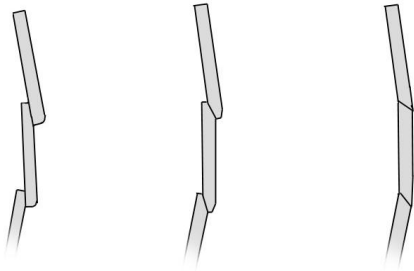


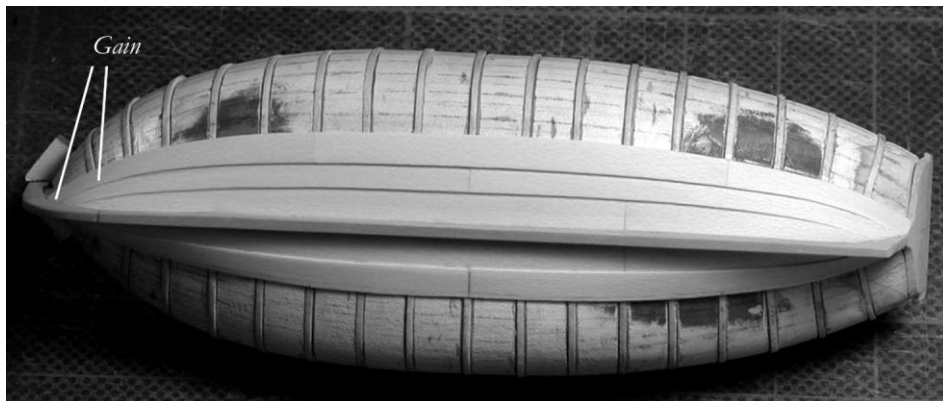
Now make a card pattern for the foremost plank in the second strake. To approximate the curve that you will need, hold a ship's curve up against the model to see what will be about right and make your first pattern. Make adjustments until a fair match with the garboard is achieved, then transfer plank widths at various points along the plank as you did before. Cut the pattern, check it against the model, and then cut the plank.

Before gluing up the plank there is the small but vital point of the 'gain' to be taken care of. This is where, at bow and stern, the clinker overlap disappears and the planks become flush. If you do not do this, the planks will never fit the rabbet at the bow.

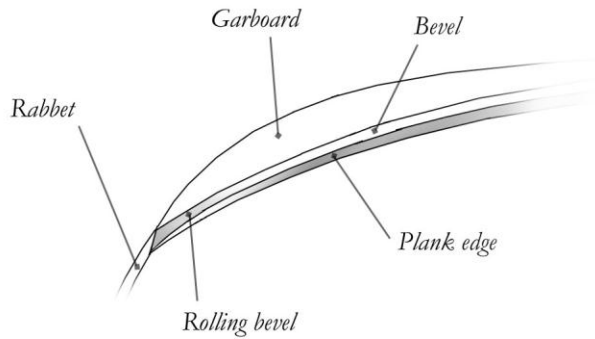


The diagram shows how this occurs. It is made over the last 12" of plank at the bow. The section at the left shows the normal lap. As one moves from this to the gain the bevel increases (center) until it becomes 45° and the planks flush (right). In the case of our cutter, the same thing will apply at

the stern where the planking goes into the rabbet or over the transom. The gain may be sanded into the plank edge or cut with a small, sharp micro-chisel. I prefer the latter as one can control the 'roll' of the bevel with greater precision. A guide is to check the plank edge while shaping this. The edge should feather down to nothing at the rabbet.



*Third port side strake in place, showing gains fore (marked) and aft*



This point is shown at the left. The angle of the bevel increases, without becoming wider, as the plank edge diminishes to zero at the rabbet. Be careful not to let the bevel get wider, or there will be an ugly shadow at the seam with the next plank.

To cut the gain in the adjoining edge of the second strake, the rolling bevel starts from the square edge and turns *under* to 45° along the same distance as the bevel on the plank already in place. The two planks should then sit nicely flush to each other at the rabbet.

### Part 5 – Beveling the transom

Continue planking, alternating sides, until you reach the transom. This will probably be at the third strake. It is now time to bevel the transom. The planking in place serves to give stability and lateral support to the sternpost and transom. Beveling is best carried out with Swiss files. Turn the model until it is stern-on to you. The changing angle of the transom edge is defined by the shape of the plug. It is simply a matter of filing the transom to conform to the contour at the aft end of the plug.

