

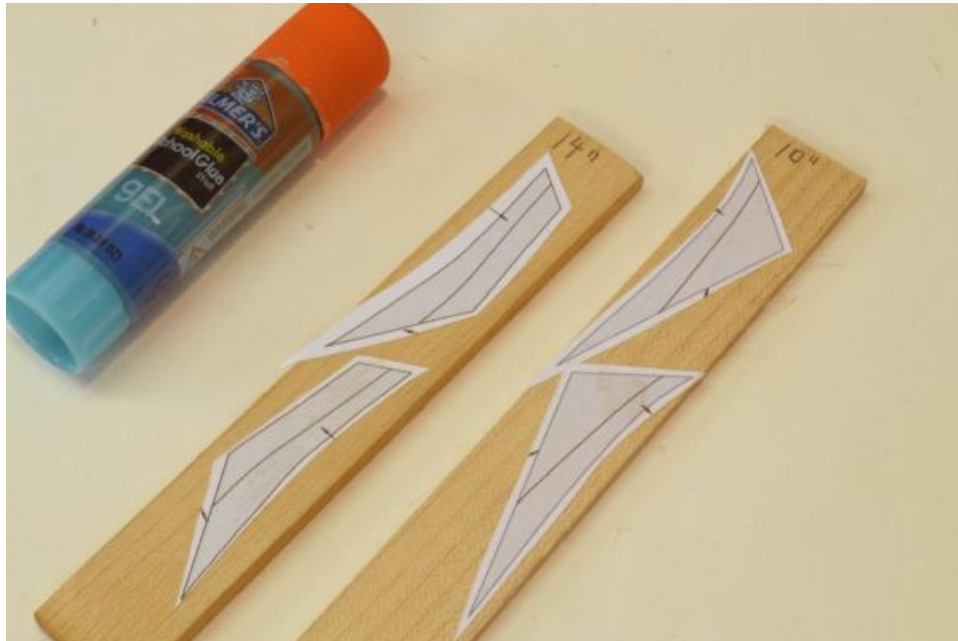
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Young America 1853 – POB 1:96

Part 20 – Knightheads

The knightheads reinforced the stem on either side and provided a base for securing the hawse timbers that formed the forward hull back to the first cant frames. This detail is shown in the posts for the full framed version of the model. Rising above the top of the sides, the knightheads also provided lateral support to the bowsprit. To accommodate the 36" square section of the bowsprit, additional space was provided between knightheads by additional members, 10" thick stem timbers, bolted to the sides of the stem assembly. The two 10" stem timbers astride the 16" thick stem provided the necessary 36" spacing for the bowsprit.

On the POB model only the upper parts of the knightheads and stem timbers were modeled. In the first picture their patterns have been pasted to the correct size stock.



As with all of the stock for this demonstration model, $\frac{3}{4}$ " wood was used, allowing all the thicknesses to be cut on a good model circular saw. This was done to allow the model to be made from readily available stock without the need for a thickness sander/planer – a rather expensive tool and not one that beginning scratch builders might have. In the next picture the members have been cut out and given an initial bevel based on the pattern lines.



These were cut from hard maple. The knightheads will be exposed on the model but painted black. The members to the right are shown in their relative positions. In the next picture the starboard head timber is being fitted into the space between the stem and the most forward bulkhead.



To prepare for this, the pine spacers forward of the first bulkhead were removed by sawing and paring with a straight chisel. These spacers had been installed to protect the forward bulkhead during initial rough fairing of the hull.

In the next picture the breadth across the installed head timbers is being checked for the eventual fit of the bowsprit.



At 1:96 the breadth needs to be $\frac{3}{8}$ ". This precise breadth was obtained by sanding the sides of the members after they were glued in. In the next picture the port knighthead is being glued into place.



With both knightheads firmly secured they could be faired into the stem rabbet. In the next picture a gouge is being used for this.



With the shape roughed out with the gouge, a curved rasp was used to refine it – as shown below - followed by 120-grit sandpaper.



With the knightheads in place and faired, the topside planking could begin.