of the deck fittings and beams does really change the overall look of the model. It's starting to fill in with all of those wonderful details. Glue the elm tree pumps in position. Make sure the handle faces the right direction. This makes you want to add more of them which I will do shortly. Chapter 8 will be completing this same work but under the forecastle beams.



Just look at how the model is filling out nicely with detail. Just try not to snag those elm tree pump handles as you work on other stuff on the model!!!! Boy that forecastle area looks so empty!!