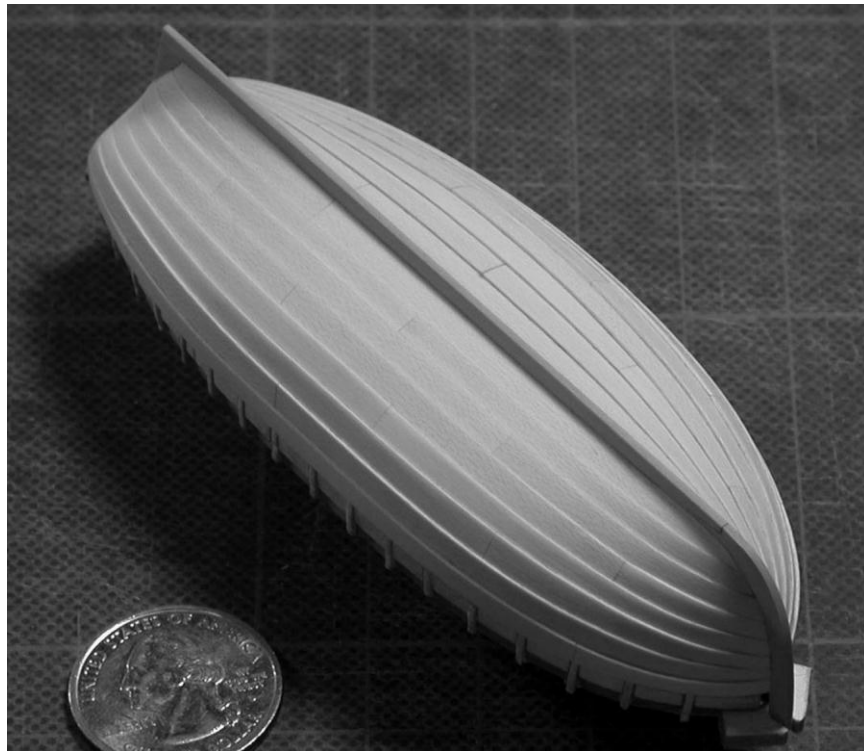
### Part 6- Completing the planking

Once the transom is bevelled you can continue planking. Be particularly careful to get the gain just right at the transom, so that there is a tight joint between strakes as well as no gaps under the planks at the transom. The most awkward spot to plank is at the junction of the stern post and transom. Wetting the plank and applying heat with a hot iron will help conform it to the shape of the boat here.

The sheer strake should be level with the top of the plug at the sides. Ensure that all is equal on both sides of the model. Before the moment of truth – removing the model from the plug – there are a few refinements to carry out. Gently sand the sharp corners of the planks

to a small quarter round. There should be no edges to catch or get chipped off. Don't overdo this, however, or the crispness of your planking will be lost.

Next, you can sand the aft part of the keel and sternpost slightly on each side to put in the taper. Do the same at the bow. Now taper the stem to the cross-section on the plan. It is easier to carry these operations out while the boat is still supported. Lastly, take your pencil and lightly mark the edge of the sheer strake with the positions of the frames. Now all that is left is to pop the model from the plug. Remove the model from your vise and place right way up. Take a piece of scrap wood about the width of the slot in the plug. Push this down the slot from above at the fore end and tap lightly. Repeat this at the aft end. There may be some alarming cracks or other sounds, but after a bit of persuasion the shell, which is quite flexible, should come free. Sit down and enjoy a good, stiff Scotch.

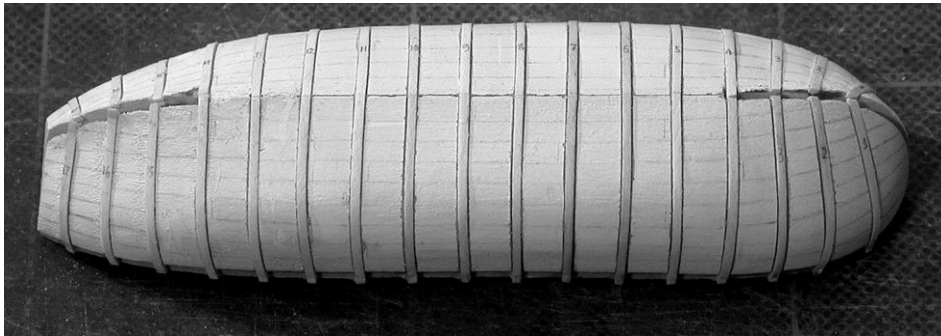


*The cutter before removal from the plug.*

## Part 7 – Frames

Take the plug and replace it in the vise. File out the slots for the frames in the center plate of the plug. Now begin with the midship frame. Using a tick strip, find the length of holly needed to wrap around the plug, allowing a little extra on each side above the sheer line. Take a length of 1½" (1/16" full size) square holly and soak it in water for a minute or two. It will now be flexible enough to wrap around the plug. Clip or white glue the ends to the rim of the plug while the wood 'sets'. I used small 'Bulldog' clips. Repeat this process for the other full frames.

As the frame dries, clearly pencil its number on the outer surface. A lot of the midship frames look identical once taken off the plug! You may need to apply a hot iron to persuade the frame to form the reverse curves further aft.



*A plug for a longboat with all the frames bent in.*

Cant frames should be made one at a time. Allow the inner end to overlap the slot. I use pieces of painters' tape to hold the cant in position. Once the frame is dry, ensuring that it does not slip, gently file the inner surface of the cant with a flat Swiss file, using the slot as a guide. This way you will get a perfect bevel on the inner end of the frame.

Take your shell and, using the mark-out that you made at gunwales and keel, glue in the frames. Trim any excess off down to the gunwales, keeping the tops horizontal. Use a sanding stick across the boat to refine this. It is surprising how sturdy the hull has become. It should now look like the one shown on the next page.