

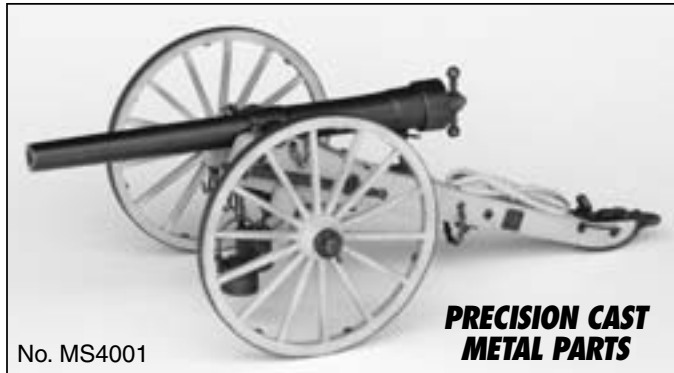
### WHITWORTH, BREECH-LOADING 12-POUNDER

Designed by Sir Joseph Whitworth, the cannon that bore his name became a favored weapon of the Confederacy. Unusual in appearance as well as operation, the Whitworth was a breech-loader that fired an elongated 12-pound iron shell from a finely rifled 1,100 pound barrel. Accurate and easy to maneuver, it had a range of 4.5 miles and made a shrill, whistling noise which could be distinguished from all other cannon of the period. The Whitworth saw action at Gettysburg, Charleston, Vicksburg, Fredericksburg and many other American Civil War battlefields.

- Historically accurate and perfectly scaled
- Cleanly cast Britannia metal components
- Authentically detailed cannon barrel
- One-piece ready to assemble wheels
- Clearly written illustrated instructions
- Easy to build – assembly and painting time 5-10 hours



**Entry Level • No. MS4001**  
Length 10" / Width 4"  
Height 3-1/4"  
Weight 1 lb., 4 oz. / Scale 1:16



No. MS4001

**PRECISION CAST  
METAL PARTS**

Check your local Guns of History or Model Shipwaysdealer for prices and availability, if there is no dealer in your area, or you would prefer to by via internet, go directly to:

[www.modelexpo-online.com](http://www.modelexpo-online.com)

### LIMBER FOR WHITWORTH, AMMUNITION CHEST

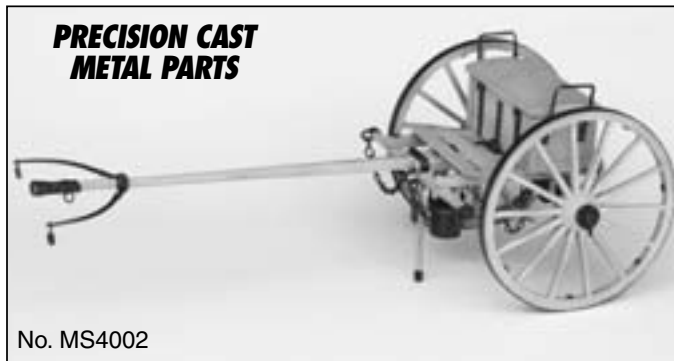
The limber was an indispensable piece of equipment during the American Civil War. It was a simple two-wheeled cart designed to carry an ammunition chest containing gunpowder and shot for the artillery pieces. A team of horses was hitched to the limber and a cannon was hooked on to its rear when the army was on the move.

The ammunition chest lid was large enough to seat up to three men. However, sitting above the gunpowder was dangerous, so after the first few months of the War, only the driver rode on the limber. In times of battle, the limber and horses were left behind the lines of fire.

- Historically accurate and perfectly scaled
- Cleanly cast Britannia metal components
- Authentically detailed ammunition chest
- One-piece ready to assemble wheels
- Clearly written illustrated instructions
- Easy to build – assembly and painting time 5-10 hours



**Entry Level • No. MS4002**  
Length 10" / Width 4"  
Height 3-1/4"  
Weight 1 lb. / Scale 1:16



No. MS4002

**PRECISION CAST  
METAL PARTS**

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## NEW FROM GUNS OF HISTORY!

### NAPOLEON, MODEL 1857 12-POUNDER

Developed in France for Emperor Napoleon III in the 1850s, the bronze smoothbore 12-pounder became the most popular gun of the American Civil War. The Napoleon was light enough to be easily maneuverable and heavy enough to destroy field fortifications almost a mile away. Firing solid shot, spherical case and canister, it was also extremely versatile. By mid-1863 nearly 40% of all field artillery pieces of each army were Napoleons. The Union had over 1,000 in its arsenal and the Confederacy over 600.

