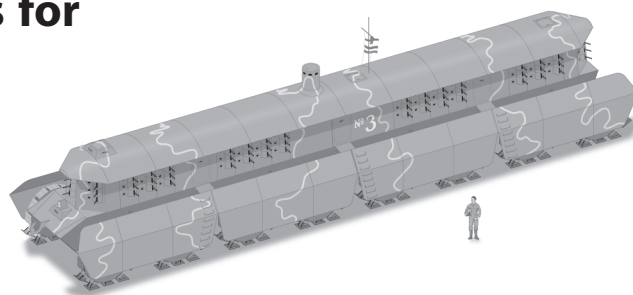


# Assembly instructions for the Land Ironclad



## History

Occasionally in the field of science fiction there appear stories that turn out to be accurate predictions of future inventions or events. But few of these are as remarkably prescient as the short story by H.G. Wells that appeared in *Strand* magazine in 1903. This work portrays a conflict very similar to the trench warfare that developed in France during the First World War. The combating nations are locked in a stalemate, the advent of the machine gun and quick-firing rifle preventing either side from launching effective infantry or cavalry attacks. Wells's story describes the invention that breaks the deadlock—an armoured, all-terrain vehicle that can withstand small-arms fire and cross trenches. We know these vehicles as tanks. Wells's name for his creations, and the title of his story, was *The Land Ironclads*.

It is uncertain whether the British inventors of the tank were inspired by these fictional predecessors; in spite of the obvious similarities there are also notable differences between the land ironclad and the tank as it later appeared. Wells envisioned a hundred-foot-long vehicle that was perhaps closer in conception to a naval warship. Instead of continuous tracks, the land ironclad was propelled by eight pairs of *pedrails*, wheels ringed with flexible feet to give traction. He also gave his vehicles innovative weapons: remotely controlled rifles with an advanced sighting system that gave tremendous accuracy even while moving. In *The Land Ironclads*, fourteen of these machines, launching a surprise attack and accompanied by mobile infantry units, are able to rout an entire enemy army in a matter of hours. Although the massive size of the machine is in hindsight clearly impractical, in almost every other respect Wells accurately foretells the coming age of mechanized land warfare.

## The Model

This model is a 1:110 scale replica and is compatible with 15mm figures popularly used in wargaming. The design is my interpretation of the vehicle described in the H.G. Wells short story. A word of caution: this model is not suitable for assembly by very young children, due to the use of sharp tools and the complexity of some assembly steps. Previous experience with card modeling is recommended. If you have any comments or suggestions regarding this kit, I can be reached by e-mail at [models@currell.net](mailto:models@currell.net)

Model parts are contained in the document **ironclad\_parts.pdf**. Print out the parts document on 8.5"x11" or A4 size white paper card stock suitable to your printer. 67 lb. cover stock (approx. 8.5 thousandths of an inch or 0,2 mm thick) is recommended.

## Tools

Before beginning, you will need the following tools and materials:

- |                              |  |
|------------------------------|--|
| a) a sharp knife for cutting | e) a scoring tool or blunt knife for creasing the fold lines         |
| b) a flat cutting surface    | f) a glue applicator such as wooden toothpicks or a small paintbrush |
| c) a ruler or straight edge  | g) (optional) 24 gauge (0,5 mm) wire                                 |
| d) white glue                |  |

## Hints

- Select a well-lit, comfortable work area that will remain undisturbed when you are not there.
- Keep your hands and tools clean when working, to avoid getting glue on visible parts of the model.
- It's easier to stay organized if you only cut out those parts you need for each step.
- Make sure your knife is sharp. When cutting straight lines, use a straight-edge.
- Study the diagrams carefully, and always test-fit the parts before applying glue

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## Assembly

In these instructions, the directional terms are given from the driver's point of view. "Port" and "starboard" refer to left and right sides respectively. Scoring of parts is indicated by thin black lines outside the part's outline, and by dashed or shaded lines on the part's surface. Score parts *before* cutting them out. In the diagrams, subassemblies are identified by a number within a circle (e.g. ②), corresponding to the step in which it was assembled.

