



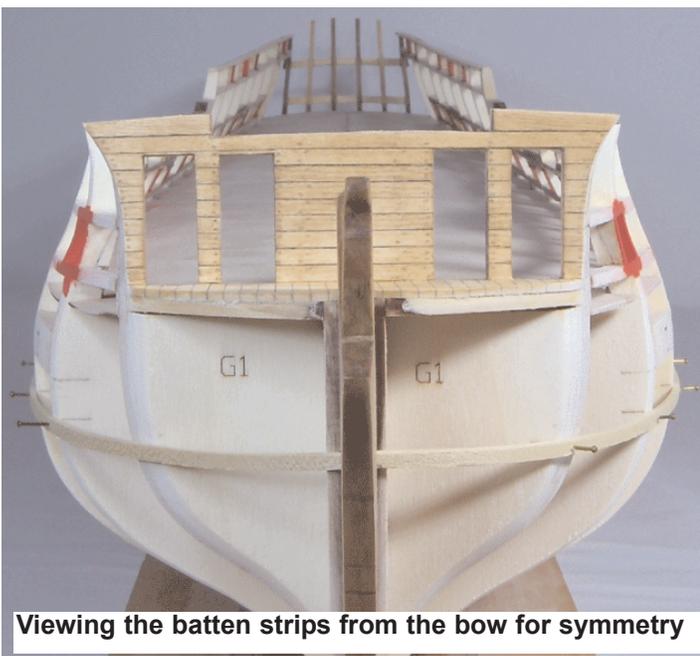
Batten strip in position which references the top of the wales.

Chapter Five

Planking the hull above the wales...

Planking any ship model can be a challenge. In order to make the process more manageable, it will be broken down into smaller steps. The first thing you need to consider is whether or not you will paint your inboard bulwarks and gun ports. If you have decided to paint them bulwark red, then this would be the best time to paint them inside and outside. Paint the inboard faces red and the outboard area surrounding each port opening. The prototype model will be painted and you will see that this step has been completed in the photos that follow.

Each bulkhead has one more laser-etched refer-

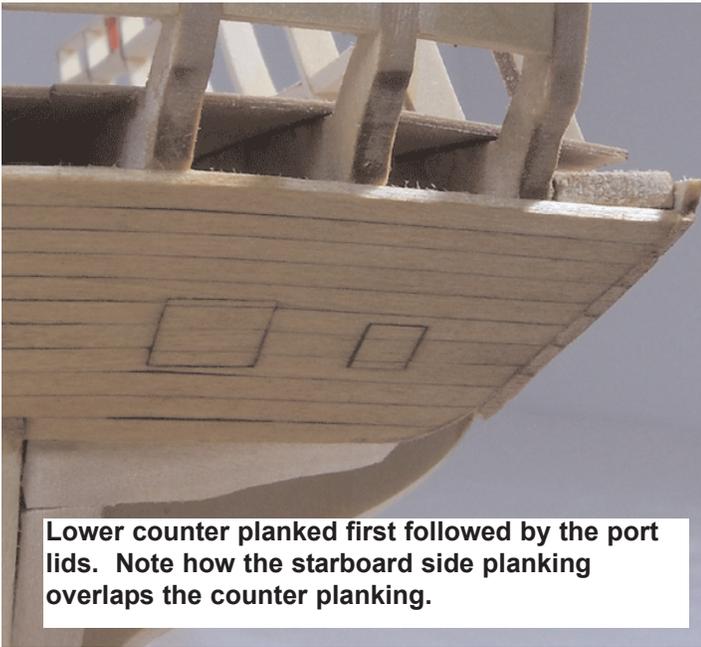


Viewing the batten strips from the bow for symmetry

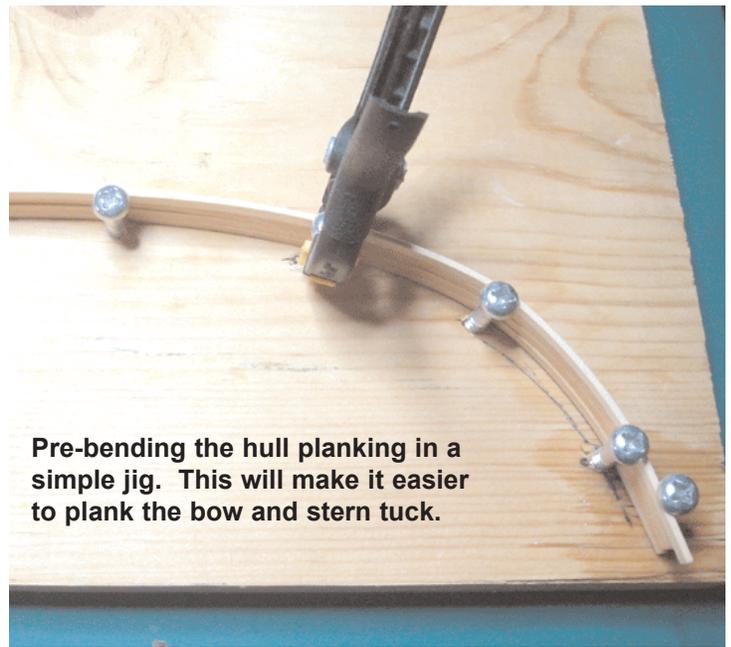
ence line that hasn't been used yet. These are the reference lines below the sweep port framing. It represents the top of the wales. Use a batten strip like you have done many times throughout this project. This is probably the most important batten strip you will need to use. In addition to creating the smooth run for the wales from bow to stern, it will also establish the run of the planking across your entire model. It will create the sheer line for the profile of your model. Place the batten on both sides of the hull so you can check it from the bow and stern. You should make sure that the wales are symmetrically located so your planking will be at the same heights on both sides of the model. You can see the battens being used on the prototype in the photos provided. Note how they are lined up evenly when viewed from the bow. Mark your reference lines in pencil after you tweak them and are satisfied.

Planking the lower counter first...

Plank the lower counter first. Use 1/8" x 1/16" strips. If you want to show the caulked seams between each plank, then run a soft pencil down their edges. It will be easier to plank the counter if you turn the model upside down. Remember to support the bulkhead extensions and stern frames by propping your model up so it is not resting on your work surface. This will help stop your bulkheads and stern frames from breaking as you plank the lower counter. Apply the first plank on the top of the lower counter following the curve created by the break/transition onto the upper counter.



Lower counter planked first followed by the port lids. Note how the starboard side planking overlaps the counter planking.

