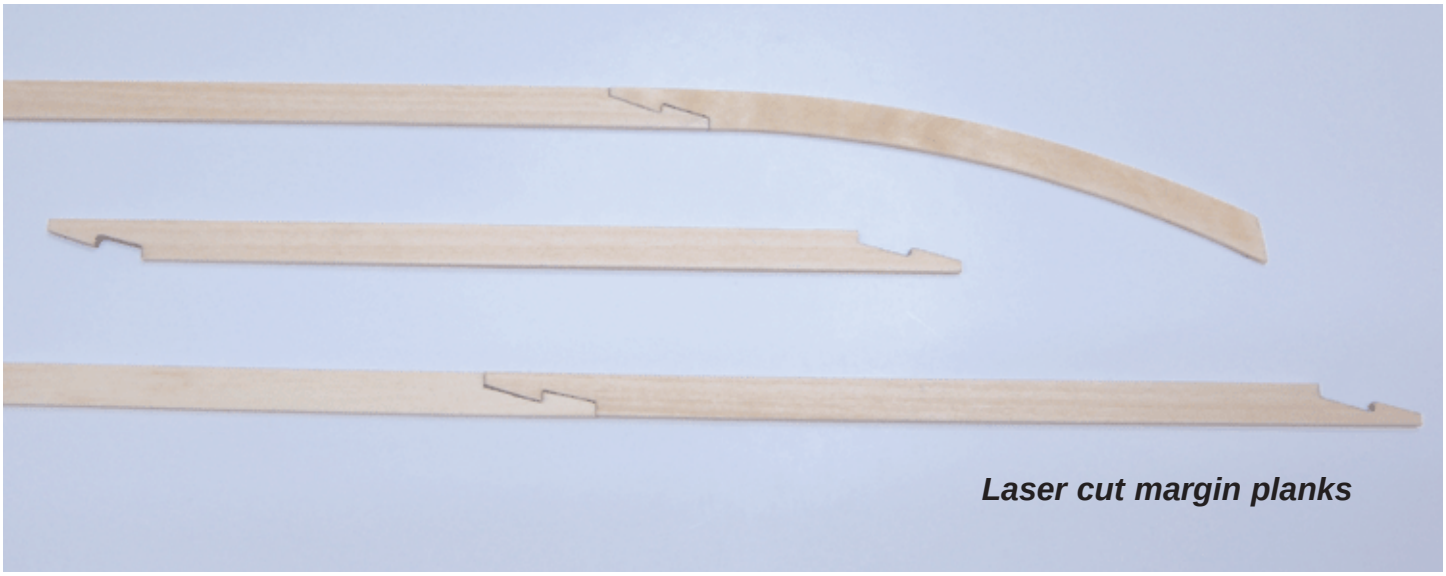


Laser cut margin planks

Chapter Ten

Planking the Gun Deck

There are a few ways that you can plank the gun deck and create the hatchways for Confederacy. You can choose any method based on your experience and comfort level. The kit was produced to show the most historically accurate details as seen on many contemporary models from the period. For example, many contemporary models show the “checkerboard” pattern of the floor in the great cabin. This is an optional detail that you might not choose to model. Other features that will be discussed in more detail later would be the technique used to “nib” your deck planks into the margin plank. The margin plank is the laser cut strip of wood that is placed along the bulwarks on both sides of the ship. This will be the first feature addressed in this chapter.

Adding the Margin planks

There are five laser-cut pieces for the margin planks on each side of the gun deck. They are listed as parts MP1, MP2, MP3, MP4 and MP5 and are 1/16” thick. The ends for each section have been cut with scarph joints for authenticity. Lightly sand the edges of each margin plank section and test fit them along the bulwarks. The aftmost length of each margin plank is longer than needed and should be cut to fit snug against the stern. See the photo provided. Once you are satisfied with how they fit, run a pencil down the edges to simulate the caulking and glue them into position along the bulwarks.

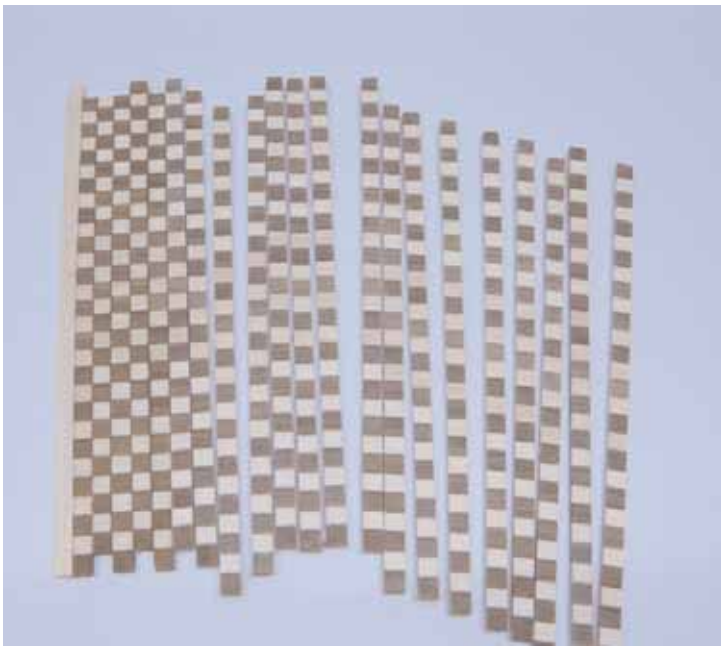
NOTE: There will be a small gap left between the margin plank and the floor of the quarter galleries. This area should be filled with the appropriately shaped 1/16” thick strip.

To finish up this step, add the waterway on top of the margin plank and against the bulwarks. The waterway is a strip of 1/16 x 1/16” basswood that is rounded off to the profile shown in the photo provided. The deck planking and margin plank will be left natural on the prototype model. It will not be stained since the deck would have been lighter than the hull planking above the wales. It will be treated just like the planking below the wales and ONLY sealed with wipe on poly. This

is of course a personal decision based on your own likes and dislikes. You may opt for a different finish than shown on the prototype.

