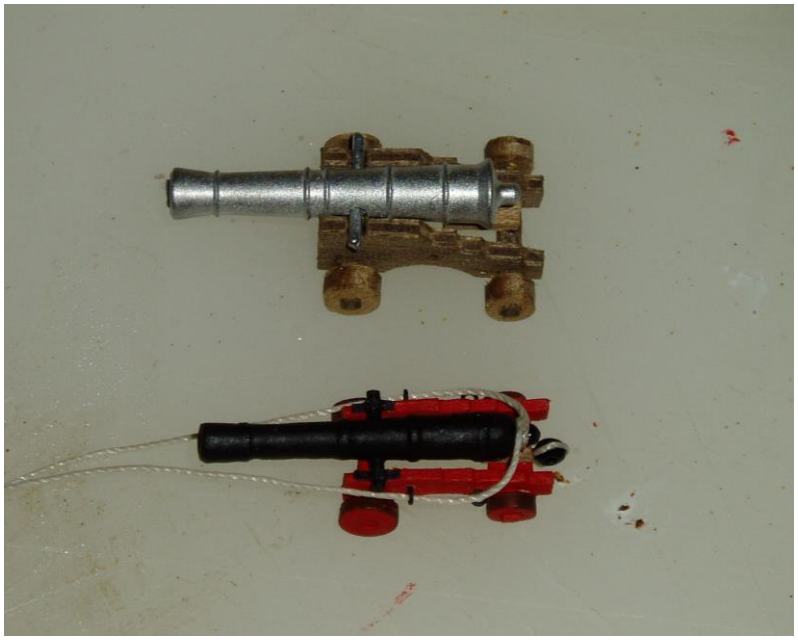
Cannons

The notes for Sherbourne state that she was armed with 3lb cannons but the parts supplied with the kit are somewhat oversize. I decided to scratch build 3lb cannons and these are described below. However, for the sake of ease and simplicity it is possible to use the kit parts. The small dimensional errors remain but visually the guns are in keeping with the size of the hull. If you do scratch build the cannons then the swivel guns will also need to be made from scratch.