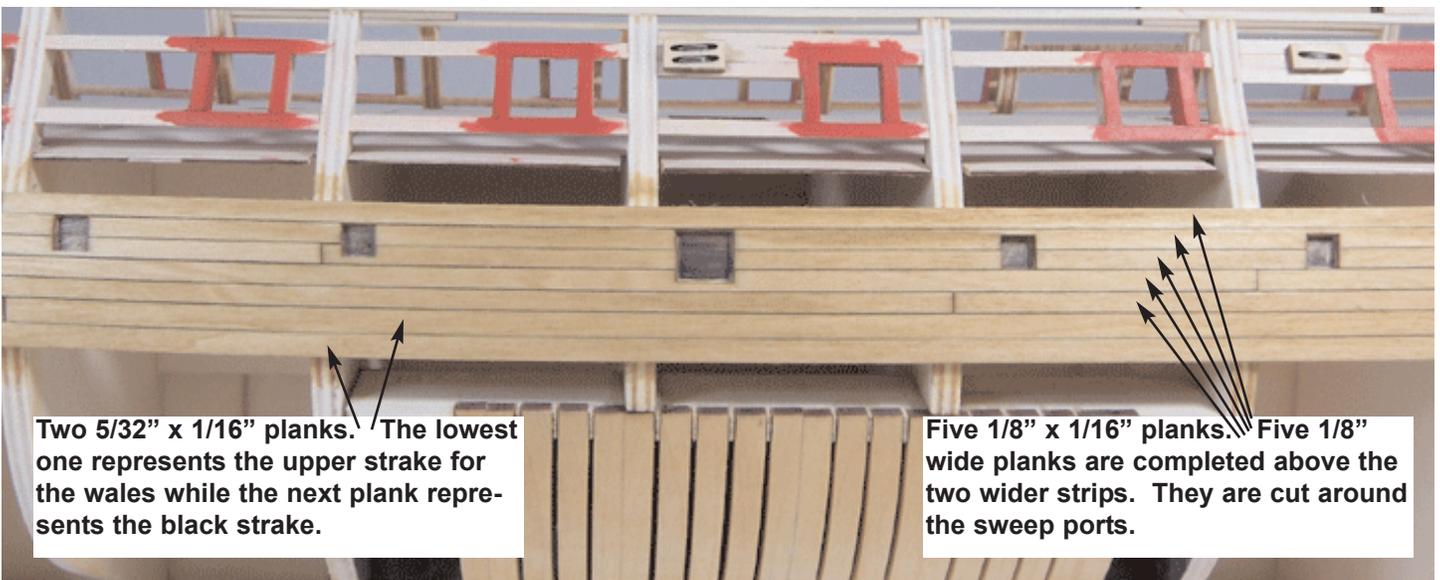


Pre-bending the hull planking in a simple jig. This will make it easier to plank the bow and stern tuck.

Continue to apply additional planking until you reach the gun port openings along the counter. You must notch the planking around these ports. Hold a planking strip in position and mark the locations that need to be notched out. Leave approximately 1/32" rabbet around each port opening. This 1/32" reveal around each port will be used as a stop when you add the port lids afterwards. These four ports will be modeled with their lids closed. Even so, try to create a consistent rabbet around each port opening in order to get some practice for planking around the gun ports on the port and starboard sides later. Those ports will have open lids and the rabbet (port stops) will be very visible. Continue the planking process until you reach the bottom of the lower counter. Don't worry about cutting the

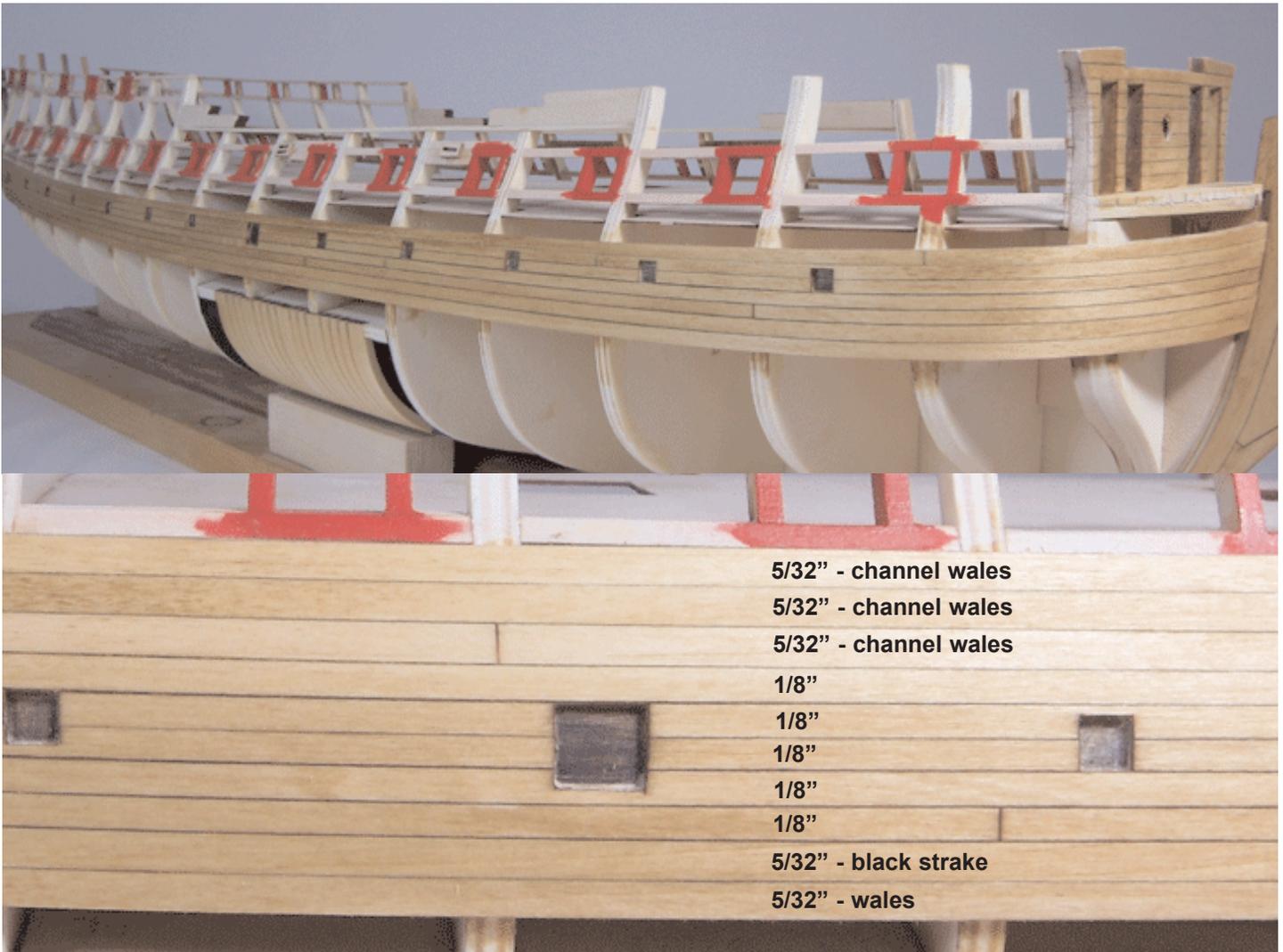
opening for the rudder yet. This will be done later in the project. See the photo provided which shows the lower counter planked and the port lids completed. You can see a few planks that were added to the sides of the hull. Note how these planks overlap the counter planking.

