

Weekly work updates from February 2004 through December 2004 on the restoration of the 1895 lumber schooner *C. A. Thayer*

August 23 – 27, 2004

Back from a week of sailing in the San Juans, the framing in the starboard mid-body is almost complete. While waiting for a new shipment of framing stock, the gang had worked ahead making up templates for the remaining starboard and port framing, between about Frame 10 and 54. For about the last three weeks there has been a flurry of cutting on the big ship saw. Now the starboard futtocks are mostly in, and the port side will follow quickly. Late last week the trunnels connecting the starboard futtock pairs were driven, making them solidly permanent.

Dozens of filler pieces at the upper portions of the old floor timbers and #1 futtocks have been made up and installed. This was fussy work; cutting the soft upper sections back to solid wood, with a flat surface, and making up inserts to fill in the gaps. The inserts, usually wedge-shaped, have been attached with trunnels, at least through their inner faces, and usually sideways into the sister futtock. The final shaping of the inner faces will wait until the new ceiling planking is ready to install.

The raising of the after house went off without a hitch. The house is now resting comfortably some six feet above its old level, well supported by the I-beams. With the house and house beams out of the way, there is room to work in the stern. The after pointers and their connecting shelf structure are out. The pieces all look just fine and can be reinstalled later in the project. Much of the thick ceiling planking aft has now been removed, leaving just enough to help hold the shape until the new framing is installed.

There has been good progress on the sister keelsons. The plan, you will perhaps recall, was to remove the forward and after sections of the upper sister keelsons on both sides, fore and aft. Each of these timbers was about forty feet long, scarfed into the longer center sections. The drifts were pulled with the hollow hydraulic pumps without notable trouble, and the timbers slipped out using wedges and chain falls.

The main object of this exercise was to get access to the floor timbers and lower futtocks in the ends. Therefore, we had to cut through the lower sister keelsons about 25 feet from the ends and remove them, even though these timbers were basically sound. It turned out that the lower sisters were independently fastened to the frames, two drifts into each frame pair, even though the drifts from the upper sisters had passed through them and into the frames. This is one more indication of the strength of the structure. When these lower drifts were removed, the four lengths of lower sister were removed. When repairs to the framing are completed, new forward and after sections of lower sister will be installed, with proper scarf joints connecting to the original middle lengths.

The condition of the upper sister keelson sections was worse than we had hoped. Only two of the four pieces can be reused, and these will require extensive graver pieces to be

let in to fill localized soft sections. Both of the forward sections will be replaced with new material.

We decided to also remove the center section of starboard upper sister keelson. This was mainly because the scarf at the forward end of this section lapped over the forwardmost piece. We could see that there was extensive rot in the under face of this scarf area, and it would have been impossible to either fill this with gravers or to cut a new scarf further aft with the timber in place. So it came out. We have decided to cut a new scarf in the piece, about eight feet aft of the original, and make the new forward keelson piece that much longer.

The condition of the floors and lower futtocks exposed by the removal of the lower sister keelsons fore and aft was about what we had anticipated. The midship sections, under the centerline main keelson, were sound. In each frame pair, one timber comes to a diagonal butt, just outboard of the center keelson, on either side of the vessel. The new futtocks will come down to these original butts. For the other futtock in the pair, a new butt will be created, in the form of the longest possible scarf, as far outboard as possible. This will result in joints placed closer together than we would like, but with enough stagger to hold together. We have seen that the guys are able to work cleverly on these sorts of joints, and are confident that the joints will be closely fitted and solid. The only alternative would be to remove either the centerline keelsons or the garboard planks, neither of which would be good for the project as a whole.