“Checkerboard” Floor Pattern in the Great Cabin (optional)

As mentioned earlier, this is an optional detail you can add to the model. To create the checkerboard pattern, the darker squares will be made using 3/16” x 1/32” walnut strips. The lighter squares will be made using the same sized basswood strips. Glue the strips onto the 6” x 6” x 1/32” plywood square provided. Alternate the strips so you end up with the striped pattern shown in the first photo below.



Then, use a steel edged ruler and a sharp hobby knife to cut the assembly into strips. Cut the strips 3/16” wide and across the pattern. You should end up with many strips with little 3/16” squares of alternating color. If you are fortunate enough to own a hobby sized table saw with a 4” blade, cutting these strips will be that much easier. To make the checkerboard pattern, simply glue the strips edge to edge after shifting the squares in each row to achieve the pattern. Don’t be shy with the glue because you don’t want these strips to pull apart in the next step. You should now have a checkerboard sheet approximately six inches square.

Use the plans to cut a paper template for the great cabin floor. It should be adjusted to fit perfectly on your model. The floor extends from the laser etched line on the false deck to the stern. Cut the paper pattern so it’s a snug fit along the margin planks and along the stern. Once you are satisfied, take the paper template and position it on top of your checkerboard. Trace the shape of the great cabin floor so you can cut it out. The squares should be aligned as shown in the accompanying photos. One photo (below) shows the cabin floor cut from the checkerboard sheet before being glued onto the model. It would be a good idea to cut it a little larger than you need so it could be sanded for a perfect fit. The aft edge of the cabin floor should be beveled to fit snug

against the stern planking (as the stern is angled). Sand the floor smooth and finish it with a coat of MinWax wipe on poly. You will see the contrast between the two types of wood even more after applying the sealer.

Hatch Coamings, Gratings, Scuttles and Companionways

The gun deck will be planked “around” the hatches and gratings. Therefore, they will need to be built first before you can start planking. The positions for the hatches are laser etched onto the false deck. The frames for the hatches and companionways (referred to as a coaming) will be built with lap joints in the corners. This is a simplified version of how the coamings were actually built on the real ship. But depending on your experience, you could simplify it even further by simply mitering the corners or butting the edges up against each other. The coamings for the hatches and companionways are either ¼” high or 3/16” high. Examine the plans carefully to ensure you build each set of coamings using the correct sized strips of basswood. The strips will be 1/16” thick x ¼” for the first coaming you will build (Working from the stern towards the bow).

Use the plans as a guide to cut your ¼” x 1/16” strips as shown in photo one on the next page. Note how the ends were notched to form the lap joints in the corners after they are assembled. When gluing them together keep the hatch “squared up”. To help you keep the coamings square, you can create a simple jig. Use a 1/16” thick piece of scrap sheet wood to make the jig. Just form a right angle as shown in photo 2. You could stain the coaming strips before you glue them together. This will help prevent blotchy coverage of the stain due to any glue seepage. The coamings on the prototype were stained “Golden Oak” to match the hull planking above the wales.

Note in photo 2 and photo 3 how the corners of the coaming were rounded off. The corners would only be rounded off above the deck planking. You can use the same jig you created to keep the coaming square as a guide while rounding off the corners. Place the coaming in the jig and use a sharp blade to trim off the sharp corner down to the top of the jig. Then round off the corners with some sandpaper. This is why the jig was made using 1/16” thick scrap wood. The deck planking will also be 1/16” thick. You can see in those photos how the corner remains sharp where the deck planking will rest against it. This will ensure a tight fit around each hatchway. It is very close to how it was done in actual practice at that time.

If you examine the photo above, you will see how the inside of each hatchway was lined to form a rabbet. Even the open companionways would be covered with boards during rough weather to keep the water out. The rabbet is formed so gratings and cover boards could be placed in each opening. To form the rabbet, line the inside of each coaming with 1/32” thick strips. The rabbet should be 1/16” deep. Use 3/16” x 1/32” strips to complete the lining of this first coaming.

The coaming just forward of the companionway is slightly more complex. It has three sections as shown in the above photo. It has one open companionway and one hatch that is covered with a laser cut grating. This portion of the assembly is built using ¼” wide coaming strips. It also has a third section that forms the platform for the capstan. This is only 3/16” high. This smaller platform was built separately and then glued to the taller coaming afterwards. The