To create the port lids for the lower counter, glue four (1/8" x 1/16") strips together edge to edge. This will create a strip that is 1/2" wide. Hold this strip against each port opening lining up the seams with the planking surrounding each gun port. Try and match the pattern of the planking seams when you create the port lid. Mark the sides of the port with a pencil to get the correct angles in order to match the planking seams. Then cut the strip so you have a piece that will fit



Two 5/32" x 1/16" planks. The lowest one represents the upper strake for the wales while the next plank represents the black strake.

Five 1/8" x 1/16" planks. Five 1/8" wide planks are completed above the two wider strips. They are cut around the sweep ports.



into the width of the opening. Then hold that piece against the hull so you can mark the height in pencil. Trim it to fit neatly into the opening. Push the lid into the opening so it rests firmly against the rabbet you created in the port framing. If you are satisfied with the results, glue it into position. Repeat the process for all four gun port lids. Sand the lower counter smooth and stain it with the finish of your choice. The lower counter will be left "bright" on the prototype. The port hinges will be added later in the project which should prevent them from being damaged while planking the hull. If you chose to treenail your hull planking, that could also be completed at this time.

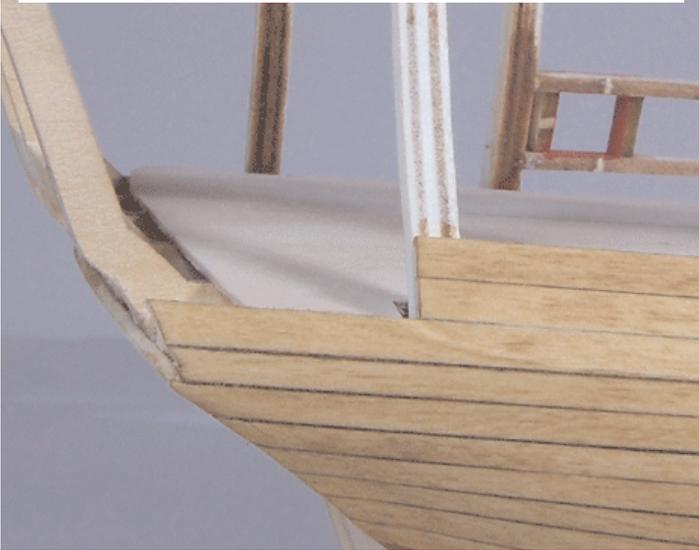
NOTE: On the prototype, a single port lid was used for the two larger ports on the lower counter. You will notice that on the plans, split port lids are shown. Either type is historically plausible. You can choose either style depending on

which one you find more attractive. No one really knows for sure which style was used on the Confederacy and both styles were a common occurrence.

Pre-bending your hull planks using a simple jig...

Once the lower counter planking is completed, you can start planking the port and starboard sides of the hull. To make the planks bend easily around the curved bow, you can create a simple jig like the one shown in the photo provided on the previous page. The jig should approximate the curve of the bow and even be slightly more pronounced. Soak your planks for a short time and place them in your jig while they are still wet. Wait until they are 100% dry before you remove them. They should retain the curved shape with minimal spring back. It will be much easier to glue them around the bow if you don't have to

The three channel wale strakes at the stern. Note how only the lowest strake is run off the stern. The two strakes above that one are cut flush with stern frame JJ.



worry about the planks snapping or creasing under the pressure. You should create an ample supply of ten to twelve $1/8' \times 1/16''$ strips and ten to twelve $5/32'' \times 1/16''$ pre shaped strips. The wider strips will be used to plank the lower wales, black strake, and channel wales. These pre-formed strips can also be used to plank the “tuck” at the stern.

Adding the first two planks...

The first plank positioned on the hull will represent the TOP STRAKE for the main wales. It will be $5/32'' \times 1/16''$. The top edge of this strip should be aligned with the reference marks you created along the bulkhead edges. Take one of your pre-formed strips and insert the bow end into the rabbet formed along the stem. Glue it into position along the hull. Each strip will not be long enough to cover the hull in one length. The Confederacy has a very long hull. Hull planking on the actual ship would have been cut to 25' to 30' lengths depending on the timber available. You should try and simulate these plank lengths along your hull as well. But our model will have a second layer of planking added for the wales and black strake. So it isn't necessary to show the scale plank lengths for these. Don't forget to darken the plank edges with a pencil if you have decided to simulate the caulking.

The second strake added to the hull will represent the black strake. It will also be $5/32'' \times 1/16''$. Glue it onto the hull above the wale strip you just completed. Don't use so much glue that it will seep out between the planks and ruin the finish of the planking surface. Most of this can be scraped or sanded off afterwards but it will change the porosity of the wood in those areas. The stain will not coat the wood evenly and appear to be blotchy. NOTE: The plans are drawn to scale and show the true dimensions for every plank above the wales. Examine them for the number and placement of the different planking sizes being discussed.

Adding the next 5 strakes of planking...

