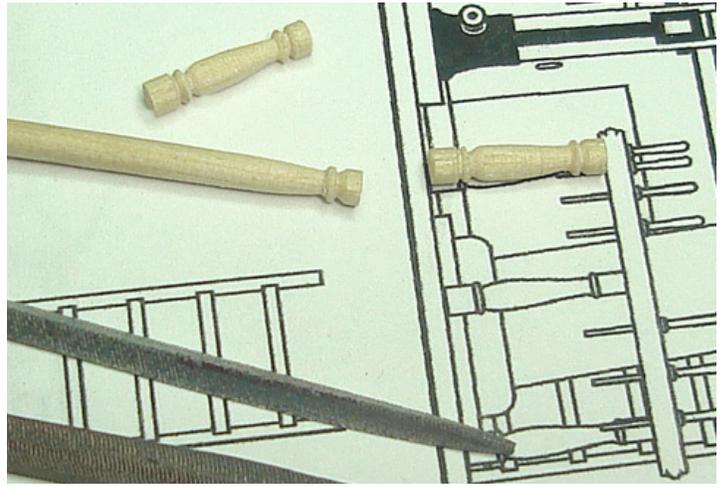


**Two 1/32" thick layers for the fife rail**



## Chapter Thirteen **Finishing the Deck Fittings**

There are many additional fittings forward of the main mast which will be built using the same techniques you used to complete chapter twelve. Others such as the fife rail will introduce you to some different techniques that will serve you well on future ship modeling projects. The construction of these fittings is described in detail below.

### **The main fife rail...**

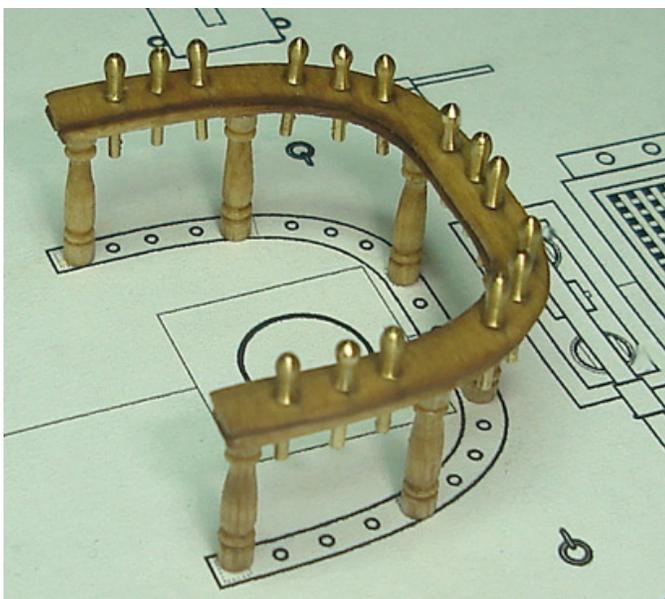
You will notice in the photos provided that there is an elevated square section of decking where the main and fore masts are located. Before you start constructing the fife rail and other deck fittings it would be best to complete these thicker deck sections. This feature was a common detail on sailing ships and helped keep water from seeping into and around the mast wedges and coat. Glue five lengths of 1/8" x 1/32" wood strips together edge-to-edge to create a equal sided square. You can simulate the caulking between the planks with a pencil. Center the planked pad on top of the mast hole and glue it into position. Then re-drill and file the mast hole through the platform as shown in those same photos. Note how the planks on this elevated section run perpendicular to the deck planking.

The top rail for the fife rail should be assembled first. The rail is actually assembled with two layers of laser cut rail. The wood grain is aligned 90% on the second layer and once glued together it will be stronger and less likely to split.