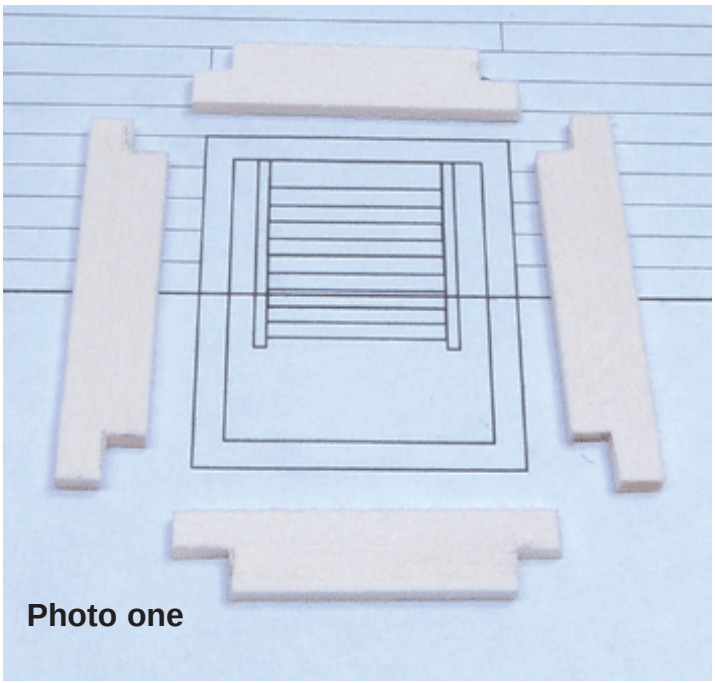


Photo one

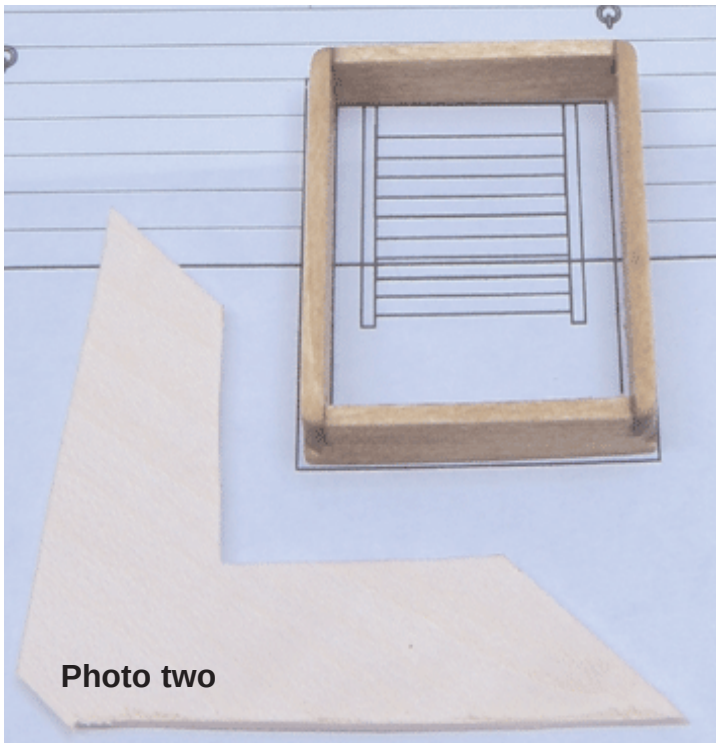


Photo two

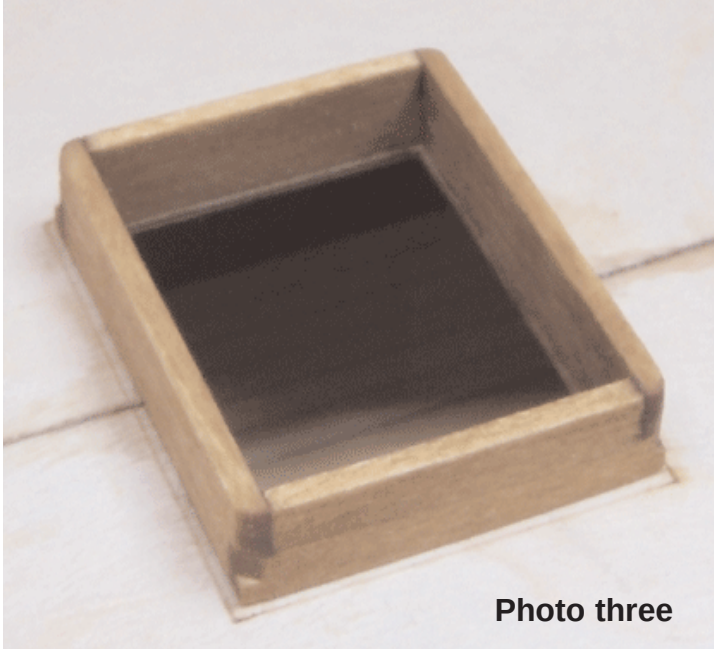


Photo three

same basic principles are used to make this assembly. As you can see in photo 4, the ¼" high section of this coaming was created first. Note how a small notch was filed into the longer, "side" strips to accept the center "cross-beam". This center strip will separate the two hatches. You can actually use the laser cut grating as a guide while building this coaming. All of the gratings are laser cut from 1/16" thick ply. If you build the coaming around each laser cut grating they will fit perfectly.

Round off the corners and line the two openings like you did for the first companionway. Then glue the grating into one of the openings. The grating should sit nicely on top of the rabbet formed by the lining. See photo 5. Remember that the rabbet should be 1/16" deep.

In that same photo, you can see that three 3/16" wide coaming strips were notched to create the platform for the capstan. The two corners have lap joints and are rounded off. Since this platform will be planked over, two 1/8" x 1/16" strips were used to line it on the forward and aft sides. The rabbet formed is also 1/16" deep since the cover boards will be made using strips that are also that thick. This platform was assembled and then glued to the taller coaming afterwards. Use 3/16" x 1/16" strips to plank up the capstan platform. See photo 6 on the next page. A graphite pencil was run down the edges of the cover boards to simulate the caulking between them. The ends of each plank were treenailed to finish it up.

Moving forward along the deck, the balance of hatches were built the same way. You just need to check the plans to determine if the coamings should be ¼" or 3/16" high. Some will have gratings while others will have "coverboards". See the photo provided on the next page that shows the hatches along the waist. The center hatch is covered with planks. Small eye bolts were used to simulate the handles for the "coverboards". Just bend them over so they look like "pull-rings". Paint the rings black. No treenails were used as the boards were not permanently fastened.

Bricked Platform for the Ship's Stove

The coaming for the stove's platform is 3/16" high (3/16" x 1/16" strips). It was built just like