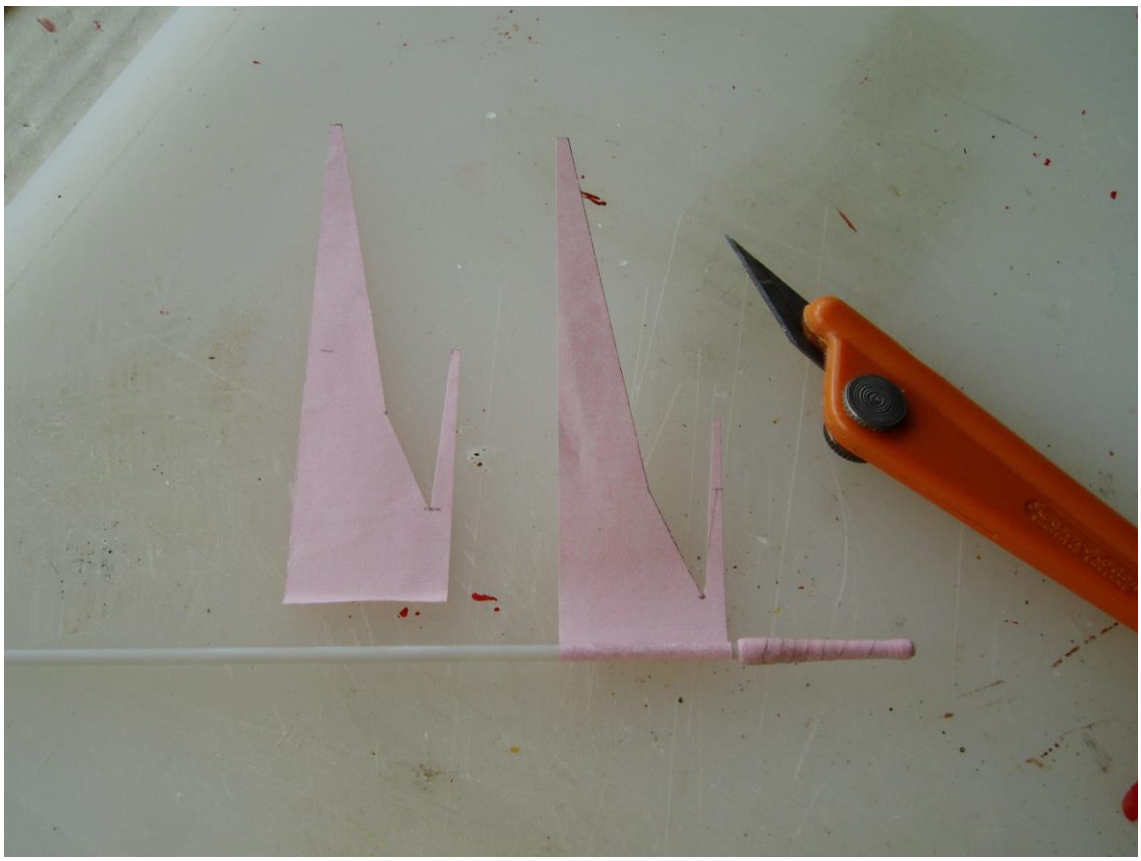


Kit & scratch cannon. The parts supplied in the kit are larger than the scratch built cannon but are nicely proportioned for a 4lb piece

Barrels

There are many ways to scratch build the cannon barrels and the choice depends on your personal preferences and access to equipment. I first made one to learn how to do it, then made nine from which I could choose the best eight for the ship.

The barrels are tapered tubes with a total length of 23.5mm including the cascabel button. The maximum diameter is 4mm. The barrels started as plastic tubes of 1mm internal diameter, about right for 3lb, and the thickness was built up by winding paper around them. This took some experimenting at first to get the number of turns right but in the end I had a shape which gave the right diameter along the barrel. The taper of the paper gives the changing diameter of the barrel by building up a greater or smaller number of layers. Building three barrels on one length of plastic tube makes handling much easier for these stages.



Barrel twist. One piece of paper is lying loose, one is glued to the plastic tube by its edge, one has been wound around

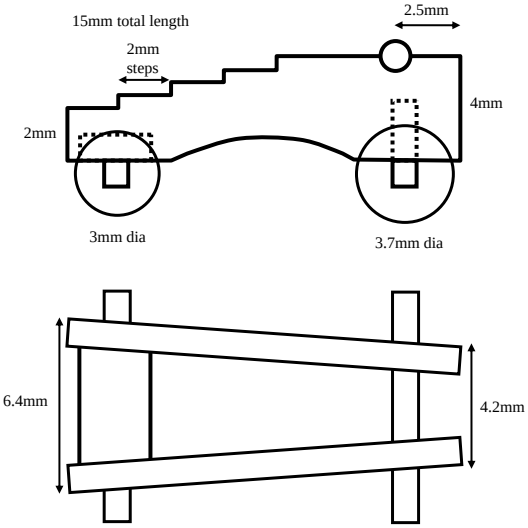
The paper was glued with cyano acrylate by one edge to the plastic tube then given a thin coating of PVA on the inner face, wound tight and left to dry. The dry barrel then received a thin coating of cyano acrylate all over to harden it. When this was dry (a light wipe with a tissue gives reassurance before you pick it up in your fingers) the barrel was sanded with some fine, worn sand paper to remove the edges of the spiral paper turns.

