

HOMES

Historic District: Carriage House



19th C
Vehicle set

Comes with Hansom Cab, Brougham, private omnibus and many more

FEATURED HOME

About this listing

A foamcore wargame terrain project suitable for 28-32 mm miniatures. Listed by

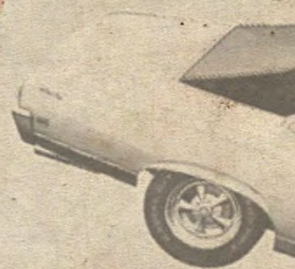
STOELZEL'S STRUCTURES

About this listing

Asking price: \$6.00

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FEATURED



“Lock up your horses”

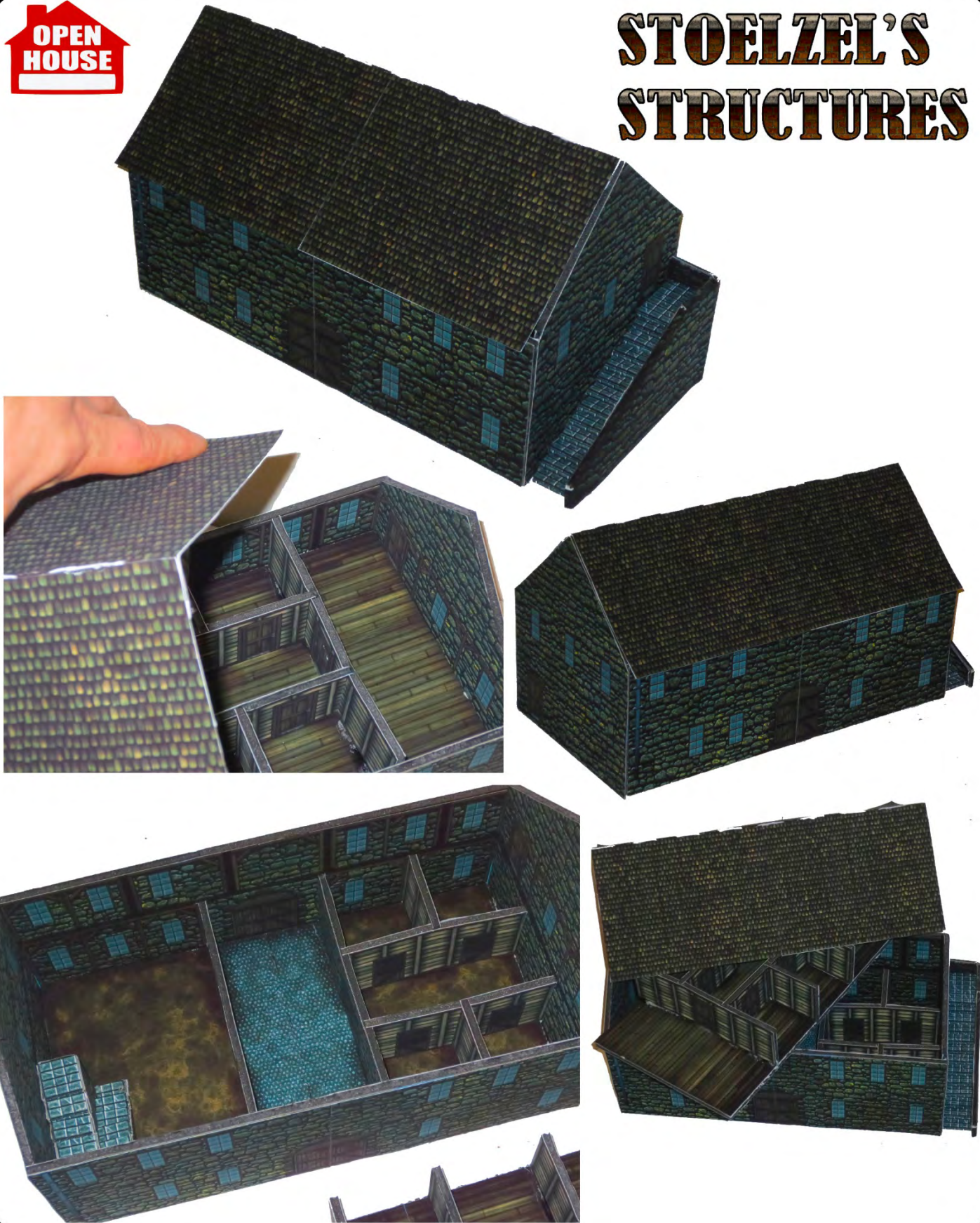
From the edge of the historic district of Olde Towne, on the roads leading the outlying rural communities, is the old carriage house, or coaching inn. In earlier times, it was here that visitors to the city would rest their horses, and store their tack and wagons. This rustic, and simple stone house may seem out of place when compared to the giant sprawling mega structures of the modern day city, but is quite spacious having both vehicle storage and stables on the ground floor, plus lodging facilities in the upper floor.