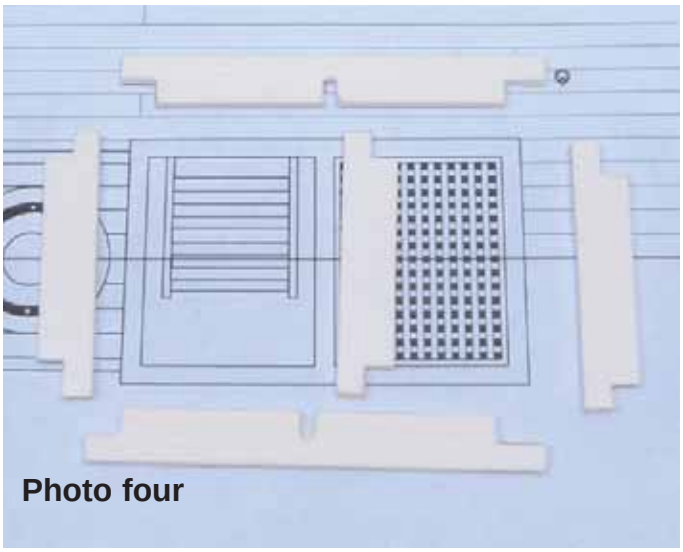


Photo four

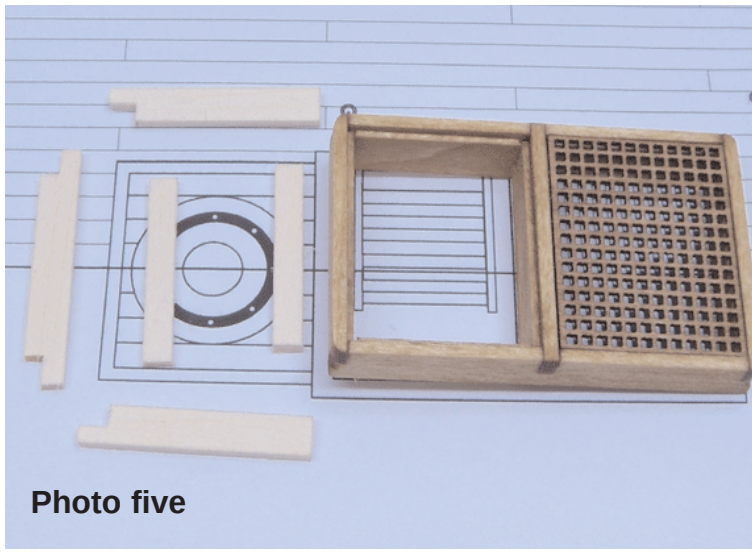
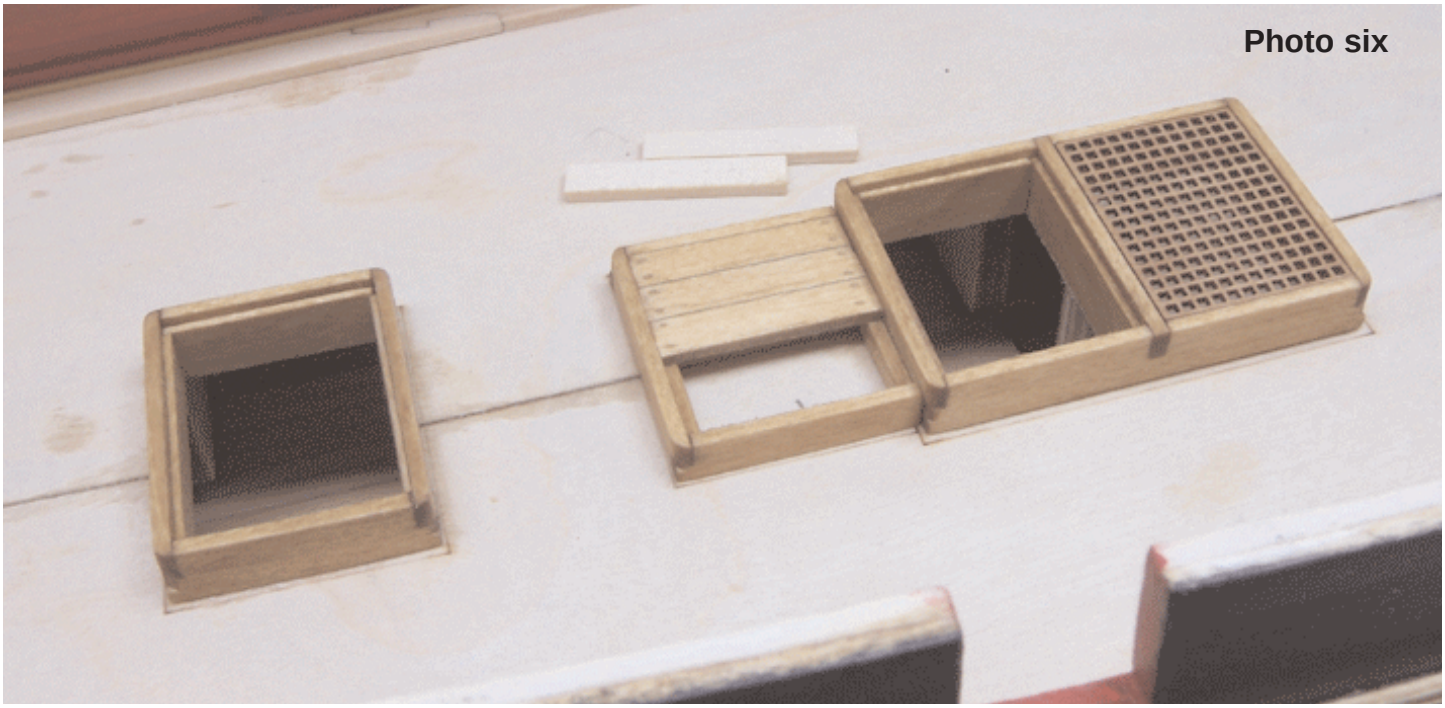
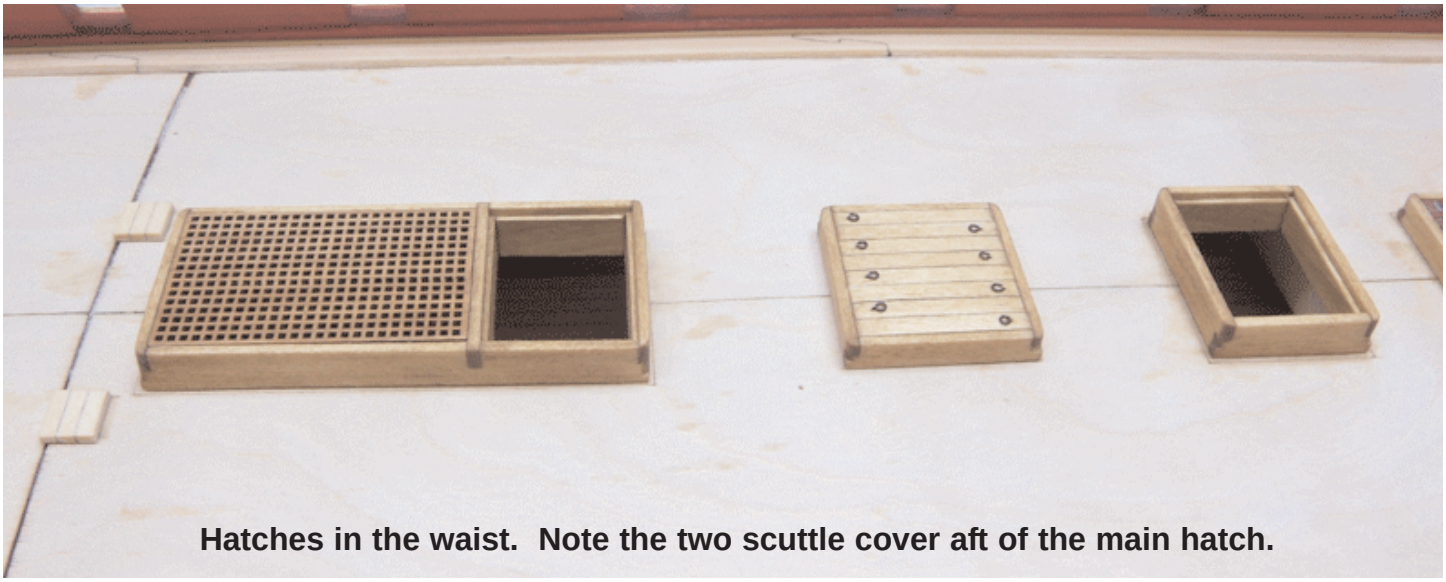


