



## Chapter Ten

### *Continuation of all inboard details...*

#### *Inboard stern details*

There are several details at the stern that need to be completed. The photo above shows all of them finished and painted. Let us break down each element individually.

**The seats** – There are two seats on each side at the stern. This was common but in many cases there was only one seat and on the other side a small

locker for holding flags and other items. For simplification and following the contemporary model of Surly in the Thompson collection, I have decided to go with two seats.

The seats are comprised of three pieces. The top, the front and the inboard side. Each of these was made using a paper template as a guide. The plans were used as a starting point and were tweaked until I achieved a tight fit for all parts. I used 1/32" thick boxwood sheet to make these parts using my finished templates to cut them out. I was careful to make sure the port and starboard sides matched when they were done...or at least were a very close

match. Once glued into position the seats were painted red.

**Transom Knees** – There are two transom knees which are quite substantial. Once again a paper template was made using the plans as a starting point. Taking the measurements from the plans it was eventually cut from a wider sheet of boxwood than needed so it could be sanded and filed to its finished shape. You will see that this process of starting with a card template is one that I use all of time. There are no real tricks to making these parts, for me it is all about the paper template to start and tweaking it to fit my model tightly. These were painted red after being glued into place.

**Boxwood cleats** - There are many cleats in the stern and along the bulwarks leading up to the bow. I used the Syren Ship Model Company laser cut boxwood cleats for all of these. I chose the 5, 7 and 9 mm cleats. Although the cleats on the plans may differ from these sizes in a few cases I just determined which were close enough to look best.



They were sanded to remove the laser char and shaped a bit. Then they were glued into position. A small length of wire was used to pin them into pre-drilled holes. I just went ahead and added all of the cleats found at the stern and along the bulwarks.

**Wire Horse for the Boom Sheet** – The horse for the boom sheet can be seen in the photo on the previous page. It is made from a small length of brass wire painted black. I have no idea what size it is because it was a scrap piece I found in my shop that looked like it was the perfect size. I made two very small washers from paper that were painted black and weathered to look like the other metal parts. These were slipped onto the wire horse before I pushed it into pre-drilled holes in the stern frames.

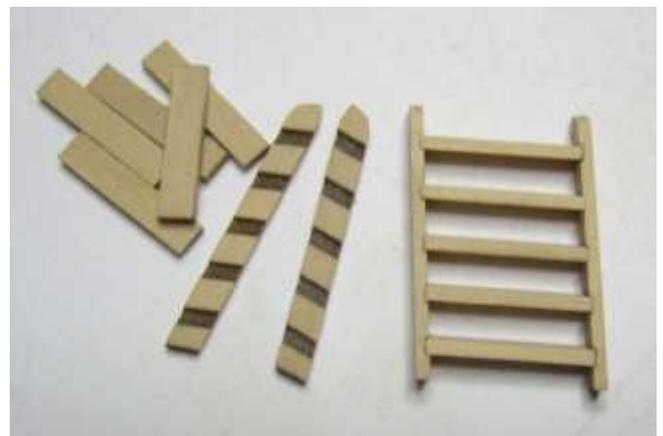
The two small washers can also be made by making a wire split ring from 28 gauge black wire and hammering it flat.

### **Bulwark details...**

Moving towards the bow I will finish the remaining details along the bulwarks.

This included making the eyebolts for the gun tackles beside each gun port. These are the ones on top!!! Below these are the eyebolts with split rings. These will be used to secure the breech line for the carronades. I did not make these at this time because it is easier to include them on your breech rope later on. More will be said about that later. These were made from 24 gauge black wire.

### **Bulwark Ladder –**





There is one ladder on each side lined up with its partner on the outside of the hull. You will find the template on the plans to cut the sides for the ladder. But just to make life a bit easier, print the next page as all of the elements are provided.

A photo on the previous page shows one ladder made up. Notice how the steps on the ladder are not at right angles to the sides. The steps must follow the slope of the deck bow to stern. So your ladder must be slightly skewed as shown. The templates on the next page show this angle and one for both sides of the hull are provided.