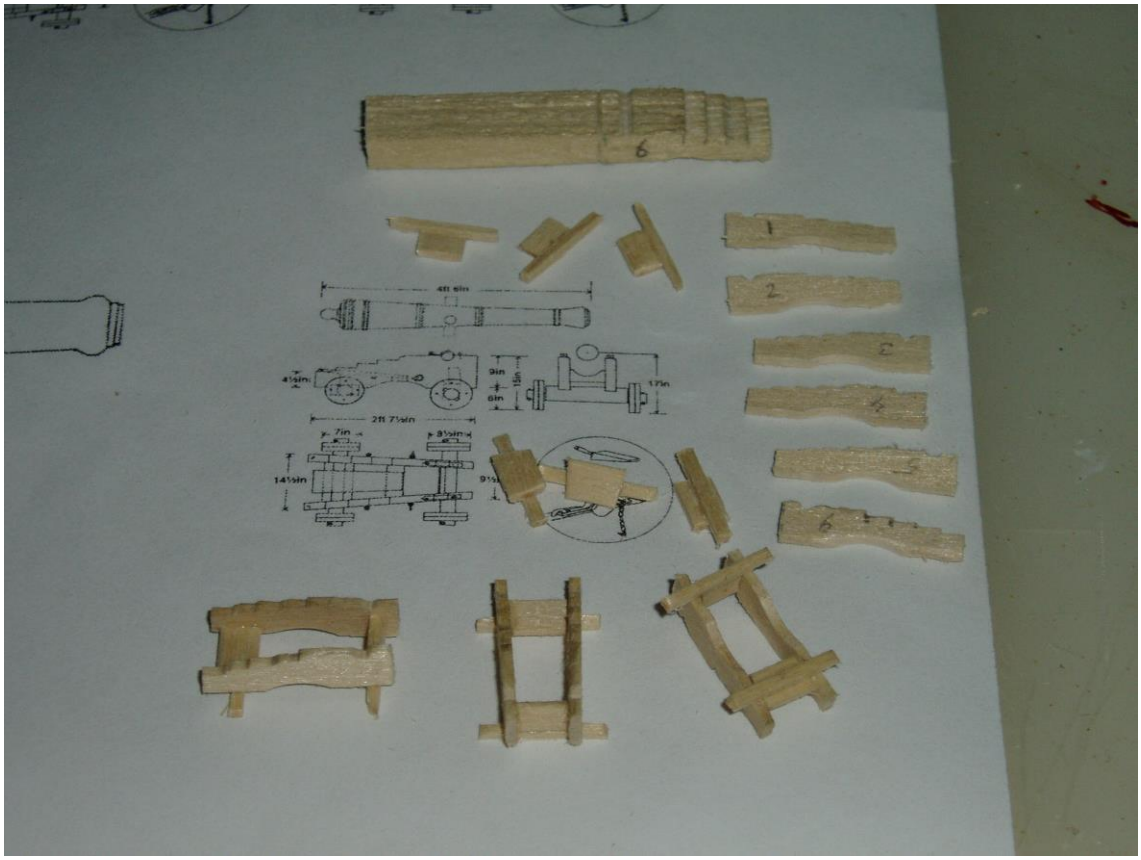
The positions of the reinforcing bands were then marked in pencil and a couple of turns of thin paper strip were laid on. A delicate touch is needed for this since thin paper strips which are wet with PVA adhesive break very easily under tension.

The barrels were then separated by rolling them with a knife blade pressing down on the cut line. This gives a much cleaner cut for a tube than a brute force slice or using a razor saw. The cascabels (the round button at the breech end of the barrel) were added by gluing a short length of plastic rod into the end of each barrel and shaping it into a ball by gentle filing. The barrels then had holes drilled in them for the trunnions which were from plastic rod. When assembly of the barrels was complete a cocktail stick was pushed into the end so that could be held for painting. The glued, paper surface takes acrylic paint very well.

Carriages

The carriages were built up from 4mm x 1mm lime stock. For the sides I found it easiest to tack six pieces together with a little PVA glue and carve them to shape as a block. The key advice here is to work slowly and only cut away a little at a time so that the steps on the top are of even size. The curve on the underside was filed. The pieces were numbered individually while cutting them off the block so that neighbours could be paired up to reduce the visual effect of cutting errors. The cross pieces for the carriages were somewhat simplified from true practice and were cut from wood strip. Assembly of the carriages was a job for small fingers and used PVA glue so that fine adjustments to alignment could be made before the glue set hard. The carriages were painted red and then a quoin in natural wood was glued on.





Carriage bits. At the top is a block of strips which have been carved for the sides. Next are the numbered sides and cross pieces with axles. At the bottom are three carriages

Five eyes need to be attached to each carriage to take the various ropes. One pair in the sides, near the front, looks forwards and backwards and leads the breeching rope. A second pair in the sides, nearer the back, faces up and down and takes blocks for the gun tackle. A single eye is in the back, facing up and down, and has a block for the training

tackle. Mounting holes for all these have to be drilled. The kit does not provide eyes for the cannons and I used the small etched brass eyes from Jotika. I painted them with black acrylic before gluing in place with a small drop of cyano acrylate.

Wheels for the carriages were made in the same way as the barrels by winding paper around a plastic tube and hardening it with glue. Thin slices were cut off by rolling the tube under a sharp knife blade. The wheels were painted red on their faces and the rolling surfaces brown to simulate worn wood.