As with all Stoelzel’s Structures products, this unit comes furnished, but also comes with a series of 19th century vehicles, and miniature horses ready for you to print, fold and use. The vehicles included in this set include a Hansom cab, a Brougham, a funeral wagon, a private omnibus, a charobanc, a couple police wagons, a stagecoach, and a couple vendor carts. Horses come in five poses, with four color options each, and a number of optional tack outfitting options.

Width: 15.5 inches Depth: 7.5 Inches Height: 8



STOELZEL'S STRUCTURES



STOELZEL'S STRUCTURES



Build instructions: Historic District Carriage House

Legal

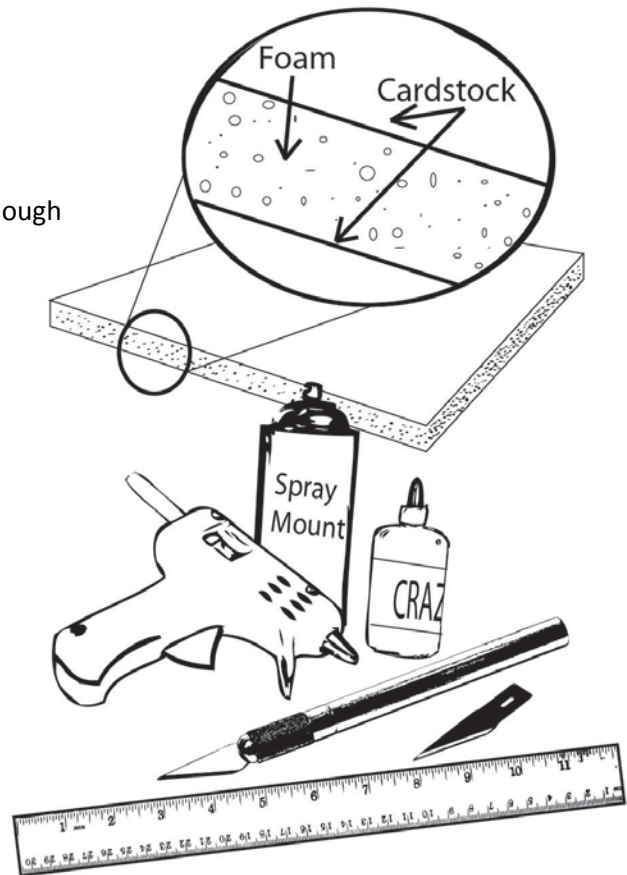
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Forward

Given a baseline level of difficulty as simple folded cardstock square buildings with at most 6 folds and three glue tabs, than this model is of intermediate difficulty. It was designed to be made primarily of foam core, and often requires the modeler to line up pieces of artwork on both sides. This model will take about two hours to build.

Materials

- 1 sheets of 5 mm thick foamcore
- Thin Cardstock, a used cereal box should be about enough
- A straight edge (metal rule is preferable)
- A sharp blade (for example an X-acto knife)
- Gluegun and glue sticks
- Cyanoacrylate (Crazy Glue)
- Full sheet label paper (Optional)
- Spray mount and fancy printing paper (Optional)
- A Rabbet cutter (optional)
- A small (~5mm) chiseling blade (optional)
- Black magic marker (optional)



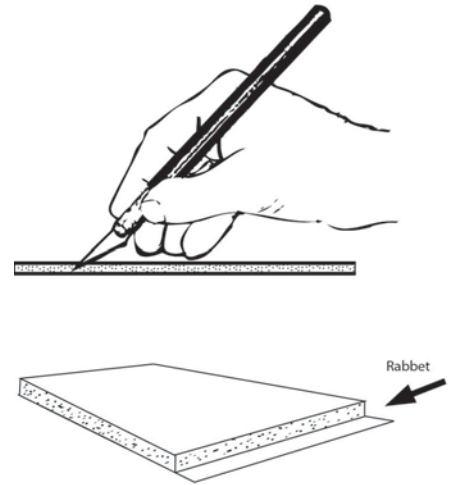
Techniques

Mounting

Most pieces of this building have images for the front and back of the foam core support structure. As such, great care should be taken when aligning the pieces. There are two options available to mount the artwork onto the foamcore.

The first option is to print out all the art files onto full sheet label paper. This provides a very simple assembly: peel the back and stick. However, the quality of full sheet labels can be hit or miss, and, in the worst cases, can lead to peeling terrain.

The second option is to use aerosol glue like spray mount or photo mount. Generally these come in two types, a permanent fix and a temporary fix which lets you take the pictures back off later. The temporary fix glue is good if you don't trust your ability to align the two sides, but like the label paper CAN lead to peeling terrain down the road. It should be noted that both of these sprays is that they can be messy and smelly. Please follow all directions on product chosen.



Rabbeting

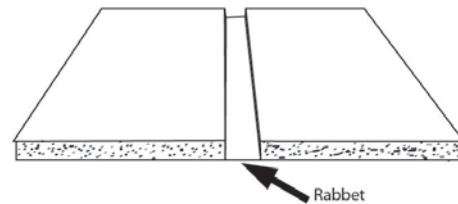
Sections which need rabbeting are indicated in the pictures by large blue boxes.