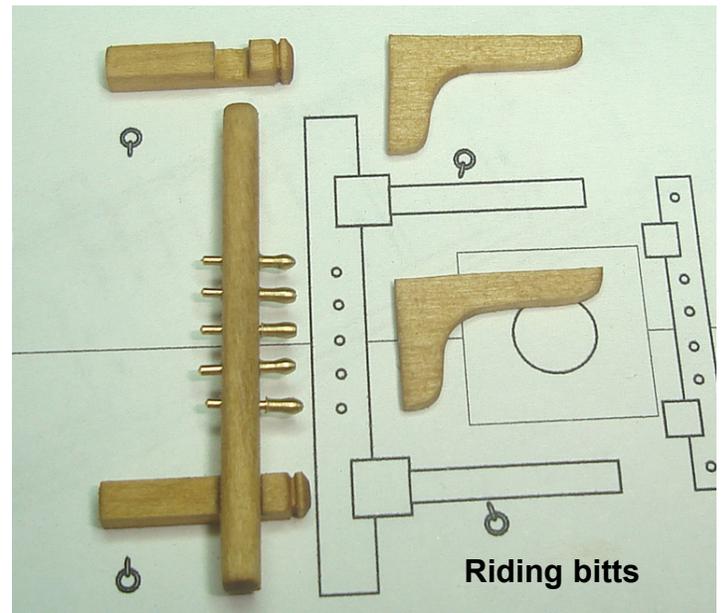
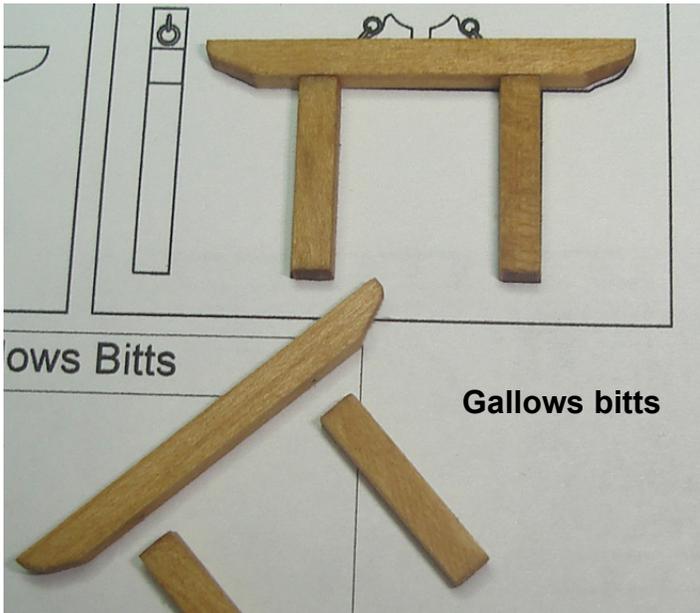
Rather than just glue the two layers together as is, you can round off the inside and outside edges of each layer first. By doing so it will create a nice double beaded detail to the rail after they are glued together. You can see this edge clearly in the photos below.

Mark the locations for the belaying pins along the top of the rail. Drill them very carefully. Even with the laminate it is still possible that the rail could split along the grain of one of its layers. Sand both sides of the rail afterwards to smooth it out and thin it down slightly. Stain it when you are finished.

The six stanchions that support the fife rail can be produced in many ways. You should start with a round 1/16" dowel. Cut six pieces that are approximately 1" long. Hold



**Completed fife rail**



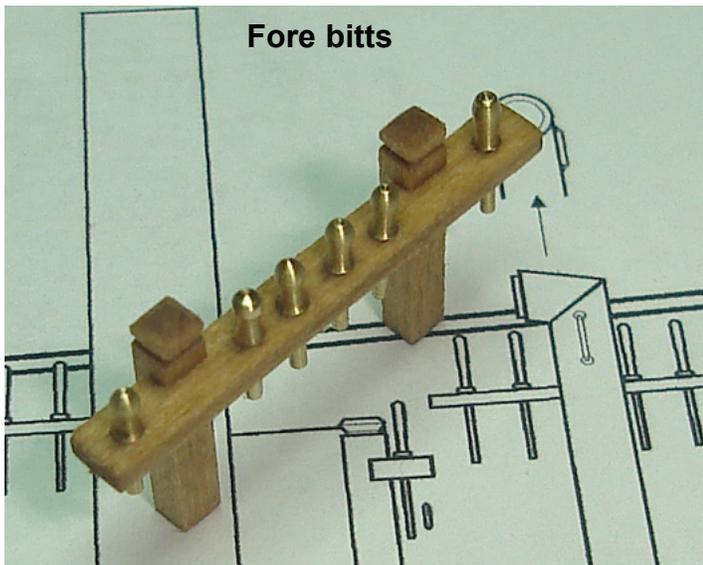
each piece against the plans and mark the locations where each groove should be sanded to establish the “fancy” profile of the stanchion. You can insert the extra long dowel into the chock of a power drill. After you turn the drill on, the reference lines should still be visible as the stanchion rotates at high speed in this “poor-mans-lathe”. Use some mini files and start making the grooves and shaping the stanchions to suit. This technique does take some practice but can produce some good quality work.

