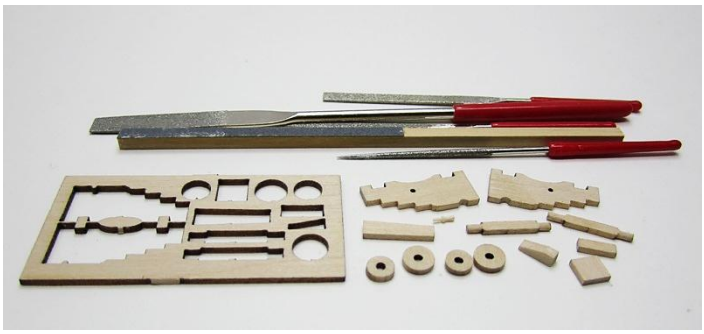
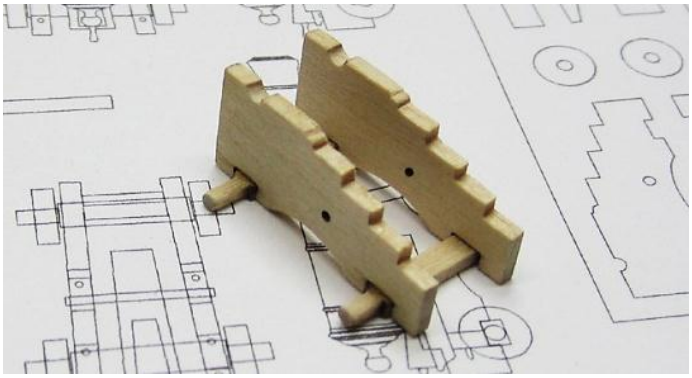
Building the Laser Cut Cannon Carriage Kit…

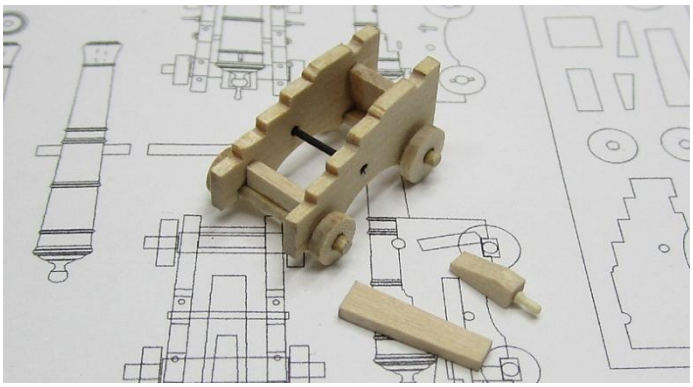
STEP ONE – Before removing any of the laser parts from the sheet, sand both sides of it smooth to remove the laser char. Then cut each part free from the sheet and file or sand the laser char from the edges of each piece. Try not to remove more wood than is needed. Only remove enough that the dark brown char is removed. Apply your stain, protective finish, or paint each piece to suit your tastes.



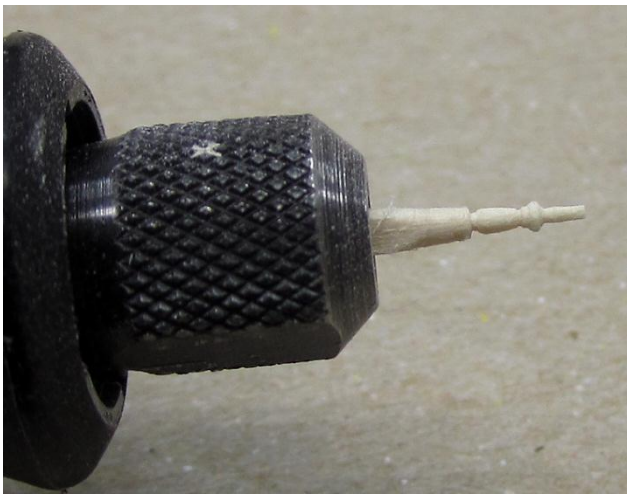
STEP TWO - Assemble the two sides of each carriage (the brackets) on each axle as shown on the plans. Note that the shorter axle is for the front of the carriage. The carriage is narrower at the front than it is at the back. Round off the outside extensions of each axle to fit each wheel (truck). Don't reduce the diameter too much or they won't fit the holes in each truck.