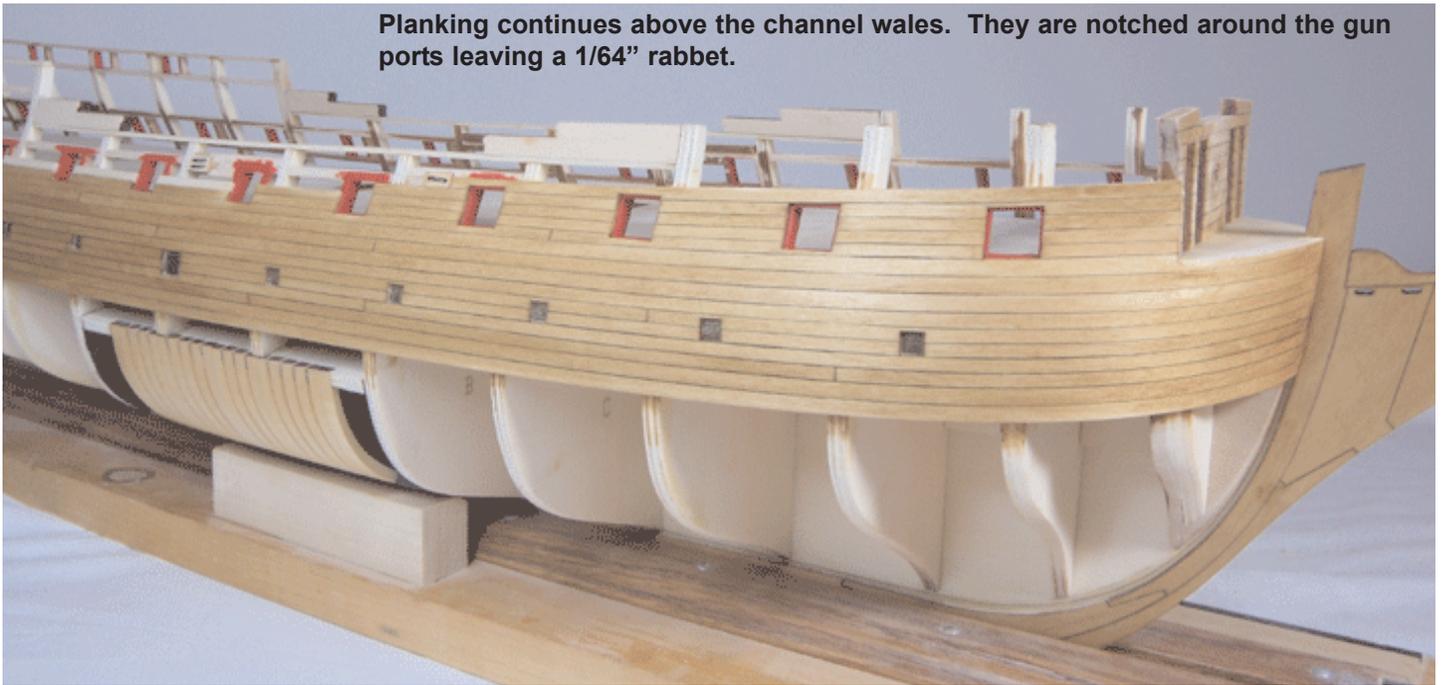
The next five rows of hull planking will be $1/8'' \times 1/16''$. Glue them above the two wider strips you initially completed. As the photo provided shows, these planks should be cut around the sweep port openings. Test a strip against the hull before you glue it into position permanently. If it runs through the outlines for the sweep ports you drew along the hull, then the planks need to be marked and notched around them. That same photo shows the five strakes added to the hull which were carefully cut around each sweep port. The lids for these will be added later.

The channel wales..

The next three strakes you will add to hull represent the first layer of the channel wales. The channel wales (or gunwales) were a thicker wider band of planking above the main wales. The chain plates were secured to these thicker, heavier planks. Use $5/32'' \times 1/16''$ strips for the channel wales. The last of these three strakes should clear the gun ports and not require any notching around them. If by chance the upper strake does overlap any of the gun ports, they need to be notched to leave a $1/64''$ wide rabbet around them. This may only happen with the aft-most ports or the bridle port at the bow.

NOTE: The first strake of these three strips will extend off the stern as shown in the photo provided. The next two strakes should be cut flush along the last bulkhead piece “frame JJ”. This will

Planking continues above the channel wales. They are notched around the gun ports leaving a 1/64" rabbet.



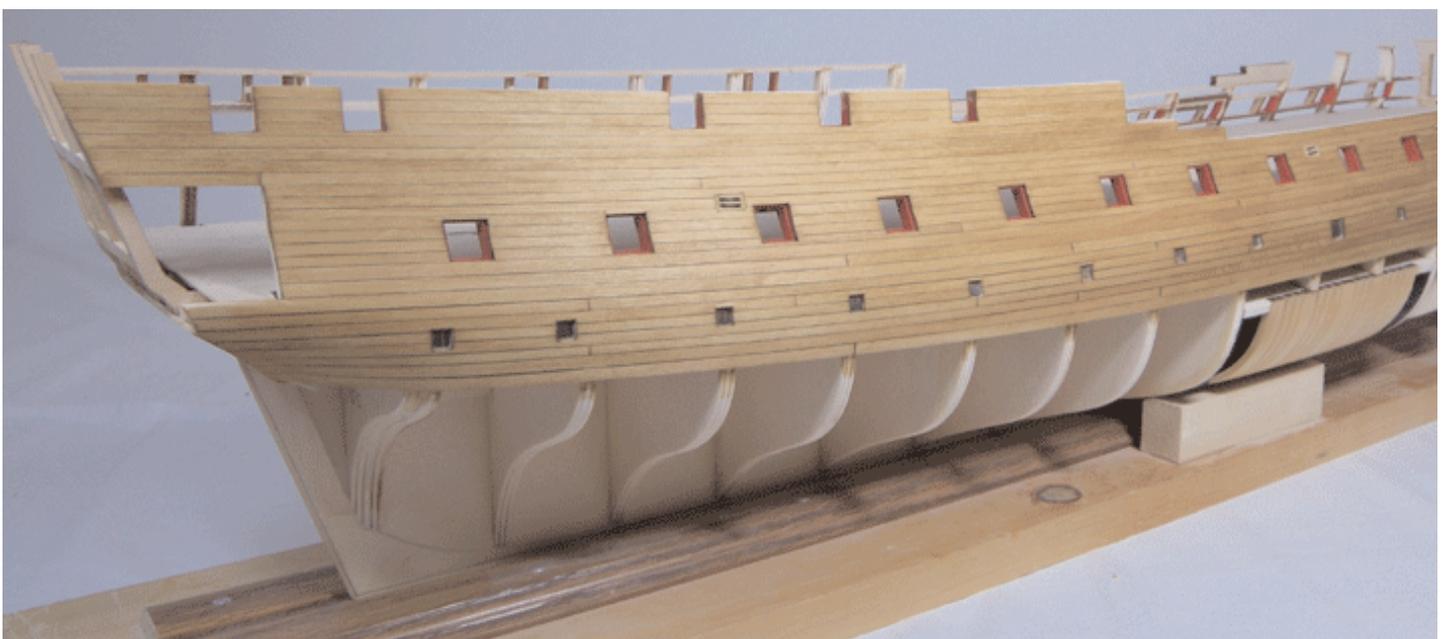
begin the forming of the doorway to the quarter galleries.