**(Step 1)** Score and cut out the hull surface A1. Take care that all scores and cutouts are completed. Fold and attach the rifle sponsons to the blue markings printed on the hull surface (**step 2**), matching the sponson colour to the camouflage pattern on the hull. If rifle barrels are to be added later, use a pin to open three holes marked on the front of each sponson. Fold and cut out hull formers A6 (**step 3**), then attach to the hull (**step 4**). This is done by wrapping the hull around the formers, beginning at the base. The triangular shapes on the formers protrude through slots in the hull side. Attach the front plate (**step 5**), then add details as shown in **step 6**. Similarly add the rear plate and details (**steps 7, 8**). The exhausts B15 may be painted black inside. Add sponsons to the upper end plates (**step 9**) and attach to the hull using connecting strips B7.

Join the ends of the wheel rims, overlapping as shown, and attach to the wheel sides (**step 10**). Attach parts C1 and D3 (**step 11**) to the wheel assemblies. Roll the axles, overlapping as shown (**step 12**) and attach them to the hull (**step 13**), ensuring they protrude equally from both sides. Roll and attach the suspension springs (**step 14**).

Join the shield bracket halves (**step 15**), folding the small tabs outward and leaving the wide end unglued. Attach to the hull by gluing the triangular shapes protruding from the hull sides between the leaves of the brackets (**step 16**). These brackets extend horizontally as shown in the diagram. Also fold and glue the walkways B9 to the hull below the printed doors. Slide the wheels onto the axles and glue in place with the end of the axle even with the outer side of the wheel (**step 17**). It is recommended to add the front and rear pairs of wheels first (without gluing) and set the model onto a flat surface while attaching the remainder of the wheels. The front and rear wheels may then be glued in place. Attach the axle caps B8.

Assemble the port and starboard shields as shown (**step 18**) and attach the "V" struts (**step 19**). Fold each shield lengthwise along the score line to the angle shown in **step 20**. Attaching the shields to the hull can be somewhat difficult, and test-fitting is strongly recommended beforehand. Glue the shields to the brackets protruding from the hull (it may be easier if the hull is set upside-down to do this), then rotate the "V" struts to attach to the tabs at the bracket arm midpoint.

Score and cut out the roof (**step 21**) and attach the connecting strips at both ends (**step 22**). Fold and cut out the roof formers (**step 23**), then attach to the roof. This is done by folding the roof along the scores as shown in **step 24**, inserting the formers to curve the top of the roof. Position the formers at the slots cut into the roof eaves. Assemble the roof end plates (**step 25**) and attach to the roof assembly. Ensure the camouflage pattern on the end plates matches the roof. Add roof viewport and conning tower (**step 26**).

If desired, 24 gauge (0,5mm) wire may be used to represent the rifle barrels (**step 27**). Cut 102 pieces, 0.18 ins (5mm) long, and insert into the sponson holes. A signal mast may also be added (**step 28**) using the same type of wire.

Finally, fit the roof onto the hull (**step 29**). Glue is optional, as the formers on the roof underside will slide snugly into the slots on the hull sides. The crew figure (parts D9/D10) may be displayed beside the land ironclad to give a sense of scale.

<p><b>1</b> Score and cut out hull</p> <p>Check that all folds are scored.</p> <p>A1</p> <p>Open slots (8 places)</p> <p>Open holes (16 places)</p>	<p><b>2</b> Attach rifle sponsons (28 places)</p> <p>Optional: use pin to open holes for rifle barrels.</p> <p>A2 or A3 Match to background colour.</p>	<p><b>3</b> Hull formers (4 pieces)</p> <p>A6 Fold to double thickness, then cut out shape.</p>
<p><b>4</b> Attach hull to formers</p> <p>Triangular shapes protrude through slots in hull.</p> <p>2</p>	<p><b>5</b> Front plate</p> <p>4</p> <p>A4</p>	
<p><b>6</b> Front details</p> <p>B10 Fold to double thickness, then cut out shape.</p> <p>B13 B14</p> <p>B2 B1</p> <p>B10 B13 B1 B2</p>	<p><b>7</b> Rear plate</p> <p>A5</p>	<p><b>8</b> Rear details</p> <p>B15 Colour inside surface black. (4 pieces)</p> <p>B10</p>
<p><b>9</b> Upper end plates (2 pieces)</p> <p>A2 or A3 Match to background colour.</p> <p>Optional: use pin to open holes for rifle barrels.</p> <p>B3, B4</p> <p>B7</p> <p>Front</p> <p>Rear</p>	<p><b>10</b> Pedrail wheel (16 pieces)</p> <p>C3</p> <p>B6</p>	
<p><b>11</b> Pedrail shoes</p> <p>C1 4 pieces per wheel</p> <p>D3 Fold to double thickness, then cut into segments. (12 pieces per wheel)</p>	<p><b>12</b> Axles (8 pieces)</p> <p>C2</p>	

**13** Attach axles to hull

Axes protrude equal distance on both sides.