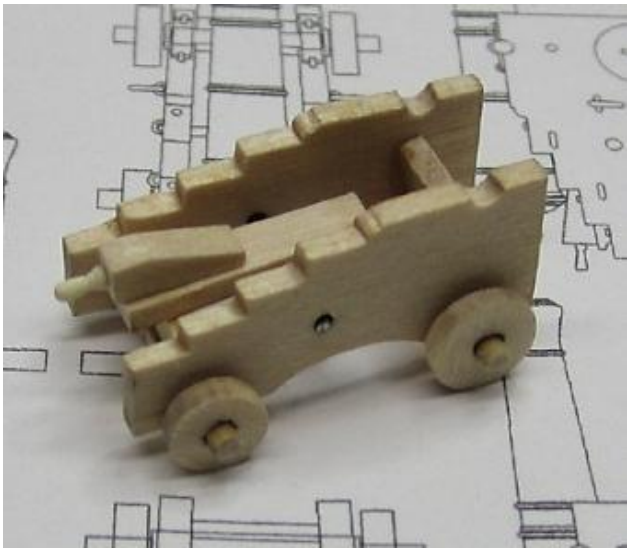
STEP THREE – Add the laser cut transom on top of the front axle. See the plan for details on its angle. Another small strip is placed in top of the rear axle. To finish off this step, a length of 22 gauge wire is pushed through the holes on each bracket. The wire should be cut so it stands proud of the surface of each bracket. Just by a little bit to resemble a bolt head!!! Larger wheels (trucks) go on the front of the carriage. See the photos.



STEP FOUR – Shape the Quoin from the 3/32” x 3/32” wood provided. This is the wedge-shaped piece used to raise and lower the cannon barrel. Using the 1/16” x 1/16” strip provided. You should turn the handle as shown. It should basically look like a small belaying pin. Insert this into a tiny hole drilled through the back of the quoin. It can be turned by chocking it into a Dremel tool or drill chuck as shown. Use various needle files to shape the handle. These are quite small and care should be taken to ensure they are kept to scale.



STEP FIVE - Place the carriage bed on top of the wire and rear axle with the narrow end facing forward. The rear end of the bed can be shaped with the *fancy profile* shown on the plans although this detail will hardly be seen. Glue the quoin on top of the carriage bed after determining the proper height of the barrel. The quoin will lower the cannon barrel as it is pushed forward.



STEP SIX - Add the various eye bolts, bolts and rings using 28 gauge black wire to make them. Examine the plans for their locations. The bolt heads on the top of the carriage brackets and the bolt that secures the carriage transom were simulated. Drill a small hole, and then insert the wire into each hole. Snip off the excess leaving the wire stand slightly proud of the surface. You may need to touch up the ends with some black paint.

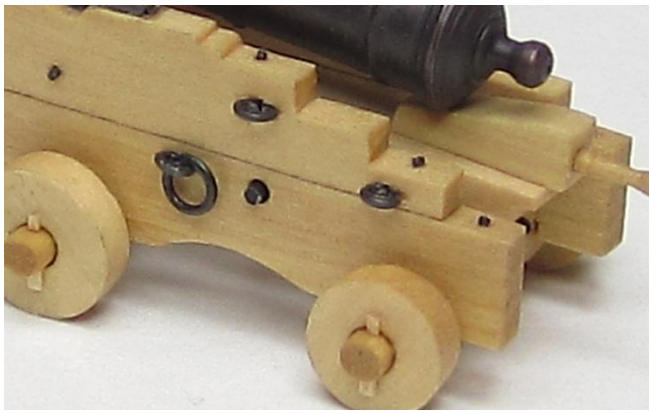
The eye bolts are inserted into pre-drilled holes. The “eyes” should be recessed into the wood as shown which would have