File the slots into the sides of the ladder so you can insert the steps. These are just strips of boxwood cut to length. Each piece is 3/64" thick. You could go thinner if you like but certainly don't go thicker.

They were painted red when completed and glued into position.

**Pin rails** – Inboard of the channels there is a belaying pin rail. It has several holes drilled through it for belaying pins. These were also made using 3/64" thick boxwood. They were cut to shape using the plans as a guide. The holes can be drilled on a small drill press or by hand, but it is visually important to keep them all lined up. The size of the holes all depend on what type of belaying pin you will be using. If you are going to buy them pre-made, check that their lengths are similar to those

shown on the plans. These commercial versions are almost always too thick and chunky, being out of scale to the other surrounding parts. So be careful selecting them. The other option is to turn them yourself from a hard wood like boxwood.

This is the option I chose. I started with a 3/64" x 3/64" strip and chocked it in my Dremel rotary tool to make the belaying pins. It takes some practice but after a while you can make them with a consistent shape and length. The photo below shows the belaying pins I made in position with a few rope coils on them. These were made in advance to see how they would look.



These boxwood belaying pins will not be as strong as the brass versions you can buy. But I am a light-handed rigger!! I won't pull the rigging so tight that they would be in danger of breaking.

The pin rail on each side was completed along with the pin rail at the bow. By completing the pin rail at the bow now, it will make it easier to fit the catheads shortly after. The pin rails along the sides of the hull were painted red with natural belaying pins. The pin rail at the bow was painted black.



You can see in the photo above how important it is to make the pin rail before you start making the catheads. Some questions to ask yourself before making the pin rail at the bow...because the catheads sit right against them.

- will the anchor cable clear the cathead?
- will the belaying pins clear the bowsprit?
- will the catheads be too close the forward gun ports?

Once you answer these and do some planning, create the pin rail as a paper template. Then cut it out and glue it into position.

**The Catheads** – The catheads can be a bit tricky. I find it easier to make each cathead in two pieces.



Both sections of the cathead were made using 3/16" x 3/16" strips of boxwood. The tail of the cathead (the inboard part) was made first. It is easy enough to cut the length of this piece. But you need to shape the inside edge to fit tightly against the bulwarks. It needs to be notched out to fit over the waterway and spirketing.

With the tail completed, rather than start the other piece with its two sheaves, I notched the cap rail where the cathead will be positioned. The cap rail was carefully cut so a 3/16" wide section could be completely removed to make the slot.

Only then did I start work on the other half of the cathead. I did this so I could rest the inboard part against the bulwarks and in position while I periodically test the outboard part on top of it. I would shape a little bit and then test it. Then shape a little more and test it again. When I was sure they would fit in position well enough I glued the two parts of the cathead together.

The two sheaves in the outboard portion were of course made first before they were glued together. A cleat was glued to it as shown in the photo above and it was painted.



### The Carronades...

I thought it was a good time to start making the guns. At least the carronades anyway. I want to have these all installed before I finish up the remaining fittings down the center of the deck.

I am using the brass carronades from Syren. The trunnion pins were glued into position. Then I added the laser cut monograms for the period. These are very thin and cut from .010 laser board. They are very tiny but once you get the hang of it they glue into position easily. I used the tiniest drop of CA on each. Each package comes with three sizes of monograms and I used the middle size for the carronades. Shown in the photo.

The carronades were now ready to be painted. The photo on the top of the page shows how I inserted a toothpick into the bore of each gun. Then stuck them in a block of foam packaging. This will make it easier to paint with an airbrush. I airbrushed them black with Badger Black Airbrush Acrylics. I almost forgot to mention, before you glue those monograms onto the brass guns and paint them,



make sure you wash the m thoroughly to remove any residue and oils that may affect the paint adhesion.

I didn't bother priming the guns first. BUT, you should if you feel it will affect the paint adhesion. I know it is probably best to do so but in all fairness I was just trying to save time. This means I will have to be extra careful when handling them after the paint dries.

