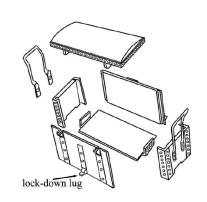
#### **GENERAL NOTES**

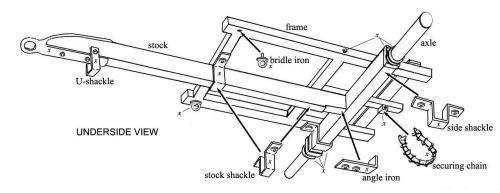
Use 5-minute Epoxy or cyanoacrylate (Super Glue) for assembly. Dry fit all parts before gluing and painting. Use a #11 hobby knife, needle files and sandpaper to clean mold marks from castings and to adjust the fit where necessary. Holes may need to be drilled out. In cleaning the castings, be careful not to destroy or damage any wood grain effect. If you inadvertently do so, you can re-establish the effect by drawing the edge of a file or coarse sandpaper across the casting in the same direction as the wood grain. The caisson was light gray or olive drab with metal fittings (marked with an x on the drawings) painted black. If you decide to display the caisson with one of our other kits—especially the limber. which is how it would have been pulled—use the same color scheme for both. If you paint the sub-assemblies as you go, scrape off enough paint to enable a good glue bond between them during final assembly.



### **ASSEMBLY**

(1) Assemble the ammunition boxes according to the drawing. Note the wide notches on the bottom edges of the sides.

The end brackets on the bottom should fit inside these. Paint the boxes and set them aside.



(3) Note the dimple in the rivet on the left side of the spare wheel axel. Drill this out to fit a small evebolt, cut so its ring will snug up against the rivet head, later. Glue the spare wheel axle onto its locating pin, then reinforce this with a U-shackle, which fits upward, at a right angle, over the center frame rail. Cut and bend the other small evebolt to form an S-hook. which is used to attach the key chain to the cast key. Attach the other end of the 1 1/2" key chain to the eyebolt.

Glue on the foot board so its forward edge is higher than its rear edge. Leave off the plank until after the ammunition boxes are attached. Its width may need to be filed down to create a loose fit between the ammunition box and the foot board. Attach the front U-shackle, leaving a 9/32" high gap inside between it and lunette (hitch ring) on the stock end.

Locate and attach the three hooks. Note that the bucket hook hangs to the inside and the chain hooks hang to the outside of the frame. The chain hooks should snug up against the middle transverse rail. Assemble the bucket. Paint every-

thing, including the wheels. Note that both wheel hub ends and the bands immediately adjacent to them are painted

Cut the large chain into two 3" lengths. Open one end link on each and attach it to the bridle irons. Slide the road wheels onto the axles. Shorten the axles if necessary so the caps and fids fit against the axle ends.

The smaller wheel hub ends face out. It is recommended that you glue on the wheels. Hook the lock chains over their hooks at the sixth link from the free end. Slide the securing chain pins into the box bracket on the center frame rail and pinch it tight. It should swing freely.

Attach the rear ammunition box with the hinges side facing forward and the feet up against the rear plank (cast integral with the frame). Attach the front ammunition box with the

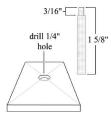
spare limber pole (square end) spare limber pole

hinges side facing to the rear and its center lock-down lug up against its opposite number. File down the long edges of the plank so it will fit loosely between the foot board and the front ammunition box, then glue it down.

round. Stain or paint it to suit, then slide it from the front Ushackle through the securing chain at the rear. Glue the key chain eyebolt into the hole you drilled in the spare wheel axle rivet. Slide the spare wheel onto its

axle, then bring up the key and key chain up between the wheel spokes and glue the key through the hole in the spare wheel axle. Finally, hang the bucket from the rear hook.

drawing to the right. Glue the dowel into the hole, flush to the bottom of the basswood