Completing the planking above the channel wales...

Use 1/8" x 1/16" strips to complete all of the remaining hull planking above the channel wales. You will certainly need to notch these planks around the port openings on the gun deck. Carefully test each plank in position before you glue them onto the hull permanently. While cutting the planks around the gun deck ports you need to create a 1/64" inch rabbet around each of them. This will form the "stop" for the port lids.

A corresponding rabbet will be created on the lids which would have produced a tight waterproof seal when they were closed. Mark and cut each piece accurately and if one section doesn't fit properly you should throw it away and create another one. This rabbet detail will be very visible and care should be taken to make them clean and consistent. There are a few additional notes listed below that explain some of the details for your hull planking above the gun deck port openings.

NOTE: While planking upwards towards the sheer, the eighth plank above the channel wales should no longer be cut flush along bulkhead



frame "JJ". It should be continued off the stern to complete the forming for the entrance to the quarter galleries. See the photo provided. When extending this plank off of the stern it should flow nicely onto the small stern piece "ZZ". Above this eighth plank all of the remaining strakes will run off the stern and be sanded flush against the stern frame. See the photo provided.

Note 2: The waist - Carefully trim the planking around the hance pieces on either side of the waist. The top of the last plank that runs between the hance pieces (XX and YY) should also be sanded down until it is flush with the sheer of the waist.

Note 3: The forecastle – Sand the last plank to create the sheer line of the forecastle. It should run from the top of the beakhead bulkhead smoothly towards hance piece XX in the waist. The top edge of that last plank should be sanded so it is flush with the top of hance piece XX. It should create a smooth gentle curve that mirrors the run of all of the hull planking at the bow.

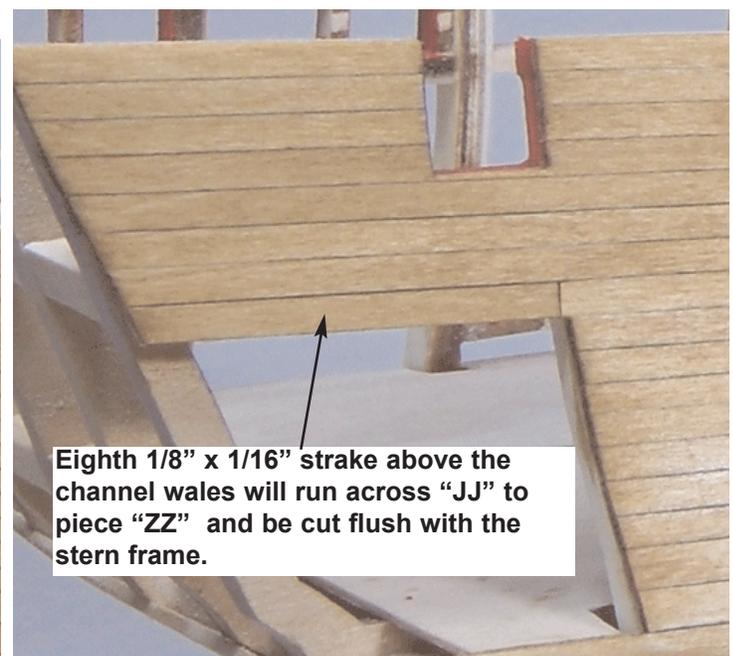
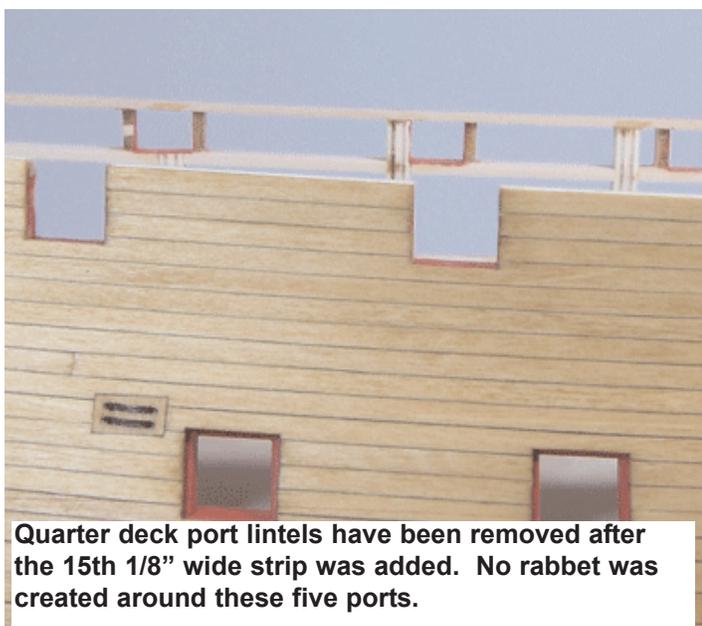
Note 4: The quarter deck hull planking – When planking the hull around the five quarter deck port openings you should NOT create a rabbet around them. There is no need to create a "stop" for a port lid because there weren't any gun port lids used on these. Just cut your planking flush to the top of the port sills and the port uprights. Continue planking towards the sheer line of the

quarter deck. The top of the fifteenth 1/8" x 1/16" strip will become the sheer. Do NOT sand the top of this plank flush with the lintel strip for the port openings. In fact, you may need to add another 1/16" thick lintel strip on top of the one already there. If for some reason the run of your planking is higher than the single lintel strip at the stern or towards the waist, you should add another lintel strip as support for it. The fifteenth plank will define the sheer. It will run along the hull with a smooth gentle curve. This creates a nice pleasing sweep to the profile view of the model and should not be altered. It will also match the run of your wales and the hull molding that will be added later.

If you needed to add another lintel strip to create some support at the stern and in the waist, then sand the top of this additional strip down flush to match the gentle curve created by that last plank. Sand the lintel strip down flush with the top of the fifteenth plank. See the photos provided.

Removing the quarter deck port lintels...