- Historically accurate and perfectly scaled
- Cleanly cast Britannia metal components
- Authentically detailed cannon barrel
- One-piece ready to assemble wheels
- Clearly written illustrated instructions
- Easy to build – assembly and painting time 5-10 hours



No. MS4003

**PRECISION CAST  
METAL PARTS**

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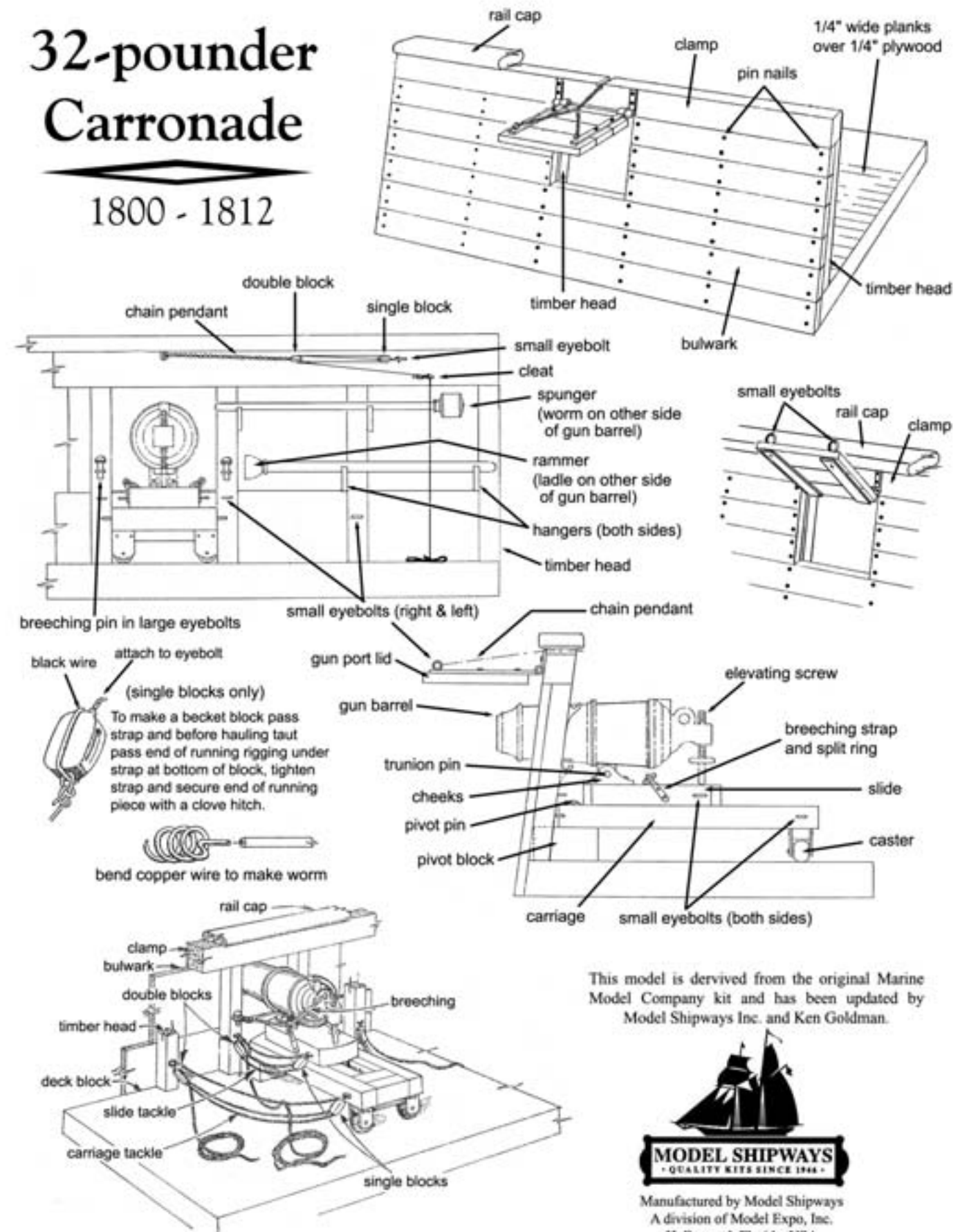
[www.modelexpo-online.com](http://www.modelexpo-online.com)



**Entry Level • No. MS4001**  
Length 8-1/4" / Width 4" / Height 3-1/2"  
Weight 1 lb. / Scale 1:16

## 32-pounder Carronade

1800 - 1812



This model is derived from the original Marine Model Company kit and has been updated by Model Shipways Inc. and Ken Goldman.