key chain

bucket lid

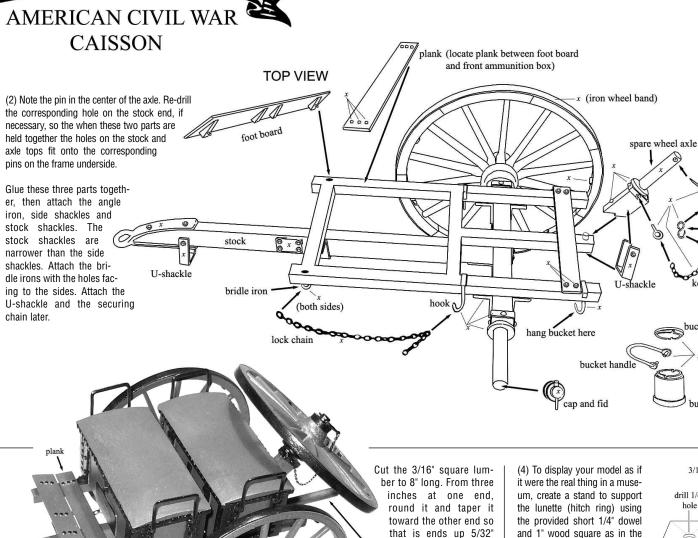
square, then slip the lunette over the 3/16" end of the dowel.



Manufactured by Model Shipways A division of Model Expo. Inc. Hollywood, Florida, USA www.modelexpo-online.com

This new kit has been designed by Ken Goldman for Model Shipways, Inc. utilizing some parts from the original Marine Models Company model of the American Civil War artillery limber.

Kit. No. MS4009



# 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"

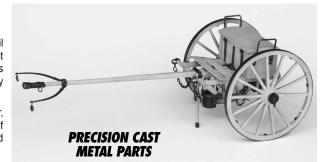
Height 3-1/4"
Weight 1 lb., 4 oz. / Scale 1:16

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 buy via the internet, go directly to:

PRECISION CAST

**METAL PARTS** 

## www.modelexpo-online.com



# LIMBER AMMUNITION CHEST, FOR BOTH WHITWORTH AND NAPOLEON 12-POUNDERS

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 ammuntion 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"

BY MODEL SHIPWAYS

Height 3-1/4"

Weight 1 lb. / Scale 1:16

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www.modelexpo-online.com

### NAPOLEON, MODEL 1857 12-POUNDER

Developed in France for Emperor Napoleon III in the 1850s, the bronze smooth-bore 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







Entry Level • No. MS4003 in your area, or you would prefer to buy via the internet, go directly to:

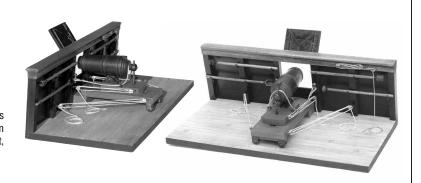
Weight 1 lb. / Scale 1:16 www modelexno-notine con

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# CARRONADE 32-POUNDER 1800-1812

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# CAISSON PARTS LISTS MS4009

PART#	ITEM		QUANTITY	DESCRIPTION/NOTES		
BRITANNIA CASTINGS						
WP0001 WP0002 WP0003 WP0010 WP0013 WP0018 WP0019	Bucket Bucket handle Top Side shackle Front foot board Key Bucket hook	1 1 1 2 1 1 3				
WP0020 WP0021	Chest handle Cap & fid	4 2				
WP0024 WP0025 WP0026 WP0027	Chest Lid Chest Bottom Chest Rear Chest Front	2 2 2 2				
WP0028 WP0031 WP0032 WP0033	Chest End/Corner plate Frame Axle Stock	4 1 1 1				
WP0034 WP0035 WP0036	Plank Bridle iron U-shackle	1 2 2				
WP0037 WP0038 WP0039 WP0040	Stock shackle Spare wheel axle Angle iron Securing chain	2 1 1 1				

### **MISCELLANEOUS FITTINGS AND MATERIAL**

All wood is Basswood or Limewood (European Basswood) unless otherwise noted. Wood dowel and blocks are supplied in lengths as noted. Cut to length as required.

WP0428	Eyebolts	2
WP0480	Chain	2"
WP2800	Chain	12"
WP3640-24	Wood Pole 3/16x3/16	11"
WP4637-24	Wood Square 3/16 x 1"	1"
WP5104-24	Wood Dowel ¼" dia.	2"
WP0993	Nails	10
WP0000	Wheel Hubs	3
WP3603-24	strip wood 6"	2

## **LASER-CUT WOOD PARTS**

WP4630-A	1/8" Thick Set plywood Wheel Rims Assembly Template	2	2 part 1 part
WP4627-B	3/32" Thick Set Basswood Spokes	2	30 part
WP3157-C	1/32" Thick Gasket material Wheel rims strips 1/8"	2	2 part
WP4656-D	1/64" Thick Set plywood For spacers	1	1 part

## **INSTRUCTIONS**

WPPL4009 Parts List WP4009MB Instructions

WPPL4000-A Wheels Assembly Drawing / template 2 pg