Making a rabbet on one of the pieces of foam, allows us to create a stronger joint when joining ends of two foamcore pieces. This is accomplished by creating a slot or groove to receive the edge of the other foam core piece. This ensures that the seam of the joint is surrounded on three sides. Rabbeting your corners and joints also helps hide exposed edges of foam.

A rabbet joint is made by cutting only partially through a piece of foam core while leaving the opposite side of card stock backing still intact. One must be careful not to cut all the way through, as this could ruin the images on the other side, and also make the piece un-useable.

T intersections where an end piece of foamcore butts up against another perpendicular piece of foamcore can be made stronger and smoother using an interior rabbet joint. These are a bit trickier, but not that difficult to do. An example can be seen here.

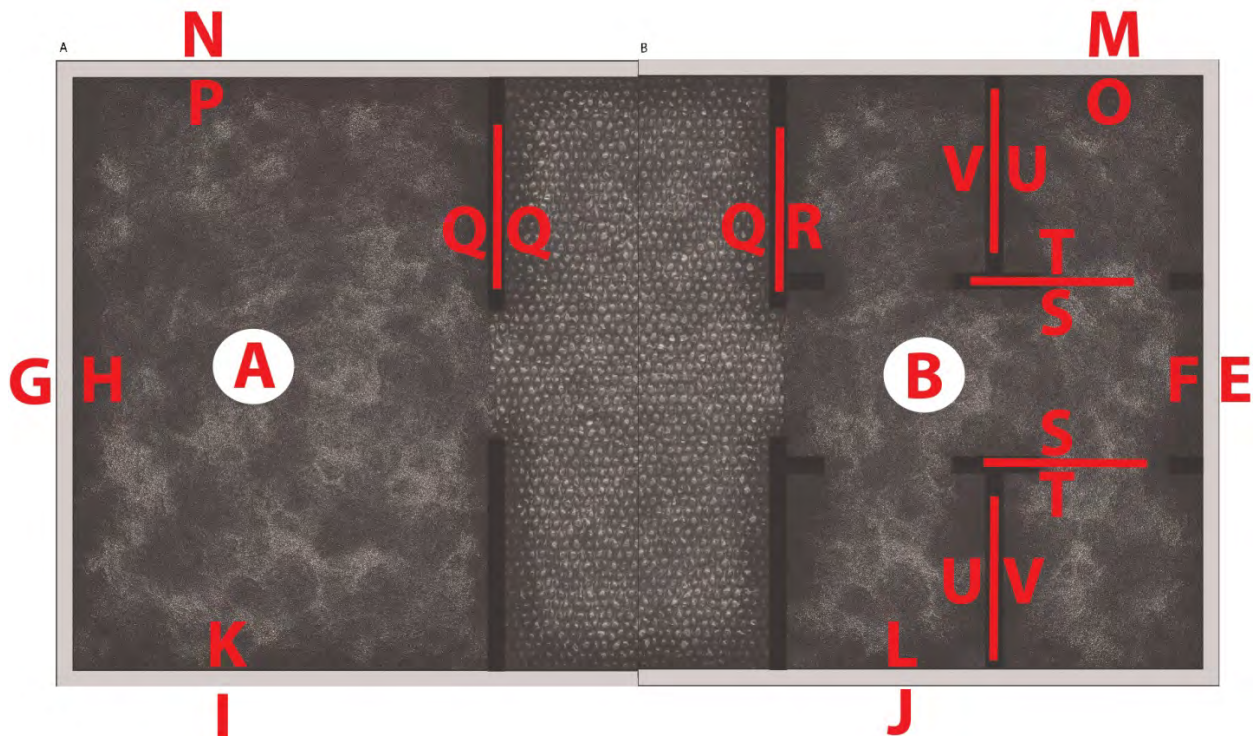


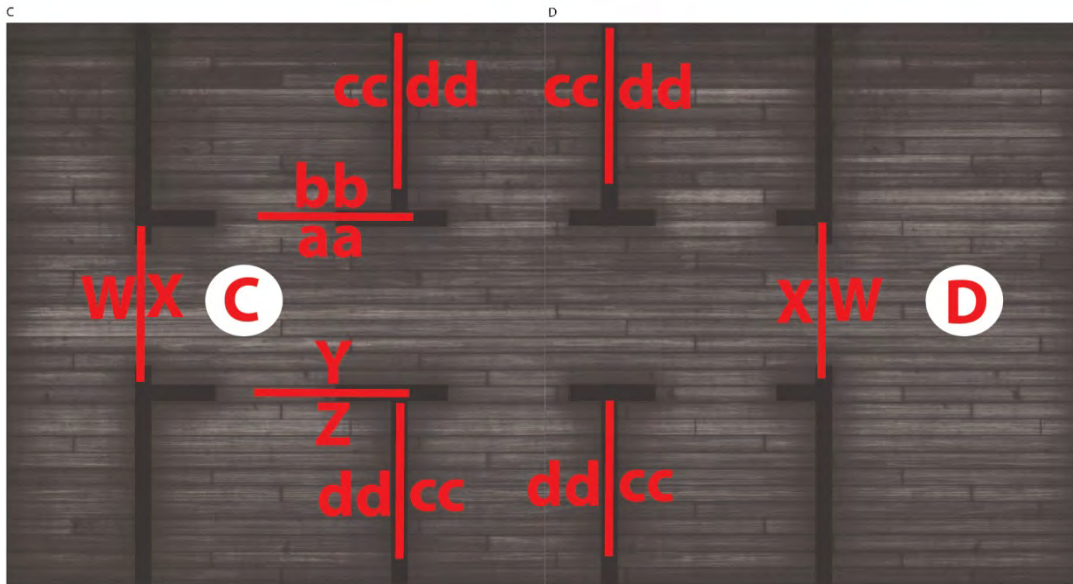
There are a lot of tools available online called foamcore rabbet cutters than can make doing rabbets somewhat easier for the modeler. These rabbet cutters fix the angle and depth of the cutting blade, thus preventing cut through. If you don't have a rabbet you can do these same cuts with a simple blade and a little care.

Build Instructions

List of major parts

A	Floor, ground level left side	Z	2 nd Floor Hallway, front, facing rooms
B	Floor, ground level right side	aa	2 nd Floor Hallway, back, facing hall
C	Floor, 2 nd floor, left side	bb	2 nd Floor Hallway, back, facing rooms
D	Floor, 2 nd Floor, right side	cc	2 nd floor Room divider walls
E	Right Wall exterior	dd	2 nd floor Room divider walls B
F	Right Wall interior	ee	Roof Piece A
G	Left Wall exterior	ff	Roof Piece B
H	Left Wall interior	gg	Roof support pieces
I	Front wall, exterior, left side	hh	interior stairs part 1, inside
J	Front wall, exterior, Right side	ii	interior stairs part 1, outside
K	Front wall, interior, left side	jj	interior stairs part 2, inside
L	Front wall, interior, Right side	kk	interior stairs part 2, outside
M	Rear wall, exterior, Right side	ll	interior stairs, platform step, top
N	Rear wall, exterior, left side	mm	interior stairs, platform step, under
O	Rear wall, interior, Right side	nn	interior stairs step, top
P	Rear wall, interior, left side	oo	interior stairs step, under
Q	Lower floor crosswall (three copies)	pp	exterior stairs part 1, inside
R	Lower floor crosswall, stable side	qq	exterior stairs part 1 outside
S	Stable crosswall, exterior	rr	exterior stairs part 2