Manufactured by Model Shipways  
A division of Model Expo, Inc.  
Hollywood, Florida, USA  
[www.modelexpo-online.com](http://www.modelexpo-online.com)

## INSTRUCTIONS FOR 1:24 SCALE 32-POUNDER CARRONADE

### GENERAL PREPARATION & PAINTING

Lightly sand wood parts to remove any raised grain fibers. Cast metal parts should be thoroughly washed to remove molding agents. Scrape off mold seams and then polish the parts with steel wool or a soft brass brush. Fill any pits. Primer painting the cast parts is recommended. Pin nails and eyebolts should be cut as necessary so they do not penetrate clear through the wood parts. Refer to the drawings for proper placement of parts.

Paint all metal parts black. The bulwark and gun port lid are gloss black on both sides, the clamp and rail cap should be stained and finished a dark oak. The deck can simply be varnished or given a very light gray wash to simulate years of holy stoning. Gun slide, pivot block and carriage can be painted a red or a maple tan.

### GUN AND CARRIAGE

Laminate with wood glue the three layers of the pivot block and the two each of the slide and the carriage. When dry, score the sides to suggest the ends of the surface etched planks.

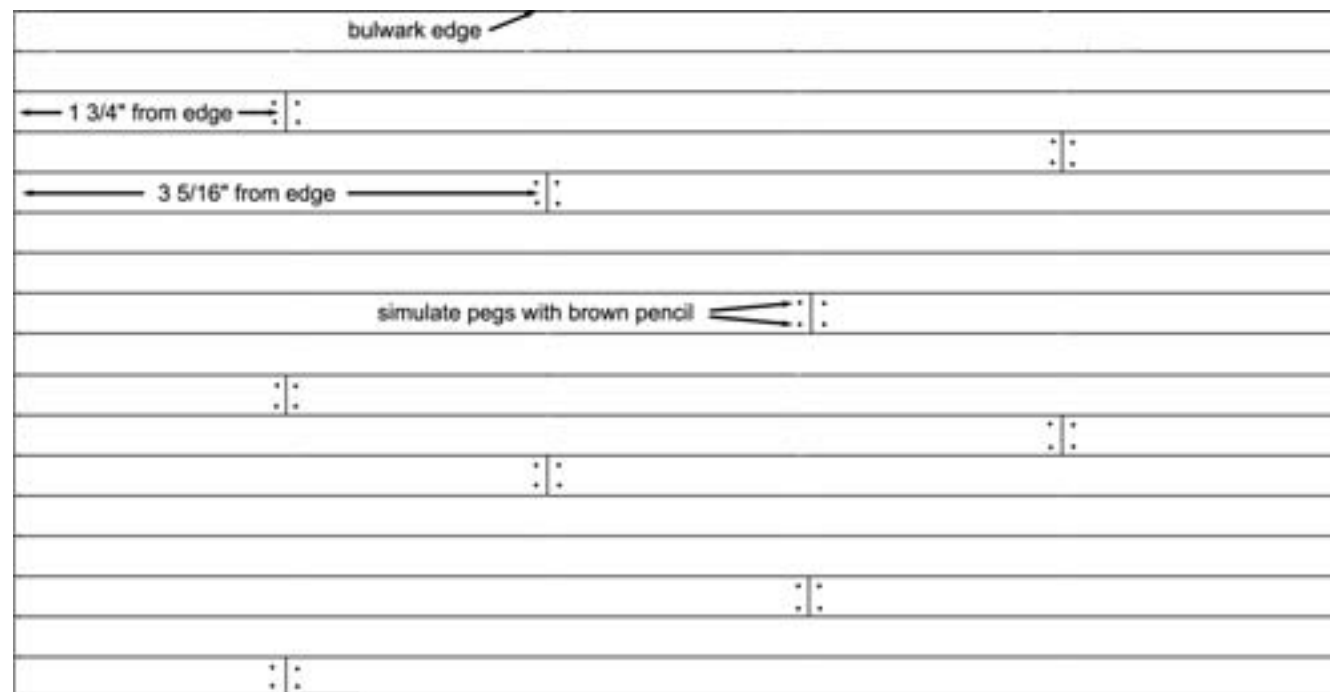
Cut a piece of wood 1 5/8" long from the 1/4" square stock. Check that it slides easily in the carriage slot, then glue this lengthwise, centered on the bottom of the slide. Cut a 1 3/8" long piece from the 1/8" x 3/16" stock and glue the wider side across the underside of the carriage, 1/16" in from the squared off end.

Attach the cheeks to the slide, all the way to one end (the front) using 4 pin nails. The lug on the barrel should fit easily between them. Nail breeching straps to the slide, then insert a split ring through each. Glue the casters to the cross piece under the carriage. Attach small eyebolts to the carriage and slide.