Once the hull planking above the channel wales is completed, sand it smooth and apply the finish of your choice. The sides of your hull should be significantly stronger at this time. To complete this step, the lintels need to be cut away for the quarter deck gun ports. Use a fine-toothed blade like the one you used to cut the bulkhead exten-



sions earlier. Remove the portion of the port lintels that intersect the openings. The lintel strips were only used to create support for gluing the port uprights into position earlier. There won't actually be a lintel for these gun ports. Instead, the cap rail will sit on top of bulwarks and span across each gun port opening. This won't be added until much later. After you cut the lintels away, use a sanding stick to sand the ends flush with the sides of each opening. You will probably need to touch up the red paint on the inside of each port opening afterwards. See the photo provided.

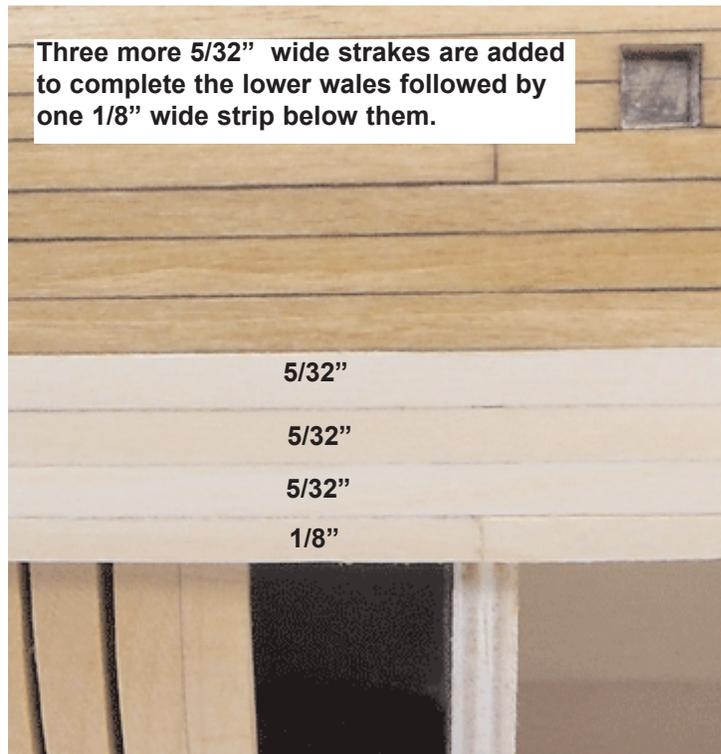
Completing the first layer of the main wales...

Add three more strakes of $5/32'' \times 1/16''$ strips to the hull. These will be added below the two $5/32''$ wide strips already there. You will now have a total of five $5/32''$ wide strakes in this band across the hull when completed. The top strake will become the black strake (not painted black on our model) and the four remaining planks below it will become the first layer of the main wales. To complete this step, also add one $1/8'' \times 1/16''$ strip below the wales. See the photo provided.

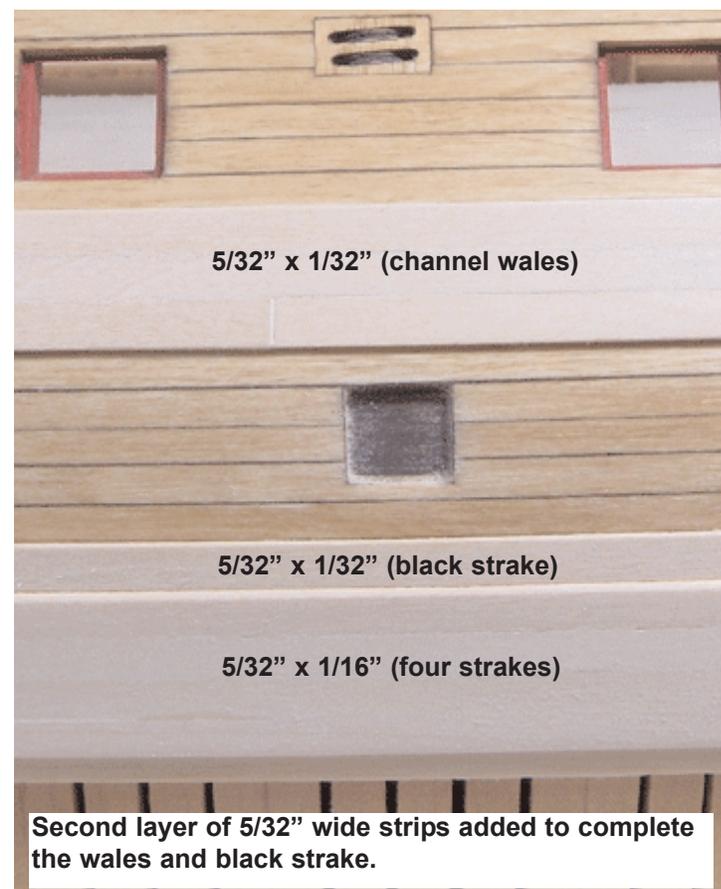
OPTIONAL breather from planking: You could continue planking the hull to the keel. But some builders prefer a change at this point to avoid "planking-overload". For those who would rather complete the first layer of planking you can skip ahead to chapter six which documents it in detail. If however, you need a break from planking, the following items can be completed instead. This was how the prototype model progressed. Those who choose to complete the planking first can double back to complete these intermediate steps afterwards.

Adding the second (final) layer for the main wales and channel wales...

Starting with the main wales, add a second layer of $1/16'' \times 5/32''$ strips over the four strakes that make up the main wales. These strips should be glued on top of the first layer and you can use the seams as a guide to ensure a smooth run across the hull. If for whatever reason your first



layer was not positioned to your satisfaction, you can tweak the second layer to correct minor problems that disrupt the gentle curve of the wales. Chamfer or slightly round off the bottom and top edges of the wales after all four strips have been added. See the photo provided.

