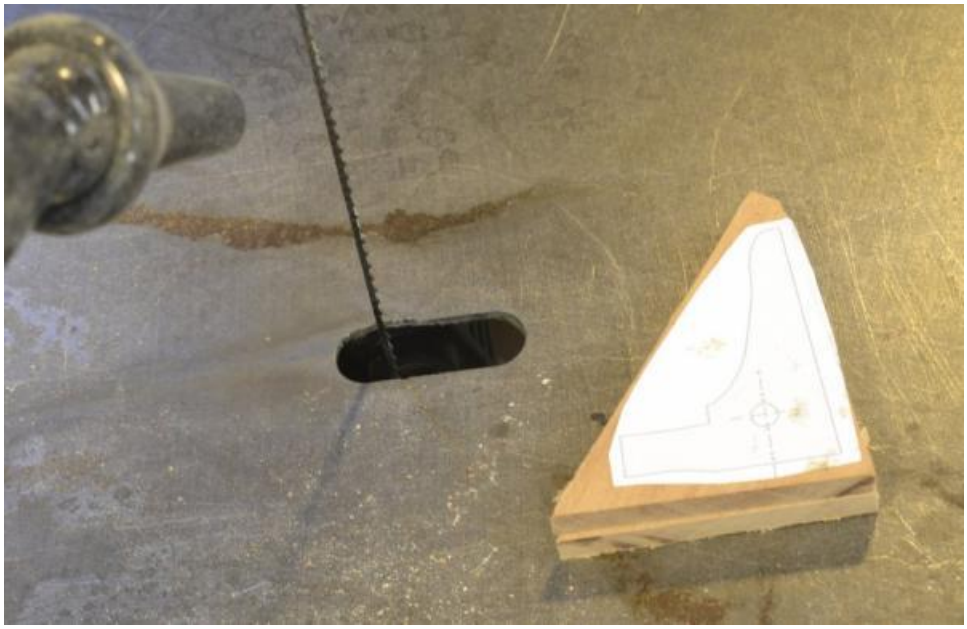
11/29/15

Young America 1853 – POB 1:96
Part 36 – Forecastle Deck Beams 2

Before setting the forecastle deck beams some under-deck work had to be completed. In the first picture the main decking under the forecastle has been completed, the opening for the bowsprit has been sized and a large knee has been fitted to the forward side of the Samson post.

On this model the bowsprit will step on the plywood bulkhead at the aft side of the opening. A dowel into holes in both the bowsprit and the bulkhead would probably be the simplest method. Next, the carrick bits that will support the windlass shaft were cut out. In the next picture, blanks for two bits were pasted together with one pattern and are about to be cut out on the scroll saw.



These two bits needed to be identical and also carefully fit so the windlass will be horizontal and will clear the deck and breast beam. I left the bottom edge with some excess so the bits could be tailored to fit the actual space with the correct height above the deck for the holes that will take the windlass axle.

These bits also provide central support for the forecastle breast beam, so that beam needed to be positioned before fitting the bits. In the next picture that beam has been cut to length and its height is being set at the side using a strip of deck plank.

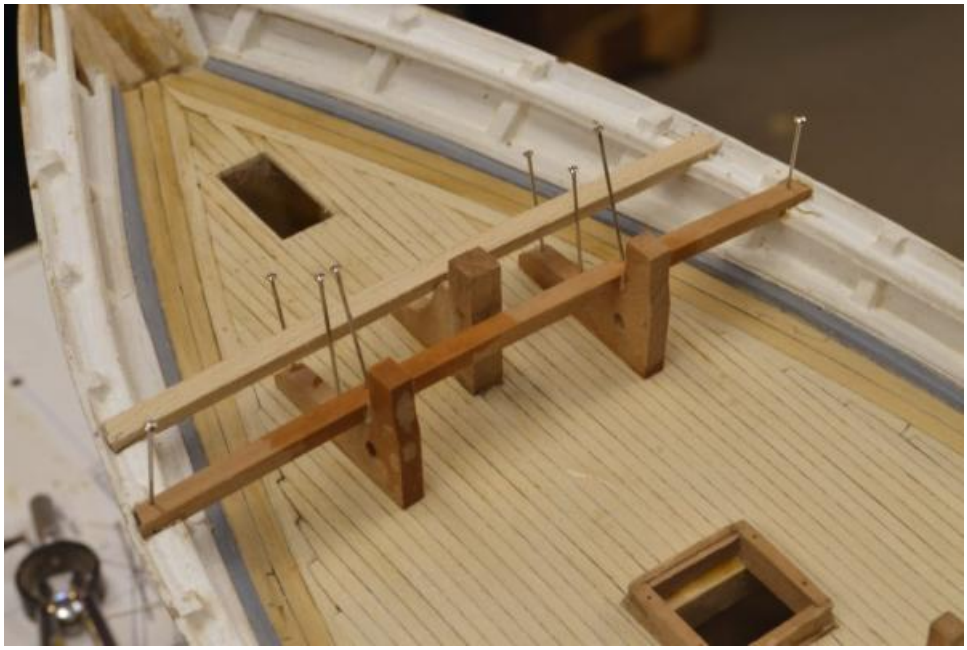
The deck planking needs to be flush with the top of the side. The height along the top of the side was well checked much earlier. I set the deck beams on the top of the main rail, since this is at a

convenient height. Either the beam could be cut back or the rail notched to get the beams at the correct height. All of this structure will be hidden by the deck, so any deck knees can be ignored.

Unlike all the main and lower deck beams, the forecastle deck beams are not set on the frame lines. To mark the beam locations, measurements were taken from frame lines on the plan drawing for the forecastle and transferred to the shipway plan using dividers. In the next picture a deck beam location is being transferred from the plan up to the rail using a square.

The line drawn at the beam location can be seen at the base of the square. With the first two beams positioned, the carrick bits and the Samson post knee could be trimmed to provide support for the beams. All these parts have been fitted in the next picture.

In this picture the carrick bits are pinned in place. They have been positioned with a temporary windlass axle installed so they would be aligned when pinned. The height of this axle was set using a gauge block cut to the correct height when the bottoms of the carrick bits were trimmed before setting. In the next picture the axle has been removed and the bits glued to the deck.



In this picture the breast beam has also been glued at the rails and to the carrick bits. All pins were later replaced with copper wire bolts. Before going any further the hawse holes needed to be drilled out and lined. In the next picture the main hole on the port side is being drilled to final size by hand using a pin vise to hold the drill.

Small pilot holes were drilled first by eye after locating the inside and outside centers – before enlarging the holes to final size. The locating method was described in one of the posts on the framed model and in detail in the book. It is basically a matter of locating the fore and aft positions and the heights on the sheer plan and transferring those to the hull using a height gauge. The centers at the inside are at the waterway where intersected by keel-parallel lines from the centers of the chain tubes.

The last picture shows the brass lining inserted into the sized hole.

All four hawse holes were installed in this manner. The linings were the filed off flush on the outside. Work on the forecastle deck will continue in the next part.