Check the fit of the small trunion pin in the trunion nut and drill out the nut if necessary. Attach the barrel lug between the cheeks with the trunion pin and glue on the trunion nut. Let the barrel tip forward and insert the elevating screw through its hole. Determine the display angle you want, then apply glue to the elevating screw and to the lug between the cheeks. Insert the slide in the carriage and attach the carriage to the pivot block with the pivot pin.

### BULWARK AND DECK

Bevel back one long side ten degrees on the provided 8 1/4" x 4 1/4" x 3/16" plywood. This later will create the bulwark tumblehome. Using wood glue, plank the deck starting with two uninterrupted strips of 1/4" x 1/32" lumber at the beveled edge. Continue planking to the opposite edge as indicated in the drawing.



The laser etched side of the bulwark and gun port lid face outboard. Scribe the blank sides to match the etched sides. Hold the bulwark against the beveled deck edge and draw a light line the length of the bulwark to indicate the bottom placement of the timber heads. Center the pivot block under the gun port, measure 1/4" to either side, and lightly draw parallel lines, perpendicular to the planking, up the bulwark to indicate placement of the inner two of six timber heads, cut from 1/4" square stock 2 3/8" long. Bevel the ends to the same ten degrees with the ends parallel. The inner timber heads create a lip inside the gun port against which the lid rests. Glue on the outer timber heads flush with the bulwark edges and center the remaining middle two between the outer and inner ones. All timber heads should be sanded flush with the bulwark top.

Insert pairs of pin nails through the bulwark planks into each timber head, leaving the bottom plank until after the bulwark is glued to the deck piece. Affix four large and four small eyebolts to the timber heads where indicated, and attach the hangers using pin nails. Make sure the tool handles (1/8" dowel) will easily fit across the timber heads into the hangers. Score the backside of the gun port lid, as you did with the bulwark. Cut the two backing strips, 1 1/8" x 3/32" x 1/4" and glue these to the back of the lid, in 1/8" from the outside edges. Determine the top by lining up the lid planks with those on the bulwark, then position the long hinge straps on the outside of the lid, centered over the backing strips, with the eye centered on the top edge. Affix these with pin nails in the top and center holes and small eyebolts in the bottom holes. Let the eyebolt ends protrude about 1/16" and clench over. Paint the bulwark and gun port lid assemblies.

Cut the clamp (3/8" x 3/8" stock) to length and file a groove for the chain pendant across the center. Cut the rail cap (1/8" x 1/2" stock) to length, round over the edges, then laminate this to the clamp. Stain and varnish this, then glue it to the top of the bulwark and timber heads. Drop the lid in place. Slide about 1 3/8" of the brass rod through the hinge rings and position the short hinge straps on the rod, outside of the long straps. Nail the short straps to the clamp. The gun port lid should open easily.

Glue the bulwark to the deck piece and insert the bottom pairs of pin nails. Glue the pivot block to the deck, between the gun port timber heads and insert the pivot pin through the carriage into the block.

### TACKLES AND TOOLS

Prepare single blocks per the drawing, using thin black wire for the straps. Use 20" of WP1225 for each carriage single block and 14" for each slide single block. Use 12" for the gun port lid tackle. Double blocks do not have running rigging tied under the strap. Cut a 1 1/2" length of pendant chain and, using a scratch awl or similar, slightly enlarge the end and center links. Cut a 2 1/2" length of chain and similarly enlarge the two end links. Using a split ring, attach one end of the long piece to the center of the short piece, then attach the two short ends to the small eyebolts in the gun port lid. Run the other end of the long piece through the groove in the clamp. With the gun port closed, rig the tackle as shown. Position the lid as desired, tighten the tackle and tie off the line to the cleat.

Seize a loop, using provided thread, in one end of the breeching rope, secure this with a breeching pin (cut to 3/8" long) between one pair of large eyebolts, then pass the other end through the split ring on that side's breeching strap, the breeching loop on the barrel and the split ring on the other side. Run the slide all the way back from the bulwark in its slot to determine the length of the breeching, then seize a loop in that end and secure the loop to that side as before.

Determine the display position you want for the gun, then glue the carriage and slide in place. Refer to the drawing to rig the slide and carriage tackles. Coil the excess rigging lines on the deck. Matte varnish or shellac applied to the lines will keep them in position.

Cut the 3/32" dowel into four 2 3/4" lengths to make the tool handles. Reduce one end of three of them to fit the sockets on the rammer, spunger and ladle. Make the worm as shown and insert this into the fourth handle. Stain the handles dark oak or walnut. Glue the tools in the hangers as shown. Make a handle for the water bucket from some of the thin black wire. Glue the water bucket to the deck to the right of the gun, near the bulwark.