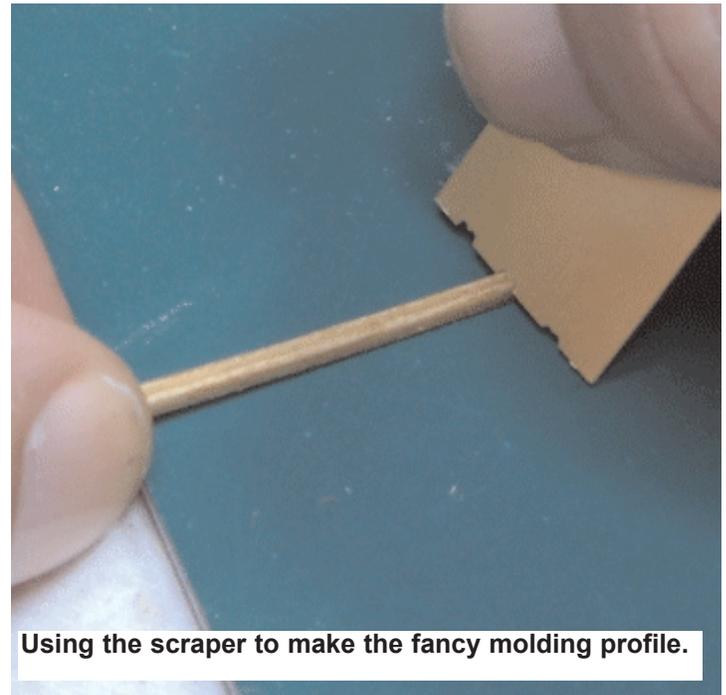


Then add one 5/32" x 1/32" strip along the top of the wales. This is the black strake. It will not actually be painted black on our model. Chamfer the top edge of the black strake after it is added. To complete the second layer for the channel wales, simply add three 5/32" x 1/32" strips on top of the first layer. Once again, slightly chamfer the top and bottom edge of the completed channel wales. The top and bottom of the wales should not have a hard, sharp edge.

Stain the black strake and the channel wales to match the hull planking added so far. The main wales should be painted black. The single 1/8" x 1/16" strip added below the wales has been left natural on the prototype. Only satin polyurethane was used. The bottom of the hull below the waterline (shown on sheet one of the plans) would have been painted a tallow color. Sometimes called "white-stuff", this layer of paint created some protection against worms and rot below the waterline. Copper plates were slowly being introduced in England for better protection, but in America this was still uncommon until after the American Revolution. We know that the confederacy was not plated with copper. To simulate the white/off-white color on the prototype, all of the planking below the wales will be left unfinished except for the application of a satin polyurethane. It will be significantly lighter than the planking above the wales. The deck planking will be treated the same way. This is purely a subjective decision and you may opt for a different color scheme below the wales or only below the waterline. If you decide to actually paint the bottom of the hull white/off-white, it should be done only below the waterline.

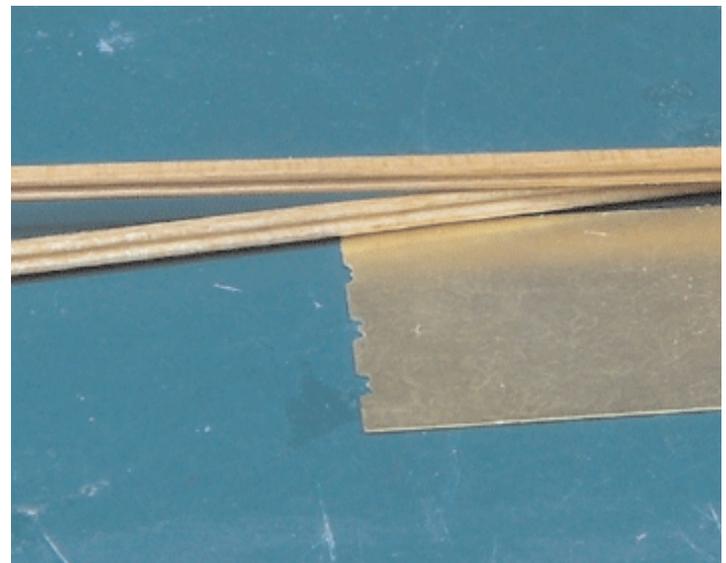
Adding the "FANCY" molding along the hull...

There are several options available for creating the fancy molding for the hull. Ships of this period had several molding strips along the hull with sometimes very complex profiles. Depending on your level of experience, you can simply add a strip of 1/16" x 1/16" basswood to the hull as is or create a simplified molding profile. The choice is yours. A set of photo etched scrapers has been provided for you in this kit. They can be



used to create a simple profile. For all of the hull molding, select the scraper with the double beaded profile. It is 1/16" wide. They will dull quickly so you will see three etched profiles on the end of the correct scraper. It also has a circle in the center of the scraper to make identifying it easier. A few other profiles are included and will be used on other areas of the model. This double beaded molding matches the cast scrollwork in the kit which will be added later along the waste so it is important that you select the correct profile scraper. More will be discussed about that later.

To create and scrape the profile into a 1/16" x 1/16" strip, you must prepare the strip first. The basswood in the kit is very soft. It can tear easily





while pulling the strip through the scraper. To prevent this from happening, run some sandpaper down all four edges of the strip first. Try and remove any rough spots. You can even slightly round off the two front edges with the sandpaper which will make the scraper perform that much better.

Hold one end of the strip down on your work surface and place the scraper profile on top of it with your right hand. See the photo provided. Don't push down too hard on the scraper. You will be holding the scraper completely stationary at about a 60 degree angle. Then pull the strip out to the left slowly at first. Remember, the first few passes (pulls) will be with light pressure to

establish a subtle imprint of the profile. The last 4 or 5 pulls through the scraper can be quicker and with slightly more pressure. This technique takes a little practice but after a few attempts you will get the hang of it. You will soon find the right amount of pressure and the right amount of speed to pull the strip through the scraper.

Because the wood is so soft, the cutter on the scraper has been intentionally created as a shallow profile. The beaded profile can be made deeper by using some small files. This will create more depth in your molding strips. The molding profile of the scraper was filed a little deeper on the prototype. Remember, that the profile of this double beaded molding matches the profile of the





cast scrollwork. These will be positioned as a continuation of the molding so try and match the profile as closely as possible. Examine the plans carefully to see where the molding is positioned. Note how the molding terminates in the waist with the scrollwork.

For those of you with more experience using scrapers to make molding, you can actually alter or create new more sophisticated profiles. Just remember that you will need to carve your own scrollwork to match your molding design. Using harder woods like boxwood or Swiss pear would be a better choice for the more complex molding profiles. They will hold an edge better and be less likely to splinter and shred while scraping. See the photo showing some completed molding strips.

Apply the molding strips to the hull. Use the run of the planking as a guide so you keep them running smoothly along the hull. The lowest molding strip will run along the tops of the hull sheaves. You will need to use two lengths of molding to span across the entire hull. Just butt the ends together while maintaining the smooth run. Choose two strips with a matching profile so the seam will be nearly impossible to locate.