**14** Spring suspension

D8 (16 pieces)

Attach D3 at right angle to axle

**15** Shield brackets (8 pieces)

Glue shaded area only.

D1 D2

**16** Attach brackets and walkways

B9 (6 pieces)

15 Glue triangular shape on hull between bracket leaves.

Bracket extends horizontally from hull.

**17** Attach wheels to axles

Outer side of wheel flush with end of axle.

B8

**18** Shields

Port shield shown. Assemble starboard shield using parts C4, D6, D11, D12, D13.

D6 C4 D13

D4 Inked surface shown facing down.

D5 Inked surface shown facing down.

**19** Shield struts

D7

4 pieces per shield

**20** Attach shield to hull

19 17

**21** Score and cut out roof

B5

Check that all folds are scored

**22** Roof connecting strips

B5 B17 (2 pieces)

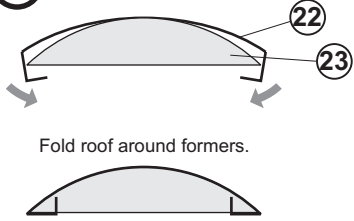
Attach at both ends of roof

**23** Roof formers (5 pieces)

B11

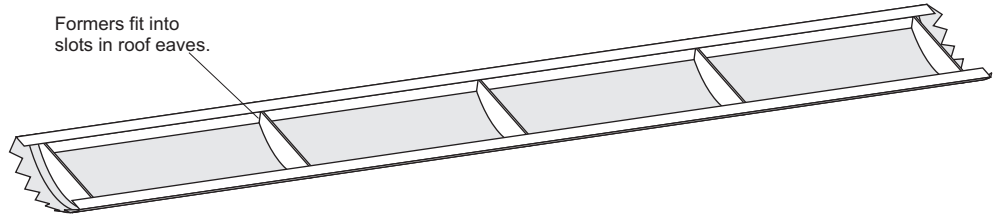
Fold to double thickness, then cut out shape.

**24** Attach formers to roof



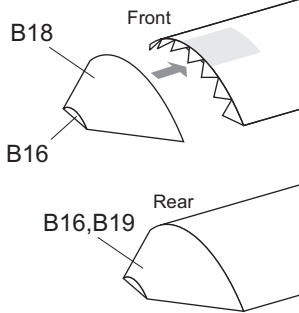
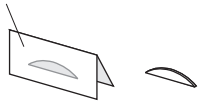
Fold roof around formers.

Formers fit into slots in roof eaves.

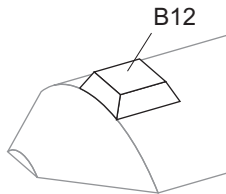


**25** Roof end plates

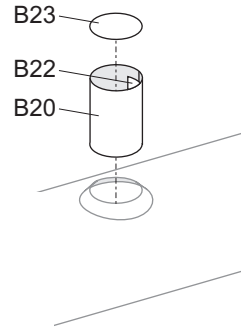
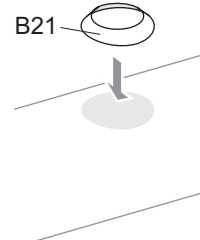
B16 (2 pieces)  
Fold to double thickness, then cut out shape.



**26** Roof details

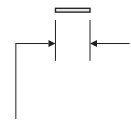


Align parts to match camouflage pattern on roof.



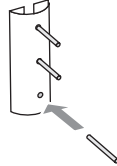
**27** Optional: rifle barrels

24 gauge (0,5 mm) solid wire painted black, or similar material.

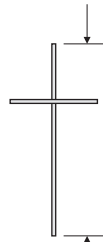


0.18 inches (5 mm) long  
102 pieces

Use a pin to open three holes in each sponson, then glue rifle barrels as shown.



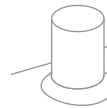
**28** Optional: signal mast



24 gauge (0,5 mm) solid wire painted black, or similar material.

1 inch (25 mm)

Attach to small printed circle on top of roof.



**29** Final assembly

Do not glue.  
Formers on underside of roof slide into slots on hull sides.