Like many of the other metal elements on this model, I wanted the finish to be different from the

wood parts painted black. I used weathering powders from MicroMark to do this. Once again I used the "Rusty Brown" powder.



### Carronade Carriages...

The carriages for the carronade were also the laser cut mini-kits from Syren. I am not very fond of repetitious tasks such as these. There are many small parts for each carriage. To make it more bearable, I decided to just make five at a time.

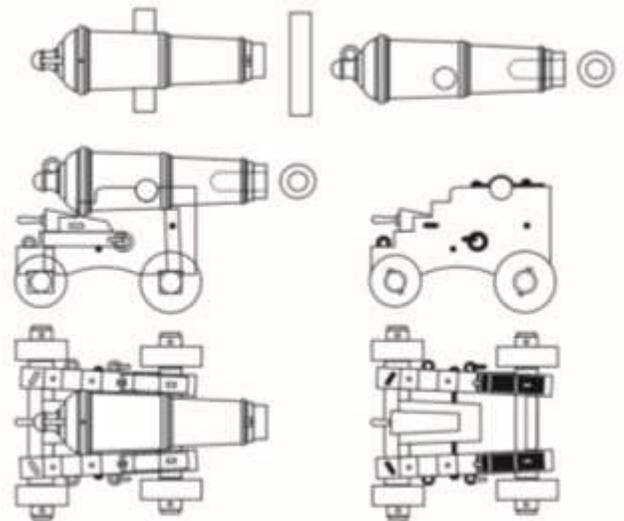


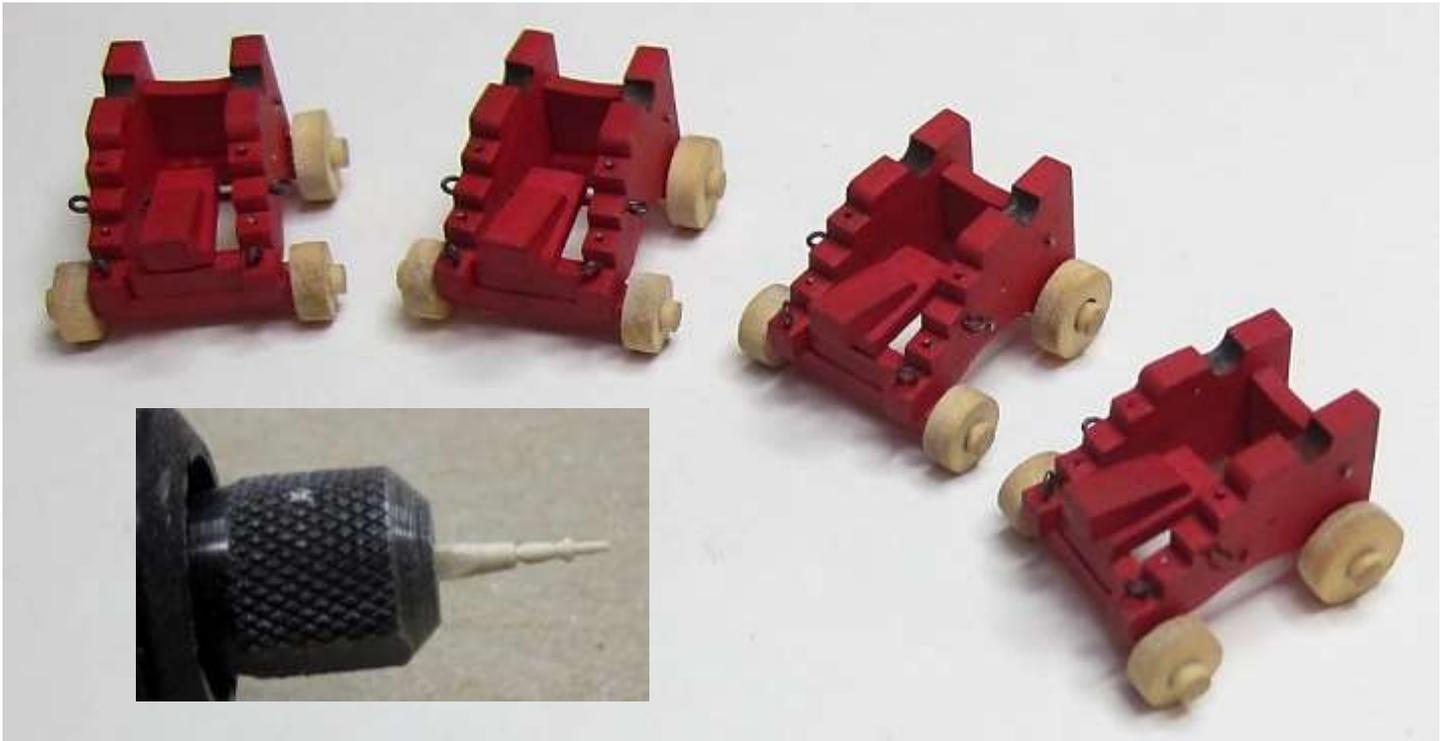
To begin, I removed all of the laser char from each piece using a sanding stick, emery board and needle file. Then the ends of the axles were rounded off for the trucks (wheels). Next I decided