T	Stable crosswall, interior	ss	exterior stairs top step, top
U	Stable short walls	tt	exterior stairs top step, under
V	Stable short walls B	uu	exterior stairs step, top
W	2 nd floor cross wall, lateral facing	vv	exterior stairs step, under
X	2 nd floor cross wall, medial facing		
Y	2 nd Floor Hallway, front, facing hall		





1. We are going to begin by assembling the Flooring of the building. What is unique about this piece is that it is larger than a single sheet of paper, and thus needs to be stitched together. To do this you will glue the necessary pieces onto foamcore, one at a time, carefully aligning subsequent pieces against their neighbors.

I recommend using glue sticks for this operation rather than spray glue as you will have a lot more working time to make the necessary alignments.

Take pieces **A**, **B**, **C** and **D** and cut along the black outer lines to remove the excess white paper. Arrange these on the foamcore as a test fit to make sure all four pieces fit onto your selected foamcore. Glue **A** (the front right floor) onto the 5 mm thick foamcore. Take piece **B**, and glue under it, and place on the foamcore aligning against the right edge of piece **A**. Cut along the perimeter outside the blue border to remove.

Then mount piece **C** onto a piece of foam core. Finally, take piece **D** and mount that along the right edge of piece **C**, taking care to align the edges. Cut along the perimeter to remove.

Cut along the side and top of the blue box without cutting all the way through. Using a chiseling blade or very carefully using a regular blade start to cut the foam block from the wall, working from the exposed bottom to the top. Gently pull away the foam as you work up.

[Builders tip: I recently found that a small flat screwdriver about five mm wide can serve as a great chisel in a pinch].

2. Now go through the remaining wall sections to mount the exterior sides on 5 mm foamcore. The list of exterior side images is as follows: **E, G, I, J, M, and N.**

Note that the two long walls are similar to the flooring in that they are longer than a single sheet of paper and will need to be stitched together during the mounting process. Refer to the assembly map above. Piece **J** will be placed to the right of piece **I**, and piece **M** alongside piece **N**. After mounting, cut along the perimeter, and you should have four exterior wall pieces.

Flip the pieces over and then mount the corresponding image on the reverse (interior) side. The list of interior side images is as follows **F, H, K, L, O and P** respectively.