The other alternative would be to manually file the grooves into each stanchion without the aid of the power drill. Don't cut your dowel into smaller 1” segments. Use a longer piece several inches long. Mark your reference lines for the stanchion on one end of the dowel. Hold the dowel down with your finger (left hand) on a flat surface. Position a file on top of the reference lines with your other hand. Then you can roll the dowel back and forth on the flat surface with your finger while applying slight pressure to the file. This will slowly create the groove and “fancy” profile

for the stanchion. It may sound more complicated but this method offers you significantly more control over where each filed groove will end up. You can slowly rotate the stanchion so you can keep the file from wondering off of your reference marks. This was the method used on the prototype to create the stanchions in the photo provided.

Stain each stanchion and glue them into position on the fife rail. Glue the brass belaying pins into the holes and paint them. To finish it up the fife rail can be glued down “firmly” to the deck. Keep in mind that there will eventually be a lot of rigging belayed to this rail which will no doubt place some stress on it. This would be a good time to ensure that the rail won't pull free from the model while you are in the process of rigging it. You might want to consider using some 28 gauge wire to peg the stanchions of the rail into pre-drilled holes on deck. Simply insert a small length of wire into a pre-drilled hole on the bottom of each stanchion and leave some of the wire showing so that portion can be inserted into the “properly placed” holes you drilled





on deck. Be very, very careful to transfer the correct location of the fife rail from the plans to avoid drilling the holes in the wrong place. Once the fife rail is glued down it will be impossible to remove it without destroying it in the process.

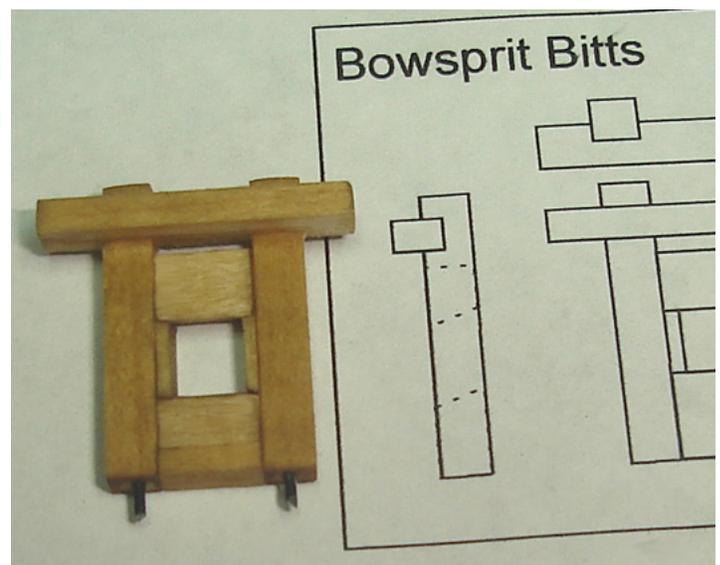
#### Additional hatches and grating...

You can construct the coamings with gratings for the two hatches midship just like you did for those aft of the main mast. The only noticeable difference would be for the main hatch. Note how there are two separate gratings that fit into that coaming. The forward grate also has the front corners notched to allow the anchor cable to pass through them. You should drill a small hole as large as the notch into the deck beneath them. These are needed to push the ends of the anchor cables into them to simulate the cables traveling to the deck below. You can also paint the area surrounding these holes black to make it appear like there is a vast open space below the grating. Logically it would be easier to paint and drill these holes before you glue the grating into position.