The barrels were glued to the carriages and trunnion caps from black paper were folded and then glued over the trunnions.

Carriages. Assembled, painted and with eyes glued in

Fitting the cannons and tackles

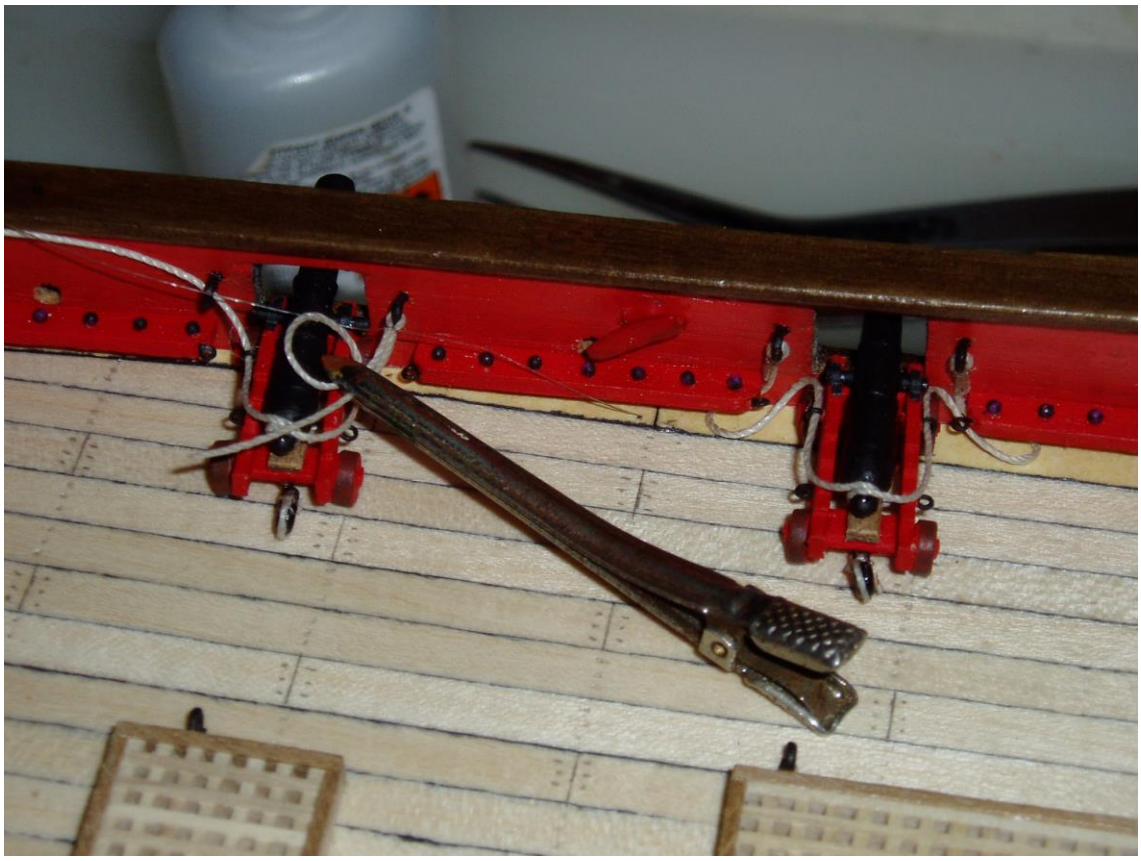
The ropes around the cannons add much to the atmosphere of a busy deck. They can be added in various positions, depending on how the guns are stowed or if they are meant to be in action. I chose to show the cannons in a stowed position but added the training tackle which runs from the rear of the carriage to an eye on the deck. This would often be removed when there was little likelihood of the guns being used but adds some interesting detail to the model.

Breeching rope

This is made from 0.5mm thread and is looped once around the cascabel. Different references show it over or under and either left over right or right over left, so decide which you trust and follow that. I placed the cannon pointing away from me, held a thread over the cascabel and then looped the right end under and round and pulled it tight. A small drop of cyano acrylate holds it in place. The ends were then threaded through the front eyes on the sides of the carriage. (If you are going to fit the training

tackle assemble a block to the rear of the carriage at this point, before gluing the cannon to the deck.)