IF you wish to remove the windows and doors, now is the time to do it (*while you can still lie them flat on a cutting surface*). Be sure to leave the window/door frames intact which cutting along the item.

3. It is time to prepare all the interior walls. Mount the following pieces onto 5 mm foamcore: (note: some pieces are listed more than once purposefully) **Q, Q, S, S, U, U, W, W, Y, aa, cc, cc, cc, cc.**

Now cut along the perimeter of each piece to remove. (I recommend writing the piece letter on the back as to not lose track). Now flip the pieces over and mount the reverse side images on the back, taking care to align them with respect to the corners. The reverse side images are: **Q, R, T, T, V, V, X, X, Z, bb, dd, dd, dd, dd** respectively. Consult the assembly maps above to see pairings.

4. It is now time to make all the necessary rabbets on your wall sections. All rabbets are indicated by a light blue box. Cut along the side and top of the blue box without cutting all the way through. Using a chiseling blade or very carefully using a regular blade start to cut the foam block from the wall, working from the exposed bottom to the top. Gently pull away the foam as you work up. [**Builders tip: I recently found that a small flat screwdriver about five mm wide can serve as a great chisel in a pinch**].

Locate the following wall sections: (Ground floor and exteriors) **AB, IJ/KL, MN/OP** (Ground floor interiors) **Q/Q, Q/R S/T, S/T**, (upper floor) **CD, W/X, W/X, Y/Z, aa/bb.**

Each of these has a blue rectangle on them that indicates an area to rabbet. Start by cutting along the black lines separating the blue box from the surrounding images. Take care not to cut all the way through the foamcore, but only about halfway through. Some of these rabbets are found along a wall edge. For these, take your blade and run it carefully along the interior (foam-side) of the far cardstock, while holding your blade 90 degrees from the previous cut. Take care not to slide your blade through the card. Once you have removed the strip of foam, take your screwdriver, or a ruler and run in along the inside of the card to remove any residual foam and to thin the piece.

For interior rabbets that are not along a wall edge, gently pull away the cardstock up, and remove it. Take your screwdriver/chisel/blade and remove the underlying foam. The lowest layer of card should be left intact.

5. With all the basic wall pieces mounted, it is now time to assemble the first floor and exterior walls of the carriage house.

5A) Take the floor piece (**AB**) and place it in front of you. Now locate the front main wall (**IJ/KL**) and test fit it into the rabbet along the front of the floor. Glue in place.

5B) Take the two cross walls **Q/Q** and **Q/R** and slip these into the vertical rabbets running up the middle of the front wall (**IJ/KL**). Make sure that **Q/R** is placed so that the rabbets on one side face toward the stables. Glue in place.

5C) Take the two stable walls (**S/T**) and slip them into the rabbets found on piece Q/R. Make sure the rabbet on pieces S/T face the toward the outer walls of the building. Glue in place.

5D) Slip the two table dividers (U/V) into the rabbets on pieces S/T. Glue in place.

5E) Take the right wall side section (**E/F**) and test fit into the right rabbet on the front main wall (**IJ/KL**) and the floor section. Make sure the stable walls (S/T) fit into the rabbets on the right side wall. Glue in place.

5C) Take the Rear section (**MN/OP**) and test fit into the corner rabbet against the right wall (**E/F**) and the floor section. Make sure the two cross walls (**Q/Q**, and **Q/R**) fit into their rabbets on piece **MN/OP**. Glue in place.

5D) Take the Left wall piece (**G/H**) and test fit the corner rabbets and its fit against the floor. Glue in place. The main unit is now assembled, all that remains is the upper floor interior, the roof, and stairs.

6. Now it is time to assemble the 2nd floor interior walls of the carriage house.

6A) Take the second floor piece (**CD**) and place it in front of you. Locate the two short edges, and you will see the room space on one side is wider than on the other, this wider side should face to your right.

Pick up the floor and attempt to fit it into your building structure you assembled in step five. The fit should be somewhat loose. Trim if needed.

6B) Take the two cross walls **W/X** and place them on top of the floor. Make sure they are not longer than the floor depth. Trim if needed. Make sure the rabbets face toward each other. Glue in place.

6C) Take four room divider pieces (**cc/dd**) and slip them into the rabbets on the hallway walls (**Y/Z** and **aa/bb**). Make sure they do not go past the edge of the floor, and trim if needed. Glue in place.

6D) Pick up the floor and test fit into the main building again. Trim the edges again if needed.

7. Now it is time to assemble the roof of the carriage house.

7A) Locate a piece of thin (cardstock thickness) cardboard that is about 11 inches by 15 inches big. If you have such a sheet you can assemble the roof as a single element. Print out 2 copies of piece ee, and two copies of piece ff. Trim the black tabs off of the top of them.

Mount Piece ee (roof piece 1) in one corner and then mount piece ff (roof piece 2) to the right of that piece. Rotate the cardboard 180s in front of you so that the images are now upside down, and away from you. Repeat by mounting piece ee in the left corner, but being careful to align the top edge of this piece with the edges of the previously mounted pieces. Then take another copy of piece ff, and mount it into the open square area.