Photo five





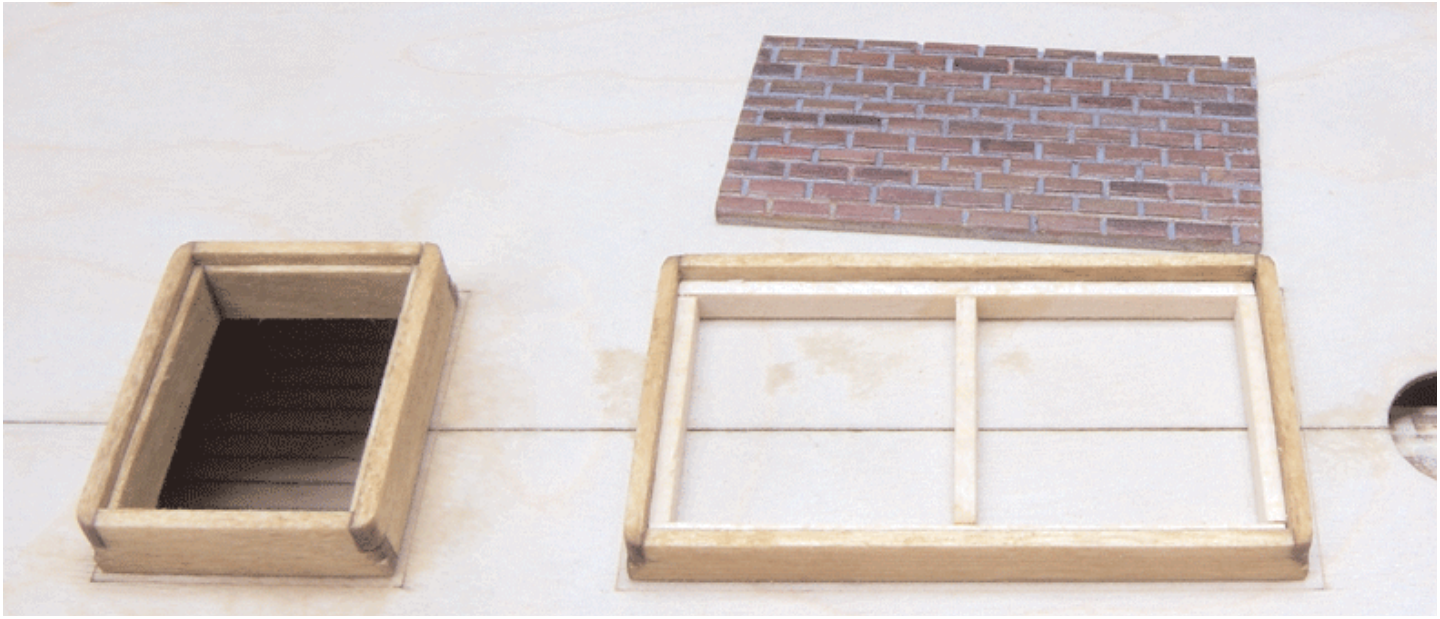
Hatches in the waist. Note the two scuttle cover aft of the main hatch.

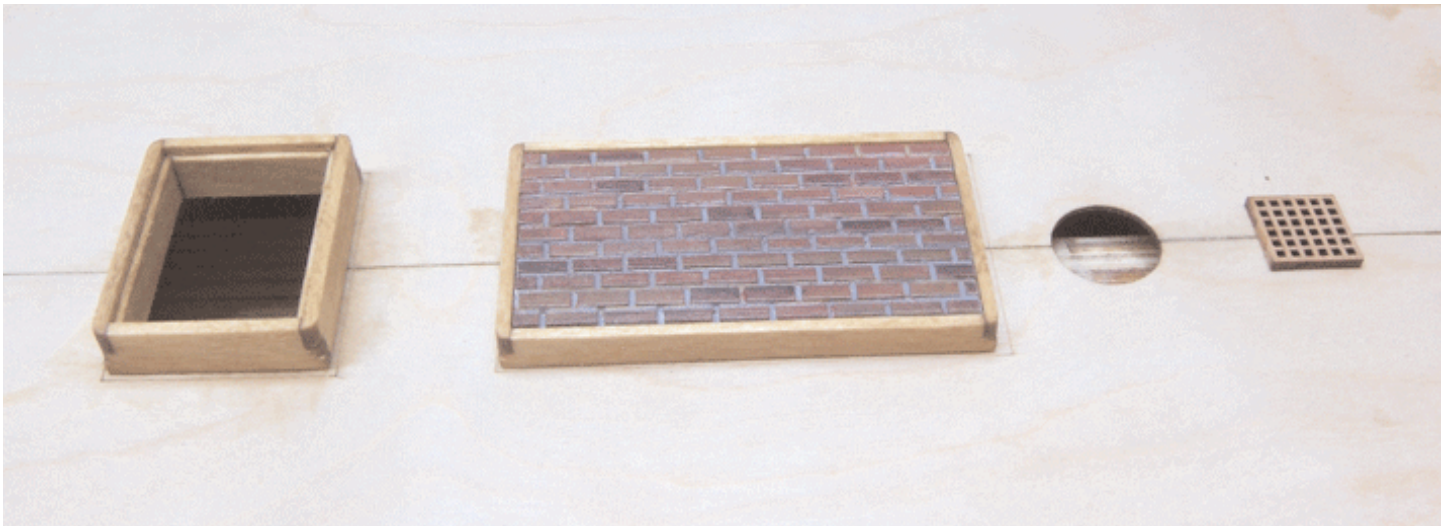
the others with 1/8” x 1/16” strips for the internal lining. This left a 1/16” deep rabbet around the top edge. A center support beam was also added to help level the “bricked platform” after it was set into the coaming. See the photo provided (next page) that shows the coaming just before the bricked platform was glued into position. It may be easier for some of you to create the bricked platform first, and then build the coaming to fit around it. This will ensure a better fit when you set your platform into the finished coaming.