Place the cannon on the deck to check that it does not rock, if necessary give it a light rub on some sandpaper to level the wheels. When you are happy with the dry run put a drop of cyano acrylate onto each wheel and then glue the cannon in place. The ends of the breeching rope are now threaded through the large eyes either side of the gun port. The breeching rope is not tight from the cannon to the bulwark but is long enough to allow the weapon to recoil. I layed the end of the rope back against itself and held it in place with a small clip, then tied the two pieces together with nylon monofilament to form a loop through the eye. A drop of cyano acrylate sealed the knot and the end was trimmed to length. The ropes were then tucked away neatly under the shot racks.



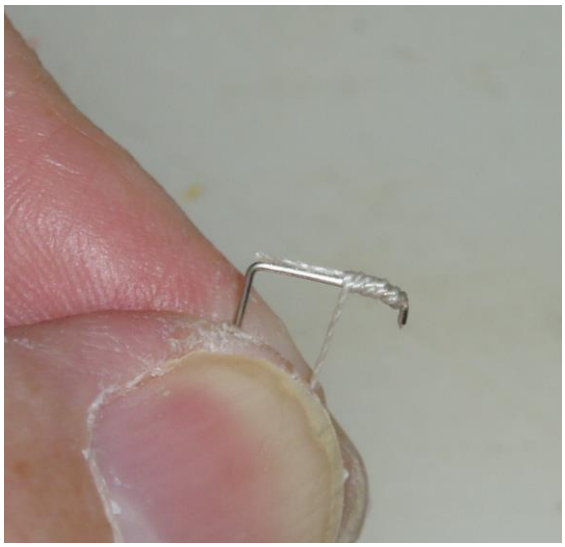
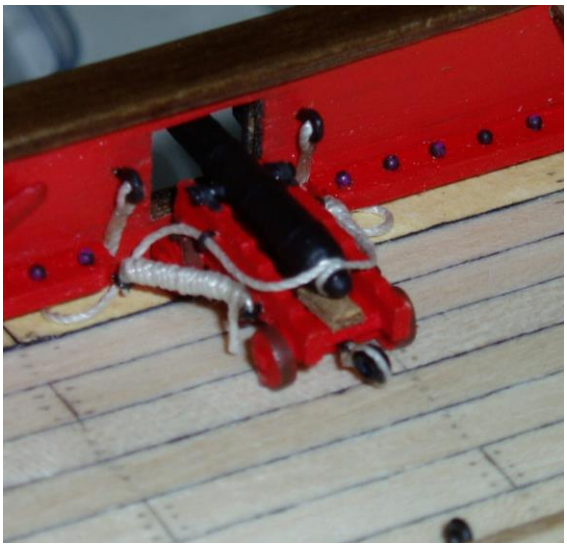
Breeching rope to bulwark. A clip and a nylon monofilament knot hold the thread in the right position for gluing. The block for the training tackle is already tied on to the eye at the back of the carriage

Gun tackle

On a real vessel the tackle has two blocks and is used for running out the guns. In the stowed position the tackle is pulled tight to hold the cannon against the bulwark and the excess loose rope is looped back and forth and then tied onto the taut rope. To do all this in 1/64 is very hard and I simplified the arrangement considerably. It is far from perfect but does at least put rope in the right place.

I bent a length of wire so that it would hook between the eyes on the carriage and the bulwark. I glued one end of a 0.25mm thread along the wire and then wrapped the thread around the wire twice, glued the end and trimmed it so that a couple of

millimetres were hanging loose. The wire was cut so that a hook about 1mm long was left at each end. The assembly was then hooked over the eyes and glued in place.

Gun tackle. A length of thread is glued along a wire and then wrapped around it. The wire with its rope is hooked and glued in place