Fold along the top seam about ninety degrees. Flip the piece over to expose the underside.

Take two roof support pieces (**gg**) and mount onto foamcore. Cut them out and place them under the roof, about an inch from the edge. Glue in place.

7B) If you do not have a large enough piece of cardstock, you will be assembling the roof into four pieces, that are then glued side by side. Start by printing out 2 copies of piece ee, and two copies of piece ff. **LEAVE** the black tabs **ON** of the top of them.

Mount each image on a small piece of cardstock. Cut along the perimeter to remove. Take one off each piece and face the black tabs toward one another, they should come together like a zipper. Make sure the tabs slip under each piece as to not be visible.

Repeat for the other two pieces. Now flip the roof pieces over, and glue a scrap piece of cardstock along the edges to join them side by side.

Fold along the top seam about ninety degrees. Flip the piece over to expose the underside.

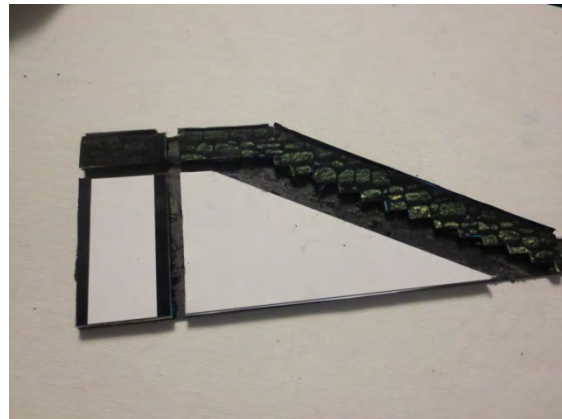
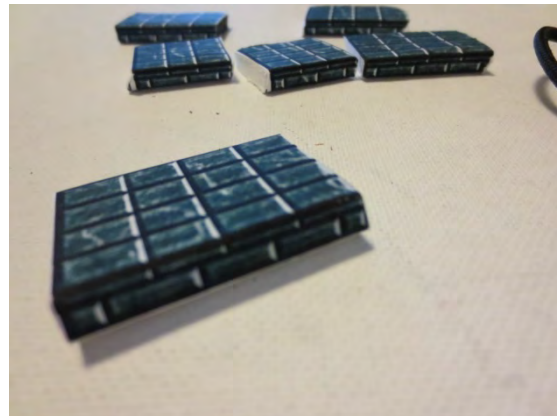
Take two roof support pieces (**gg**) and mount onto foamcore. Cut them out and place them under the roof, about an inch from the edge. Glue in place.

8. Now onto the stairs sections, one set for the exterior to go along the right side wall, and one set for the inside to go in the front-left corner. Assembly of these two is similar, but not identical.

This consists of two basic parts, the steps, and the foamcore wrappers. For both sets of stairs the step are assembled the same way, but there are two ways you might go about doing it. The first is to mount the tops of the steps on foamcore (for example, pieces ss, uu for the exterior steps) and cut them out. Then flip the pieces over and mount the underside images on the reverse side of the foamcore. You will notice then that one edge is marked in blue indicating a rabbet to be made. With the reverse side rabbet, you can flip the steps over and fold along the horizontal lines ninety degrees so that the riser covers the exposed edge of foam, and the white tab falls under the step. Glue the tab in place. Repeat for the 11-13 steps in you stair set.

The optional way of a building these is to cut out the steps from your printing, and start by making the folds. You can then glue the step on an edge of foamcore so that you are gluing simultaneously to the top and bottom of the foamcore.

Now you will want to locate your wrapper pieces, most of which have an inside piece and outside piece. Mount one of these of foamcore and cut along the perimeter to remove. Flip the piece over and mount



the corresponding image on the reverse side. Note that the exterior stairs do not have a corresponding image of the piece of stairs which will face the wall.

Go through and rabbet all remaining blue boxes on your wrapper pieces..

On some of these pieces there is a vertical rabbet sitting just to the side of a black box. This is a site for a ninety degree bend just in between these two, so that the black box pockets in the rabbet. Pre-fold, and then glue and hold in shape until dry

Start with the upper most step and test fit into the top most rabbet on the inside of the wrapper and glue in place. Work you way down gluing step under step.

In the case of the interior stairs, I recommend gluing part 2 into the middle of the stairs just after putting the step platform in. For the exterior stairs, I recommend gluing part 2 into place at the end.



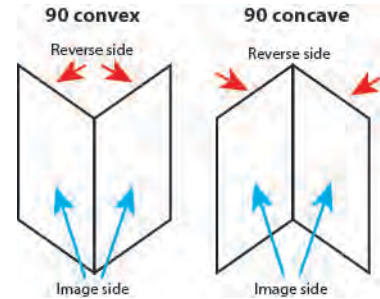
Furniture Build Instructions

Print the sheets of room fixtures on heavy bond paper. Some of the flat pieces such as paintings, window frames, door frames etc you might like to mount onto thick card. Most the furniture will be too difficult to fold on thick card.