to paint all of the individual pieces red before assembling them. I am not sure if this is the best approach but it seemed to work out OK with no issues with glue adhesion.

I left the ends of the axles natural because I want to see how the carronade would look with the trucks left natural as well. I could always paint them red later or even black which is how they are often shown on contemporary models.

I built a really quick jig out of scrap wood to help with the assembly of the carriages. See the photo below right. This jig basically held the axles in position so I could glue the two pieces on top of each of them as shown in that same photo. Follow the plans carefully for all of these elements as the rear axle is longer than the front axle. It will be easy to mix these up if you are moving too quickly.





Then the sides of each carriage (brackets) were glued on top of the axles. I was careful not to glue them to the jig. They were removed from the jig and any paint was touched up.

A small length of 24 gauge black wire was cut and inserted into the hole on each side of the brackets. The wire span across the inside of the carriage so the carriage bed can rest on top of it. The ends of the wire snipped off but left proud of the surface to simulate the look and feel of the real thing. Just allow the wire to stand proud of the surface by the tiniest amount. Touch the end up with some black paint after filing it down flat and neat.

Finally the trucks were glued onto the axles....the smaller wheels go in the back of the carriage.

Lastly, the carriage bed and quoin was glued on top of the wire that spans across the interior of the carriage. See the photo above and the plans for the details. But we are not quite finished yet. There are still many more simulated bolts and eyebolts to add. These were made with 28 gauge black wire. You can find the locations for these on the plans.

For the bolts, the wire was inserted/glued into pre drilled holes. Then as before, the end was snipped off and filed flat. The ends left to stand proud just a little bit. This included along the top of each bracket where you see those steps and also on the sides just above the front wheel.

Tiny eye bolts were formed out of the wire and glued into position. BUT, the eyebolt for the breech line on each side of the carriage was omitted. These are more easily added to the breech line first and inserted after the carriages are glued on deck. But more on that later.

The very last element to add to each carriage is the quoin handle. These are very small much like the belaying pins....but smaller. I started with a 3/64" x 3/64" boxwood strip and turned them with my Dremel rotary tool. See the photo above for that detail.

The paint was touched up and I glued the brass carronade on each carriage. See the photos on the next page. Keep in mind that the eyebolt and ring for the breech rope is shown in those photos for reference only. They were removed shortly after



for the reasons mentioned earlier. These will be added later.

The same photos show the trunnion caps. These are just thin strips of heavy paper glued on top of the carriages and over the trunnion pins. A small length of 28 gauge wire was cut the same width as these strips and glued to the aft edge of the trunnion cap to simulate the hinge.

You can test the carronades on deck but don't glue them into position yet!!!

### **Rigging the guns...**

The breech rope was made using a technique I saw on an actual contemporary model. The splice for

the button of the Carronade was simulated by creating the splice ahead of time.