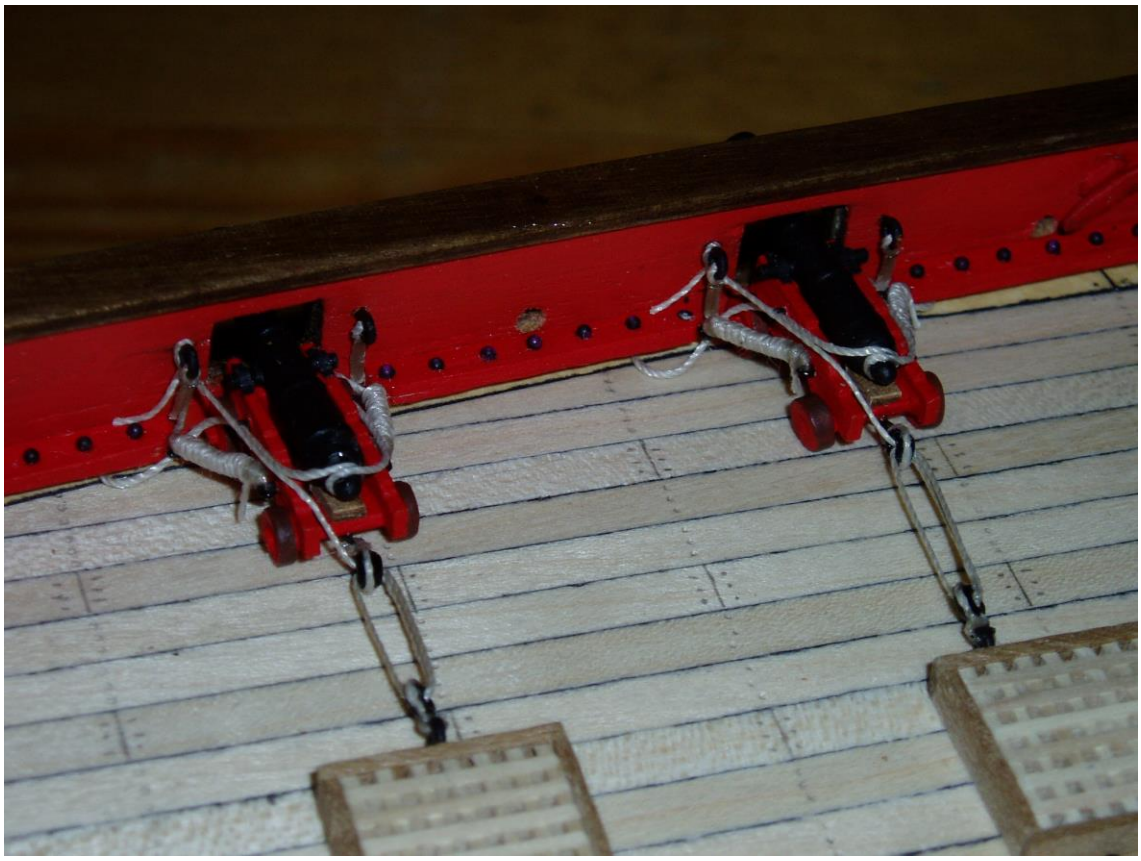
Training tackle

This is made from 0.25mm thread and uses black beads for the blocks. The parrel beads supplied in the kit are suitable and similar ones are very cheap to buy from a sewing shop.

I pushed a bead onto the end of a cocktail stick and then wrapped a length of thread around the outside of the bead, joining the ends with a simple knot. The position of the thread is adjusted until it is symmetrical around the bead and it is then glued in place with cyano acrylate. The bead was then slipped off the cocktail stick and the ends of the thread tied through an eye, either on the deck or on the carriage, with a simple knot and again sealed with cyano acrylate. The knots should be arranged so that the bead is as close to the eye as possible. It is also a good idea to ensure that the knots are always handed the same way, consistently left over right or right over left, so that when the guns are lined up on deck the ropes fall in a similar way.

One end of the training tackle rope would be tied to a hook on the end of the block on the deck; I compromised and glued the thread to the inside face of the bead. The thread is then passed through the bead on the carriage, back through the bead on the deck, and then again through the bead on the carriage. The loose end has to be secured somewhere and I carried it over the carriage to one of the breeching rope eyes. A neat look can be obtained by ensuring the beads lie at the same angles and the thread is passed through in the same direction for each cannon.

Training tackle block. Tying the thread around a bead is a slippery job



All the ropes on the cannons can be seen here together with the shot racks

Cannon tools

There is little information about where the gun tools such as the ram rod were stored when the cannons were on an open deck. It is possible that they were kept below deck and only brought out when necessary, alternatively they may have been tied to the bulwarks below the capping rail. 'Absence of evidence is not evidence of absence' in both cases so a judgement call is needed. I chose not to have the tools visible.