The bricks are simulated using wood strips (3/32” x 1/16”). You will need 11 strips that are 2 ½” long. File small grooves across the strip at 3/16” intervals. This will determine the length of each brick. The photo provided (next page) shows the needle file that was used to do this on the prototype. The edge of the file is also abrasive and it was easy to create uniform, flat grooves across the strip. Then bevel/chamfer both edges along the length of each strip. This bevel will become the mortar joint between each row of bricks once they are glued together edge-to-edge. When gluing the strips together edge-to-edge, remember to stagger the joints of your bricks to create the typical pattern you would expect. In that same photo you can see how the bottom three strips show the pattern you are shooting for. The grooves and bevels don’t need to be very deep.

The mortar joint between each strip will be “v-shaped” after the two beveled edges are butt together. It is better to show a flat groove to simulate the mortar line between each row of bricks. After the strips are glued together, you can run the edge of the file between each row to flatten it out somewhat. The basswood is very soft and this will emboss the groove rather than file it down to a squared shape. Be gentle while running the file down each row. Only light pressure should be applied. The “v-shaped” groove will act as a guide and keep the edge of you file from wandering. If you use too much pressure, it will be more likely that the file will wander out of the groove and ruin the surface of your bricked platform. It is always better to make multiple passes while applying gentle pressure.

After all 11 strips are glued together edgewise, cut the platform to size using the plans to determine the exact dimensions. Then build the coaming to fit around it. Paint the bricks before you glue the platform into the coaming. For the prototype, the entire sheet was painted light gray to simulate the color of the mortar joints. Then the bricks were carefully painted different shades





of red and brown. A small flat brush was used to individually paint each brick. If you carefully paint only the top surface of each brick, the gray paint in each groove will remain untouched and resemble mortar.

You can see the finished results in the photo provided above.

Remaining Air Scuttles and Small Gratings

You will see a small laser etched square just in front of the fore mast. This is a small ventilation scuttle. There is no coaming for this. Simply glue the 1/16” thick laser cut grating to the false deck. You will be planking the deck around this scuttle. You might want to color the square in with a permanent black marker before you glue the grating on top of it. This will help disguise the false deck underneath the grating.

There are two more scuttles just aft of the main hatch. These are covered with planked lids rather than gratings. Use 3/32” x 1/16” strips to make these lids. Glue three small lengths of the strips (about 1” long) together edgewise. Run a pencil down each edge first to simulate the caulking between each strip. Then cut two identical-sized lids from this strip. Their locations are also laser etched onto the false deck. Just glue them into position. We will be planking the gun deck around these as well. There should be two small handles on each lid which you can see on the plans. But don’t install them yet. It will be easier to sand and finish the deck planks without the eye bolts getting in your way.

Planking the Gun Deck…

After all of that, you can now actually start to plank the deck. To help you position the plank seams properly, you can draw reference lines across the false deck. Draw your pencil lines from port to starboard where the gun deck beams would have been located. These will mark the locations for your butt seams when planking the deck. If you examine plan sheet one you can see where the butt joints fall and this indicates where your reference lines need to be drawn.

Use 1/8” x 1/16” basswood strips to plank the deck. Remember to run a pencil down the edges of each plank to simulate the deck caulking. Begin by gluing the first plank down the center of the gun deck. The seam of the false deck can be used as a guide to place it properly down the center line. With this plank completed you can continue planking towards the bulwarks. Stagger you butt joints using a “3 or 4 plank shift” pattern as shown in the attached drawing. Please note however, that there were no plank joints between the hatches and coamings. The distance between each coaming is short enough that one length of planking would have been used. You only need create and stagger your plank joints from the sides of each coaming out towards the bulwarks. The photos provided show half of the deck planked at the bow and stern. Note how the deck planking is cut around the gratings, scuttles and coamings. Examine the plan sheet carefully before you begin.