#### Gallows bitts...

There are two gallows bits positioned alongside the coamings mid ship. These were a common fitting on brigs at the time. Spare yards and masts, the ship's boat, the oars for the sweep ports and any other materials would be stored on top of these. We will be lashing the ship's boat and oars on top of the gallows bitts later in the project. The two support posts for the bitts are made from 3/32" x 3/32" basswood strips. The tops were made using 1/8" x 1/8" stock. The shape for these can be copied from the inboard plan sheet. To avoid a blotchy appearance you can stain each piece before you glue them together.

Both gallows bits are identical except for the two chocks positioned on top of them. The ship's boat will sit securely in these.. The chocks will be custom shaped to fit the bow and stern of the ship's boat later and they shouldn't be added at this time. Other than this detail, care should be taken to construct a matching pair. Glue them into position on deck as shown on the plans.



#### The riding bitts...

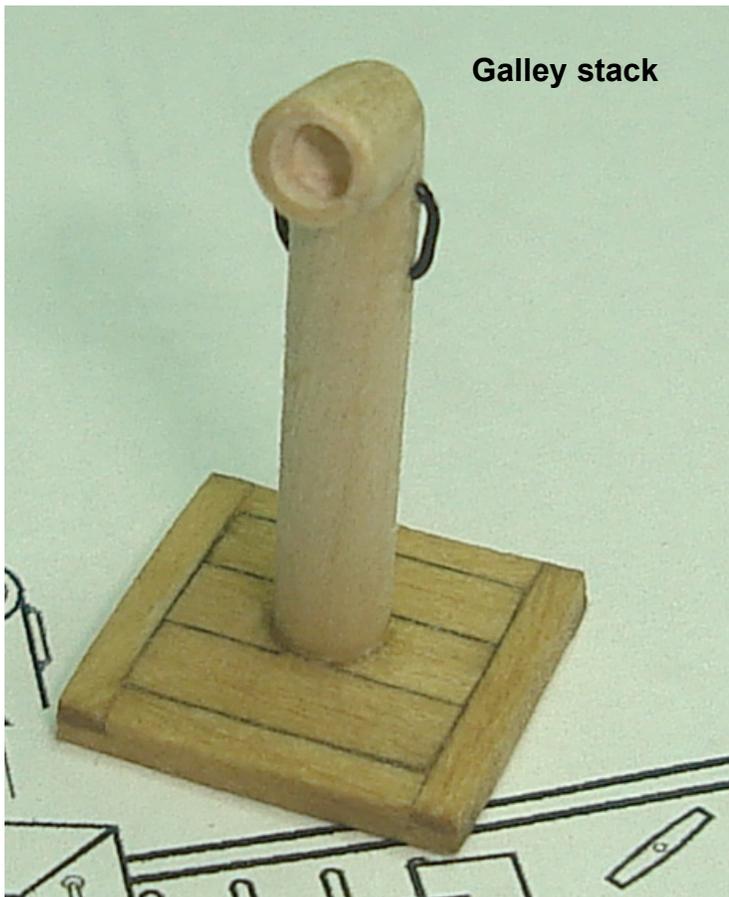
The riding bitts are located just aft of the fore mast. The anchor cable will wrap around its heavy beam before being run down those two square openings in the main hatch. The aft side of this heavy beam is rounded off. This timber is made using a 3/16" x 1/8" wood strip. Drill five holes along the center of the beam for the belaying pins. The two posts are made from 1/8" x 1/8" stock. File a groove around the tops of the posts with a needle file. Then chamfer the edges above the groove with some sandpaper which will finish it off and add a nice detail. The two posts need to be notched to accommodate the heavy beam. The notches can be made using a sharp #11 blade in your hobby knife. Then clean them up with a needle file. Two knees help support the riding bitts. The knees are 1/16" thick and glued to the forward edge of each post. Glue the riding bitts on deck but don't forget to create the raised pad of planking around the base of the fore mast first.

