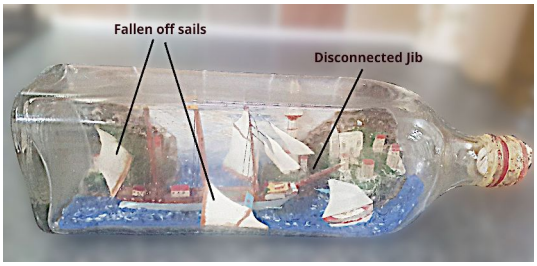
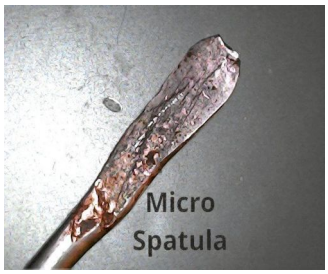
Repair of a Ship in a Bottle

This lovely and loved 100 year old schooner in a bottle was brought into the Prestwood Repair Cafe by its very distressed owner after it had been accidentally dropped and suffered damage. Two of the main sails had come completely detached from the masts and were flopping about in the bottle. Also at least one of the stays for the jibs (the small sails at the front) had either broken or come detached from the bowsprit.



One of the Repair Cafe volunteers undertook to attempt to fix it – on the usual “no promises” basis. To repair the ship out of the bottle would have been easy – but that was impossible. For some such jobs, breaking and replacing the bottle is the only option, but this would have been too drastic and reconstructing all the contents would have been a huge task. Thus it was that the making of tools was necessary.

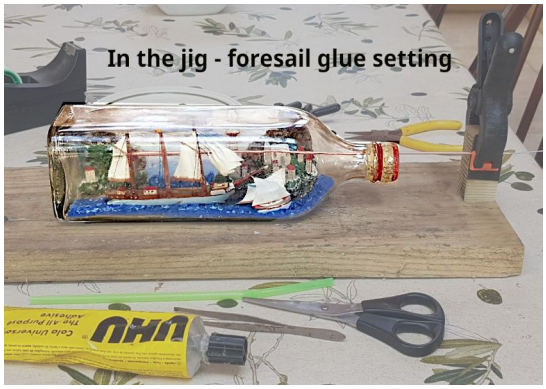
First the jibs were tackled. One stay was certainly broken, and two others either proved also to be broken or were so highly fragile that they came off when the sails were simply being repositioned gently with a drinking straw. For this, two simple tools were made up on the two ends of a bit of fencing wire. One was a little rough spatula, made simply by hammering it flat. The second was a small hook made by grinding it down and bending. The spatula was used to apply small dabs of glue to the bowsprit, then the hook was used to bring the stays in contact with the glue. The boat was held at the right angle while the glue was drying to prevent gravity from mischievously undoing the mend!



And that was the easy bit! To re-glue the main sails was less easy since they are attached to the front of the masts, i.e. away from the neck of the bottle. A special tool was made up from a length of very fine (2mm) copper tube. A steel wire (sub 1mm) was passed down the middle of it (the old technique of stretching the wire to get it perfectly straight came in handy). A loop of copper wire was soldered to the end of the tube, and the end of the wire was bent over to make a gripper together with this loop. Friction between the tube and wire were enough to allow the end to keep a grip on a sail (so the planned complication of a spring to pull on the wire proved unnecessary.


The end of the long gripper tool

Plan A, some carefully robust bending of the spatula tool so that it could smear glue down the front of the two foremost masts was rejected due to the difficulty avoiding smearing glue the rigging that went out in front of them. The sail, one being done at a time, had already been carefully picked up along its long edge with the gripper – the right way up (that seemed to matter!), a fiddly job. Getting the sail out of the bottle to glue it would have been possible with some bending of it, but getting it back with glue on with out smearing the neck seemed too difficult. So dabs of glue were the applied to the luff of sail with the less radically modified spatula while held within the bottle – carefully! The sail was then gently winkled down the bottle and put into contact with the mast and held there. Getting it between the forestay and the shrouds of the foremast took some care. To save the patience and need for a steady hand on the part of the repairer, a rough wooden jig had been made to hold the gripper in place until the glue had set. The method that was found most controlled was to leave the gripper in the jig and move the whole bottle to bring the mast up to the glued sail. Left overnight for the glue to set in that confined space. Then gripper was careful removed and on to the final sail, a repeat operation, marginally easier.



Thus the good ship Whateverhernameis (which we have since been told was once called “Millie – Homeward Bound” although the writing has since faded to illegibility) is again under full sail headed for the horizon. It was an interestingly tricky job, not without its moments, but we enjoy a challenge. The skill and patience needed to get her right again was not a patch on that needed to make this lovely thing in the first place! It is thought that, rather than use the common technique of building the boat outside with the masts folded down and pulled up with a cord only when in the bottle, the whole thing was constructed inside the bottle.