Cut out all your furniture and decorations. Draw around the edges of your cuts with black marker.

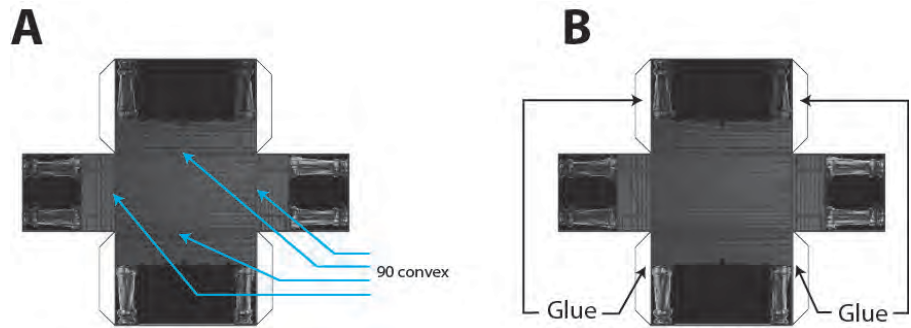
Fold along thick black lines. Use tabs to glue opposing sides of a piece or to glue a piece to the house.

A note on folds: There are two main types of folds you will need to make: Convex and Concave. Convex folds refer to any fold (90 or 180 degrees) where the images remain on the outside of the fold surface. Or in other words, the two sides of the fold are pushed away from each other. Concave folds are done in the opposite direction, with the images being brought toward each other.



Tables, Dressers, Toy boxes, etc.

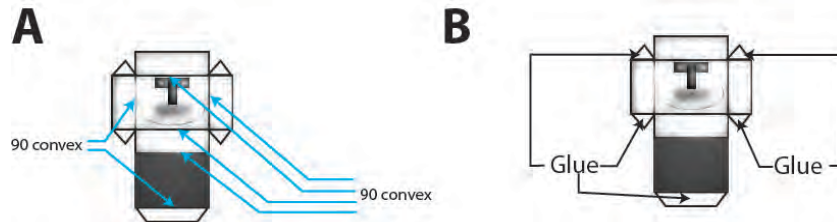
Tables are a simple cube once assembled. Fold along the four black lines that separate the top of the table (found in the middle) from the four sides. Then fold the four white tabs ninety degrees so that they tuck under the sides of the table. Put a drop of glue on the white tabs to permanently fix in place.



Cut out the circular wooden table topper and simply glue on top of the table.

Sink

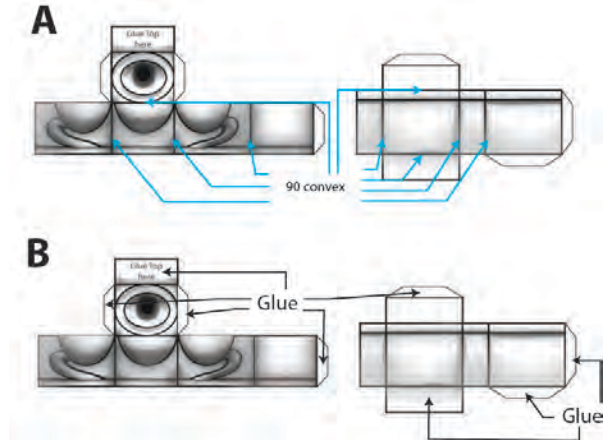
Sinks are a simple cube once assembled. Fold along the four black lines that separate the (found in the middle) from the four sides. Then



fold the four white tabs ninety degrees so that they tuck under the sides of the sink. Put a drop of glue on the white tabs to permanently fix in place. Glue on to the wall where desired.

Toilets

Toilets come into two pieces, a bottom and a top, but both pieces are a simple cube once assembled. Fold along the four black lines that separate the front (found in the middle) from the sides, top and bottom. Then fold the four white tabs ninety degrees so that they tuck under the sides of the table. Put a drop of glue on the white tabs to permanently fix in place. Glue the toilet top on top of the toilet bottom.



Television/Computer monitor.

The TV is not that different from the other simple cubes you've seen in this furniture set. The only departure is the back side, which is designed to stick out. You will see a small rectangle in the middle of the back, this part is going to be parallel with the front of the unit. The four sides which are adjacent will fall at roughly 45 degree angles, and come together at their seams. Use the tabs to glue together.

Piano.

The Piano is also a lot simpler than it might appear. It is, at heart, a simple cube. The only piece that you need to watch for is the keyboard, which will, when complete, face upward.

Couch and Soft Chairs.

The grey square in the middle of the piece is actually the bottom of the chair/couch, and will face the ground. The front, back and sides are adjacent and will fold upward, and face outward. The adjacent face going further out will be folded inward, and in the case of the back and sides, will be folded 180 degrees.