I am using .035 light brown rope from Syren Ship Model Company of course. All of my .035 size rope is four stranded. Four stranded rope just makes the splice work nicely. Essentially, the entire breech rope is made to length....3" long. See the photo on the next page. The eyebolts and rings were slipped on before the last end was finished off. You can see that in the photos. The eyebolts were 28 gauge wire while the split rings were made from 24 gauge black wire.





The eyebolts with split rings were made in advance. You will need four of these to make each breech rope. Seize the first ring the end of the breech rope. I used sewing thread for the seizing.

Then slip two more rings onto the rope. These are the two that will be inserted into the sides of each gun carriage.

Hopefully you have drawn a line 3" long on a piece of paper for this next step. The last split ring is seized on the other end. But you must ensure that once it's done, the final length of breech rope is just 3" long. Or as close as you can get it to that length.

To make the simulated splice in the center of the breech rope, insert a sharp awl through it. Make sure that you have two strands of the four stranded rope on each side so it's even. While the awl in position, brush on some white glue that is diluted with water. Don't dilute it too much. After it dries you want the splice to be stiff and hold its shape. Don't forget to make sure that one of the loose eyebolts with split rings is on each side of the



splice first. If you forget, then you will have slide it over your splice thus wrecking it.



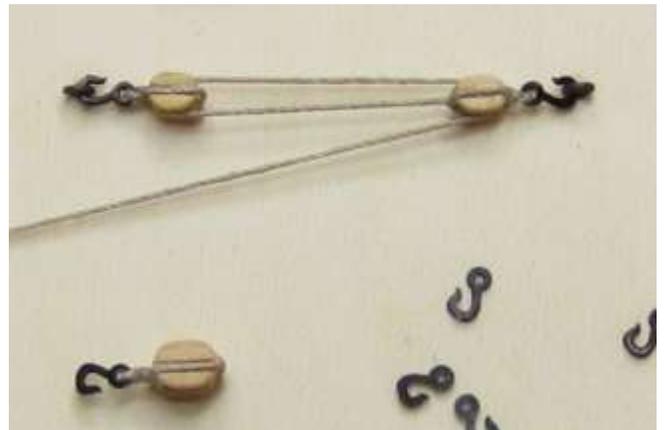


Carefully glue the eyebolts that are loose on either side of the splice into a pre-drilled hole on each side of the carriage. Then “even more carefully”, slide the splice onto the button of the carronade.

You are now ready to insert the eye bolts on each end of the breech rope into the pre-drilled holes in the bulwarks. This can get tricky at first. But after the first two you will get the hang of it. I used a bent tweezers to gently insert the tail of the eyebolt into the holes.

You will no doubt have to make many adjustments to the breech rope so it hangs naturally. See the photo on the previous page. Some paint touch-up was also required on my carriages. I was able to do this without having to glue the splice onto the button of the carronades. The glue would have just pulled the paint off the brass gun. So I made sure the splice was not too large. It was tight enough so it wouldn't fall off and not too tight that it marred the surface of the carronade.

I am assuming this is not your first ship model project. The gun tackles were made in the usual fashion. I used 1/8" single blocks and 3mm photo-etched hooks.



The typical gun tackle is shown above. I think the photo speaks for itself. .012 light brown rope was used for the tackles. Should you prefer to go larger it would be OK also. But I would not go larger than .018 light brown rope. That size is pushing the limits of scale but is acceptable seeing that these tackles were usually made with 1" rope and maybe even 1 1/4" rope in actual practice. The blocks



would have been six inches long. The rope was left a bit long so after securing it to the eyebolt on the bulwarks and the eyebolt of the carriage, the loose end could be glued on deck. Any excess was snipped off and a rope coil glued on top of it. The rope coils were made in advance by wrapping the line four times around the handle of one of my paint brushes. I applied some diluted white glue and waited for it to dry. Then I slipped the coils off the brush and manipulated it a little to make it look natural.

I also practiced a little making some test rope coils which will eventually hang on the belaying pins. They aren't glued into position yet. It's just a practice run. They will of course be added after the rigging of each line is completed.

You will also notice that after much consideration, I decided to paint the carriage trucks and axles red. I think it looks much better than the natural trucks but it's just a matter of your own personal tastes.