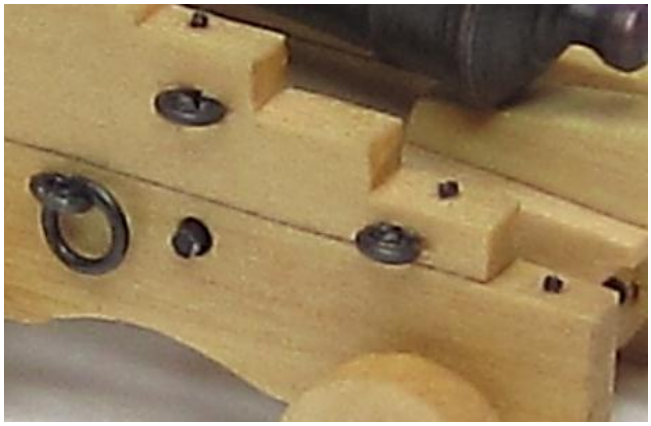
prevented them from twisting. See the photos for details. Don't forget to add the eye bolt on the back of the rear axle which can be easily overlooked. The larger ring for the breech line was made by wrapping the 28 gauge black wire around a drill bit several times. Then each ring was parted off with a flush cutter or wire cutter.

The pins (keys) shown on each axle prevented the wheels from literally falling off. These could be simulated by taking the smallest of wood shavings and simply gluing them on the top and bottom of each axle as shown.

The cap square securing the cannon to the carriage can be made using some stiff card painted black. Cut it into strips slightly thinner than the width of each bracket.

The carriage brackets could also be scribed to look like they were built in two pieces. This would have been how they were actually constructed with the carriage bolts

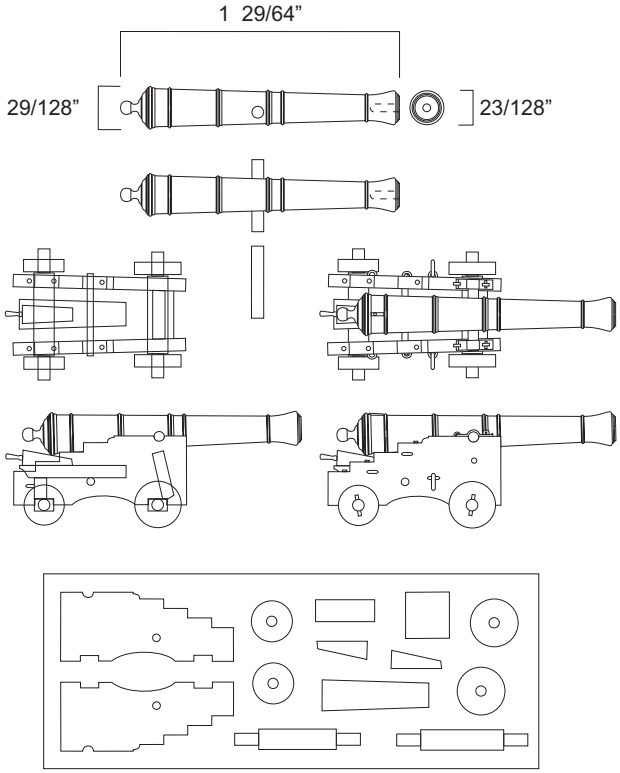




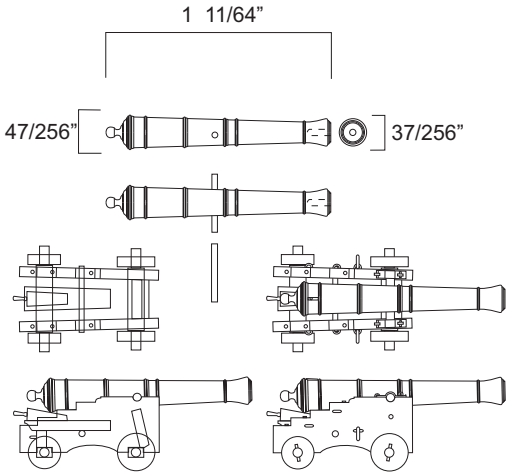
holding the two sections together. It's a small detail but you might want to give it a try. The line was etched with a sharp awl. Use a metal straight edge as a guide.

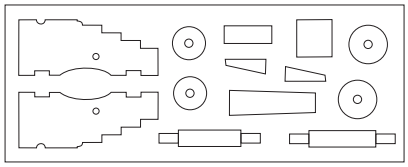
Long guns for the HMS Winchelsea.
Laser cut carriage parts are 1/16' thick

Twelve Pounder



Six Pounder





Scale 3/16" = 1'