#### Fore bitts...

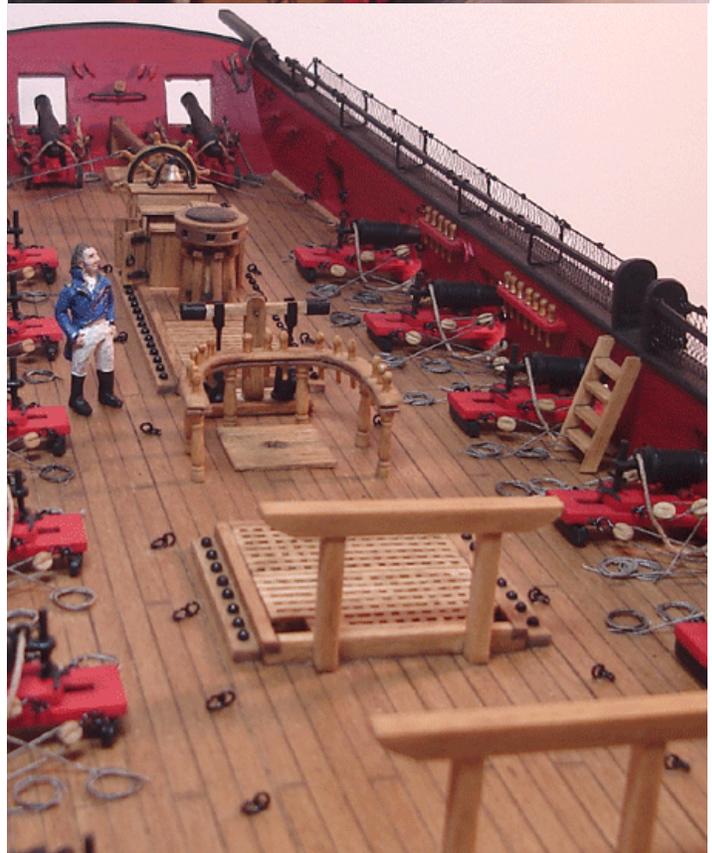
There is a small belaying rail in front of the fore mast. It is constructed very similar to the riding bitts. Only this time the posts are made from 3/32" x 3/32" stock. Notch each post to accommodate the 1/16" x 1/8" cross beam. The cross beam should be drilled for the belaying pins.

#### Galley stack...

The galley stack sits on top of a raised platform. The platform is 1/16" thick. It is made exactly like the platform the pumps sit on top of. The only difference of course being the size of the completed platform. The stack is made by cutting a 1/8" dia. Dowel to length. Two pieces are needed. You can see in the photo provided that the dowel needs to be cut at an angle where the two pieces are glued together. The end of the stack is drilled out so it looks like a hollow pipe. You don't have to drill very deep because it will be painted black afterwards and it will be difficult to tell just how deep it is at that point. You will notice there are two handles (one on each side) on the stack. These were used to rotate the galley stack so the smoke from the stove could be directed into the wind. Use 28 gauge black wire to form these. Glue them



**Galley stack**



into pre-drilled holes. Paint the stack black before you glue it on top of the platform. This wasn't done on the prototype so it would be easier to see the handles in the photo provided.

**Bowsprit bits...**

The bowsprit bits are made just like the fore bits. The only difference is the fact that some packing pieces are fitted between the posts. 1/8" x 1/8" strips were used for the posts. The tops are left flat with no fancy grooved details. The cross piece is made using a 1/16" x 1/16" strip notched into the posts. Some scrap pieces of 1/8" stock was used to shape the packing pieces between the posts. Note on the plans how the top and bottom pieces are angled to accept the heel of the bowsprit. The square opening is tricky to establish at the correct angle but you should pay close attention to the plans while establishing it. Two additional filling pieces line the sides of the opening. Also note in the same photo how the bowsprit bits are pinned into the deck. This will give it some extra strength when glued into the deck. It will be less likely to pull free if the rigging applies to much downward tension to the opposite side of the bowsprit.

**Eye bolts and split rings...**

The final task in this chapter will be to create the 22 eye bolts with split rings you see along both sides of the deck fittings. Check the plans for their locations. 28 gauge black wire was used to create them. You can see some of them in the final photos of this chapter. A small figure was added to the photos to show scale.