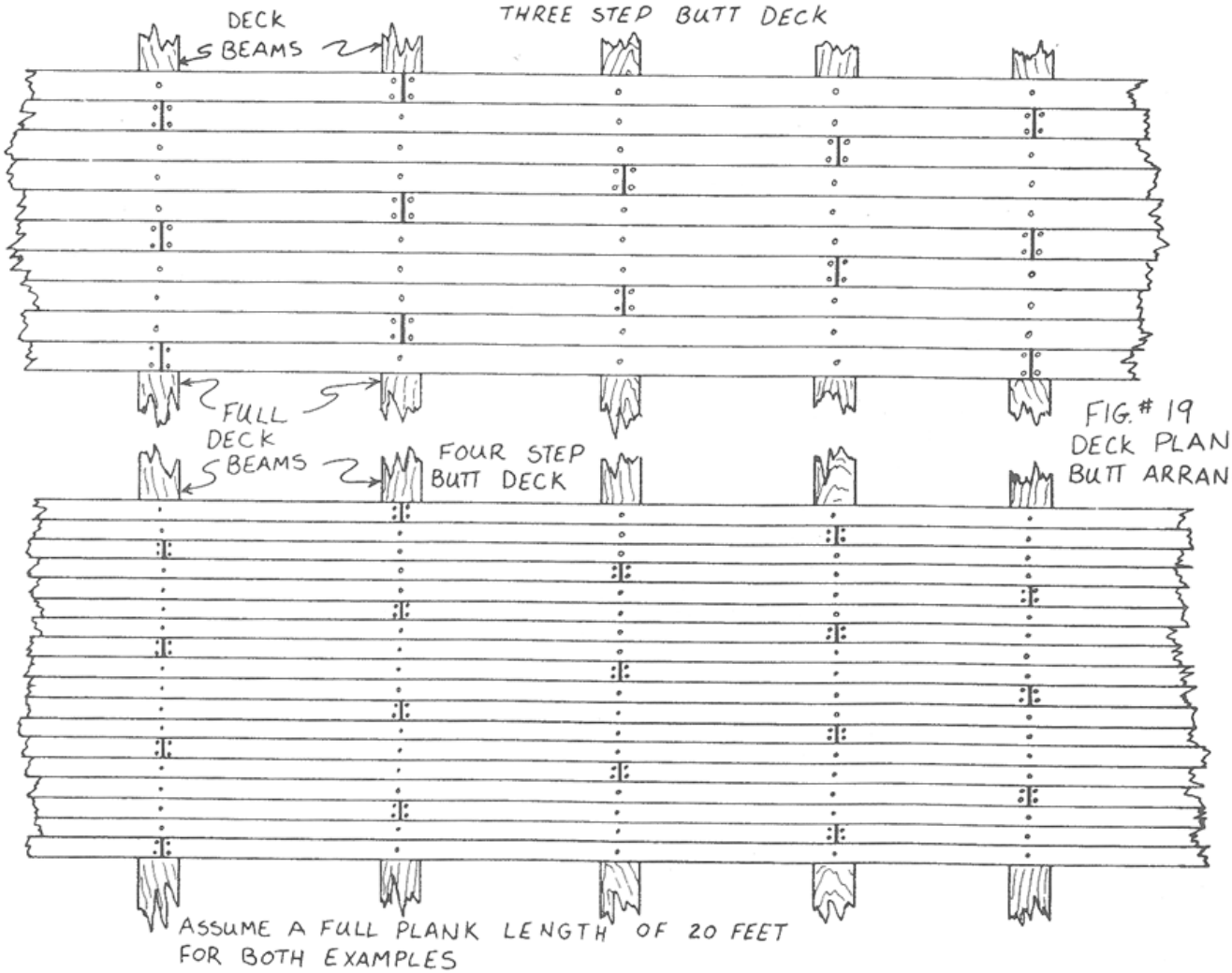


FIG. # 19
DECK PLANK BUTT ARRANGEMENT

When the deck planks butt against the margin plank along the bulwarks, they can be terminated in many ways. You can select the method you prefer depending on your experience level. The first method would be to simply cut the ends of each plank flush against the margin plank at the bow and stern. This is not historically accurate however. The planks would never terminate with a sharp point on their ends. The pointy ends were subject to rot so shipbuilders preferred to cut the ends flat. It was sturdier and the planks were less likely to rot so quickly. This prevented the need to replace them as frequently.

The second method would be to “nib” each end of the plank into the margin plank. This is the most common method used by model builders. It is probably also the most difficult. Examine plan sheet one. The gun deck shows the planks nibbed into the margin plank. The issue with this common practice would be that it didn’t start until roughly 1800. The Confederacy was launched more than 20 years earlier. You would need to notch each plank into the margin plank. To do this a sharp blade is used to cut the notches as your planking progresses. The ends of each plank are then custom cut to fit into each notch.

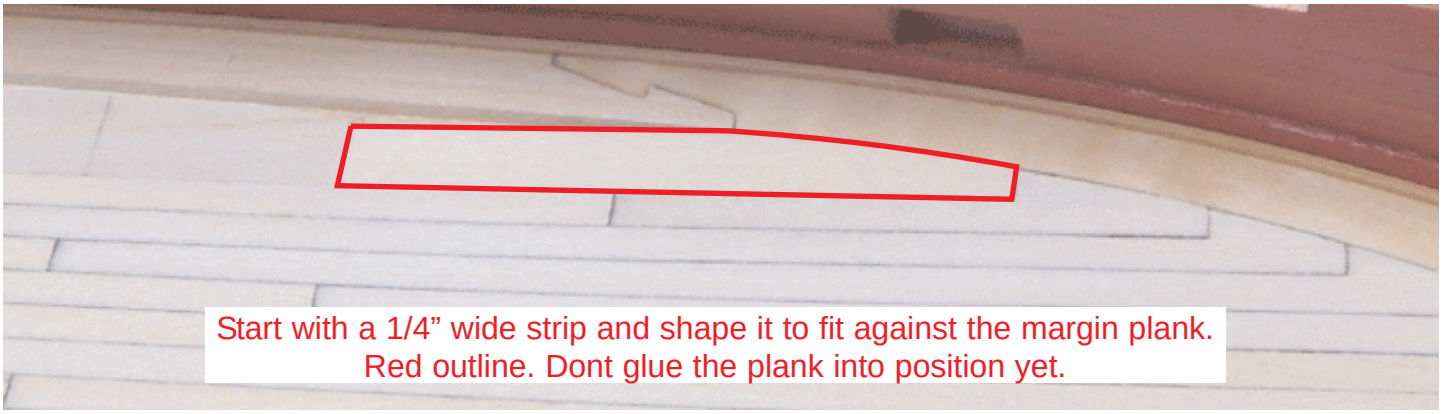
The most accurate way to plank the decks against the margin plank would be to create hook scarfs in the planks. This was the more common method up to around 1800. If you examine sheet one again, you will see that the quarter deck and forecastle show the deck planking with hook scarfs terminating along the margin plank. This was the method used on the kit prototype. In order to create a hook scarfed deck plank, a wider plank is needed. This is only true for the segment of the plank that will be shaped with the scarf joint. You can use a ¼” x 1/16” strip to cut these if you choose this method. They are not very difficult to shape.

Three photos have been provided (next page) that show the sequence to follow in order to shape the scarfed end of a deck plank. The photos show a scarfed plank being shaped at the bow. A simar plank will need to be shaped at the stern as well.