The two remaining strips should be stopped just short of the break in the waist. The molding

actually runs along the side of the cap rail in the waist and that won't be added until after the inboard bulwarks are planked. See the photo provided that shows where the molding was stopped on the prototype model. This is also true for the last strip on the quarter deck bulwarks. It will be terminated at the waist with the decorative scroll work and also runs in line with a cap rail to be added later. The cap rail will be placed on top of the hance pieces and will be 1/16" thick. To help find the right position for the molding along the waist, you can hold a 1/16" thick basswood strip on top of the hance pieces (and along the waist) so you see where the break for the molding should be established. In fact, you could start gluing the strips onto the hull at the breaks in the waist and proceed in the direction towards the stern and the bow. This is the easiest way to ensure a smooth run for the molding strips while being sure they will be situated correctly at the break in the waist.

Painting the hull between the molding strips...

This is a subject decision. Choosing what to paint on any ship model is a difficult choice. As was common for this period, the prototype model will be painted as shown in the photos that follow.

Adding the sweep port lids...



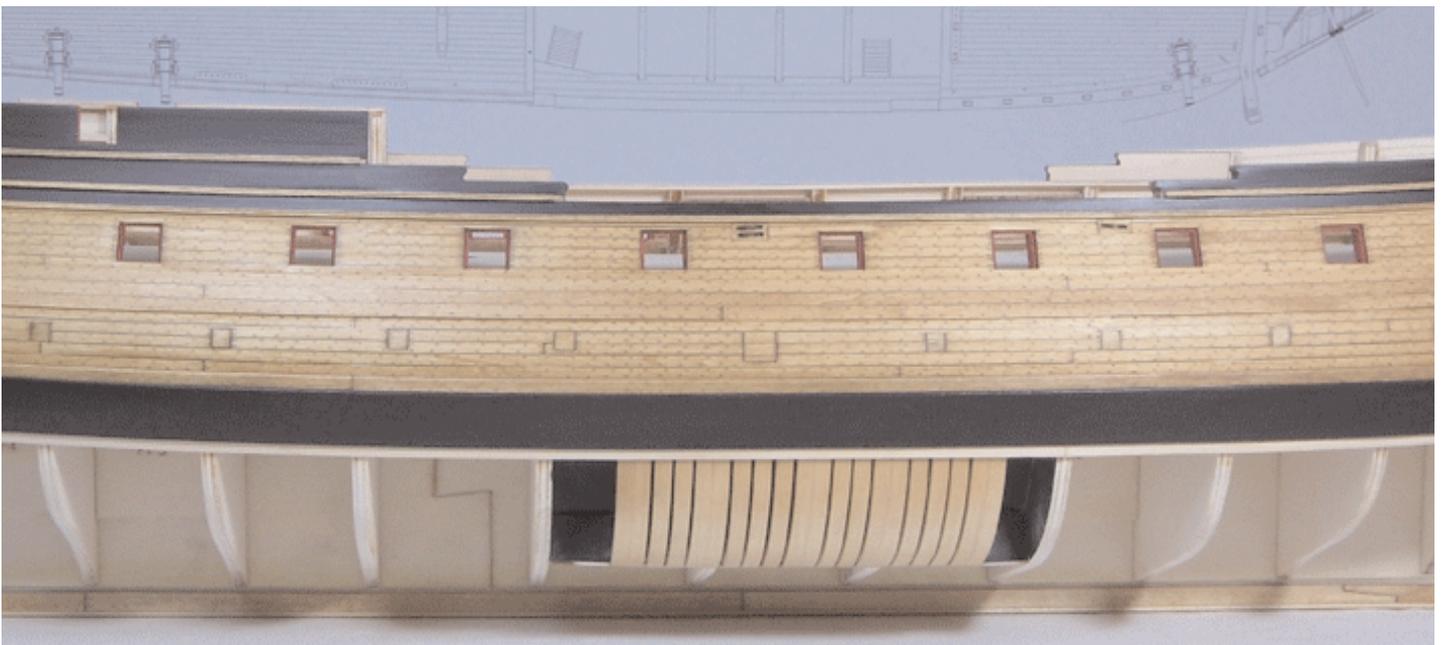
This would also be a good time to add the lids for the sweep ports and ballast ports. Use a 1/4" x 1/16" strip to create your sweep port lids. Hold it against each sweep port opening with the grain running left-to-right. Mark the strip to establish its width. Then cut the lid from the strip. The 1/14" wide strip will be too large to fit the height of the port opening. You will need to trim it to fit tightly into the opening. Pop the lid firmly into position and then sand the outside flush with the hull planking. Apply the finish of your choice

when you complete them all.

The lids for the ballast ports (the larger port opening in line with the sweep ports at the waist) will be made like the stern port lids. Use 1/8" x 1/16" strips to create them. Line up the seams of the port lid planking with the seams for the hull planking. See the photo provided.

Tree nailing the hull above the wales...

Tree nailing a hull as large as the Confederacy's





can be time consuming. The added texture and detail makes the time spent well worth the effort. Tree nailing the hull now above the wales will help split the task up into smaller modeling sessions. The techniques for tree nailing were already discussed but there are few tips that may help you get the job done with less hassle. Start tree nailing on the starboard side of the hull because that is where the cut-away shows the exposed frames. Start tree nailing along the waist so you can line up the columns of treenails with the exposed frames of the cut-away. Then continue that pattern towards the stern and bow. Try and keep your columns of treenails vertical and lined up with the bulkheads and exposed frames.

To help you keep the tree nail columns vertical and spaced evenly, you can use a piece of tape as a guide. Use low tack tape. Place the tape onto the hull so you can use its edge as guide while drilling your holes. Drill your holes carefully with a #75 bit (or close to that size) along the edge of the tape. When you finish one row, move the tape over and repeat the process. See the photo provided. Examine the plans for the tree nail pattern. Tree nailing the hull is optional and many model builders prefer the look of their models without them. It's a subjective decision and you should choose the look that you prefer.

On the prototype model, the treenail holes were

filled with Elmers wood filler. A small section of the hull (about 3 inches long) was completed at a time and repeated until finished. It made the whole process more manageable. The holes were drilled. Then the small section was sanded lightly. Each hole was cleaned out by lightly twisting the tip of an awl in each of them. Don't push the awl into each hole with force. It will enlarge it. You just want to clean up its edges. Then the wood filler was pushed into the holes and the entire section was sanded after it dried. Once the starboard side was finished another coat of MinWax Golden Oak stain was applied.