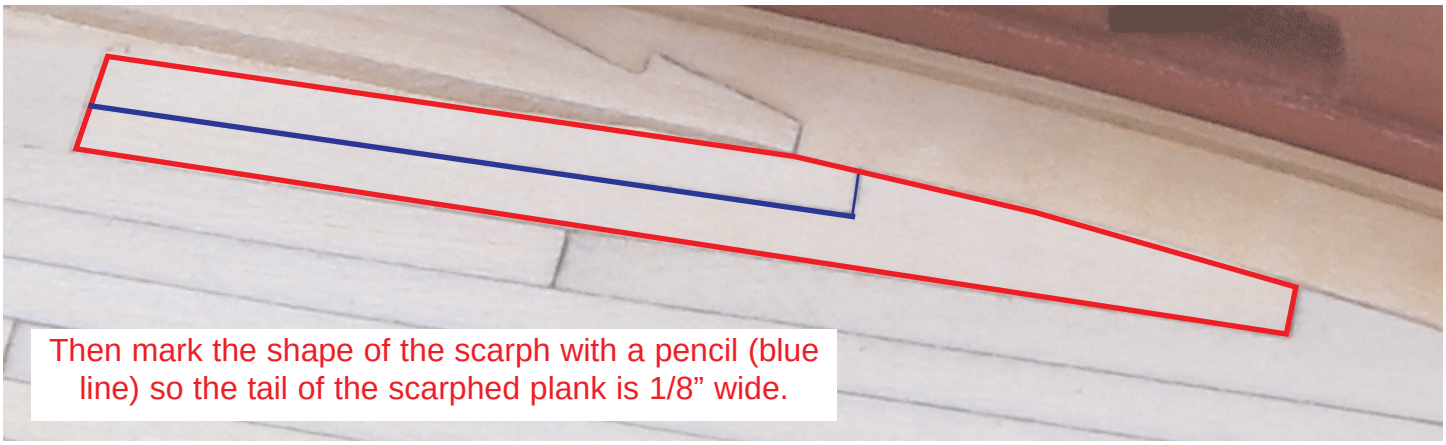
Photo one – Cut a length of ¼” x 1/16” strip to fit against the margin plank. The outside edge should be cut so the plank fits tightly into position. Don’t glue it down yet. The photo shows the plank outlined in red.

Photo Two – Remove the plank once you are happy with how it fits. Then draw a reference line that creates the shape of the scarf. The tail of the plank should be 1/8” wide. You will then be able to continue planking the deck with 1/8” wide planks until you reach the great cabin. You will need to create a scarfed plank along the margin plank back there as well. Examine the plans carefully. At the widest part of the scarf, the strip should be about 7/32” wide. Once you draw the shape, you can remove it to be cut. The reference line is shown in blue.

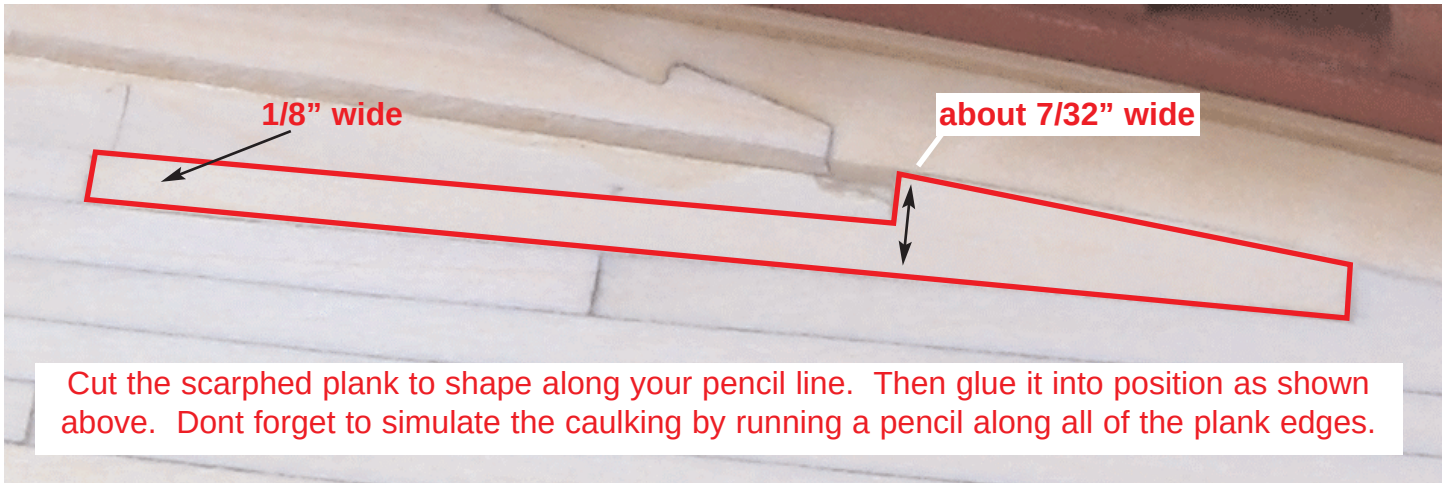
Photo Three – The plank has been cut and is



Start with a 1/4” wide strip and shape it to fit against the margin plank. Red outline. Dont glue the plank into position yet.



Then mark the shape of the scarph with a pencil (blue line) so the tail of the scarphed plank is 1/8” wide.



Cut the scarphed plank to shape along your pencil line. Then glue it into position as shown above. Dont forget to simulate the caulking by running a pencil along all of the plank edges.

shown positioned on deck. You may have to tweak its fit slightly but glue it down after you are satisfied. Once again, don’t forget to run a pencil down all of the edges to simulate the caulking between each plank. You should also check that the tail of this hook scarfed plank is actually 1/8” wide so the remainder of your planking will fit against it. The tail needs to be the same width as the 1/8” wide planking strips. If you cut the tail too narrow then you must throw it away and make another one. Don’t glue it down until you are sure. Proceed with this approach until the deck is fully planked. Then you can install the treenails just as you did on the outside of the hull. The treenail pattern is shown on sheet one for reference. On the kit prototype, the deck was finished with MinWax wipe-on-poly. No stain was used. The color matched the underside of the hull. Normally the deck would have been lighter than the hull planking above the wales. You can see the completed deck planking in the photos provided.

To finish up this chapter, create the handles for the two scuttle covers forward of the main mast hole. The kit supplied eyebolts were used. Paint them black before gluing them into pre-drilled holes. Then bend them over to simulate the handles on the scuttle lids.