Lamps

The lamps consist of two parts: the base and the shade. The base is assembled by rolling the long cylinder and gluing it closed with the tab. The two circles fold over to cover the ends and glue shut using the tabs. The light bulb points up. The shade is assembled by rolling the long curve into a cone shape and glue the tab under the opposite end. Close the shade by folding the circle over and gluing the tabs under the shade. Glue the shade on top of the base.

Vehicle assembly

Mount the vehicles onto cardstock and cut out all pieces. Consult the fold maps provided below and pre-fold each piece for your vehicle (note: Police vehicles, private omnibuses, vendor carts all pretty much follow the same fold pattern, seen last). I recommend making all 180 degree folds first as this will allow folds on the inside and outside to line up better.

Brougham and Hansom cabs

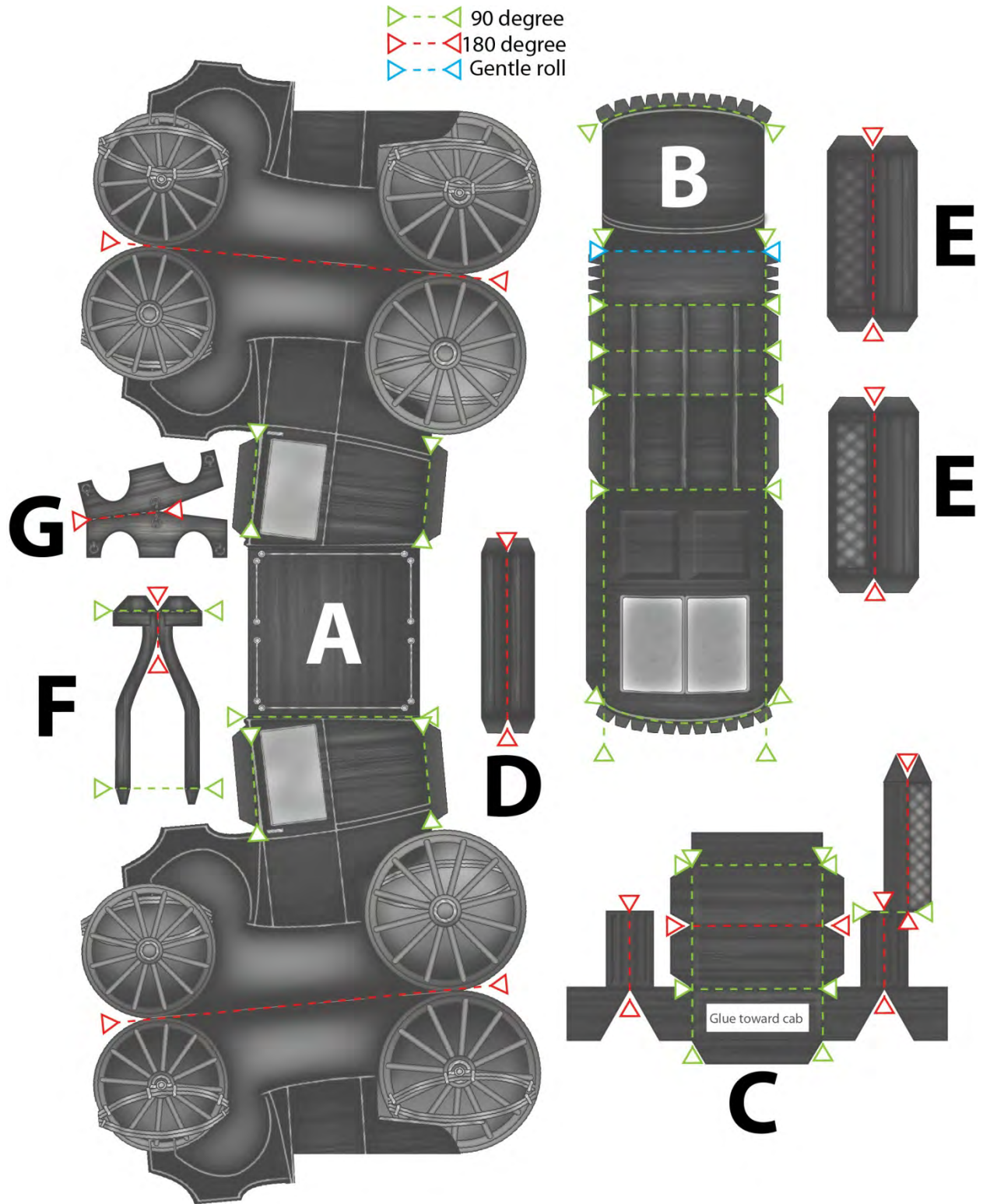
Take piece A and fold the wheels over 180 and glue in between. Piece B is the back, bottom and front. Make the 180 degree fold and glue both halves together at the fold, but not higher up. There are tabs off the cab in piece A that will glue in between these layers of piece B. Start with the Front tabs, and work your way to the back tabs, put a dab of glue on both sides, and then seal piece B around the tab until the glue dries.

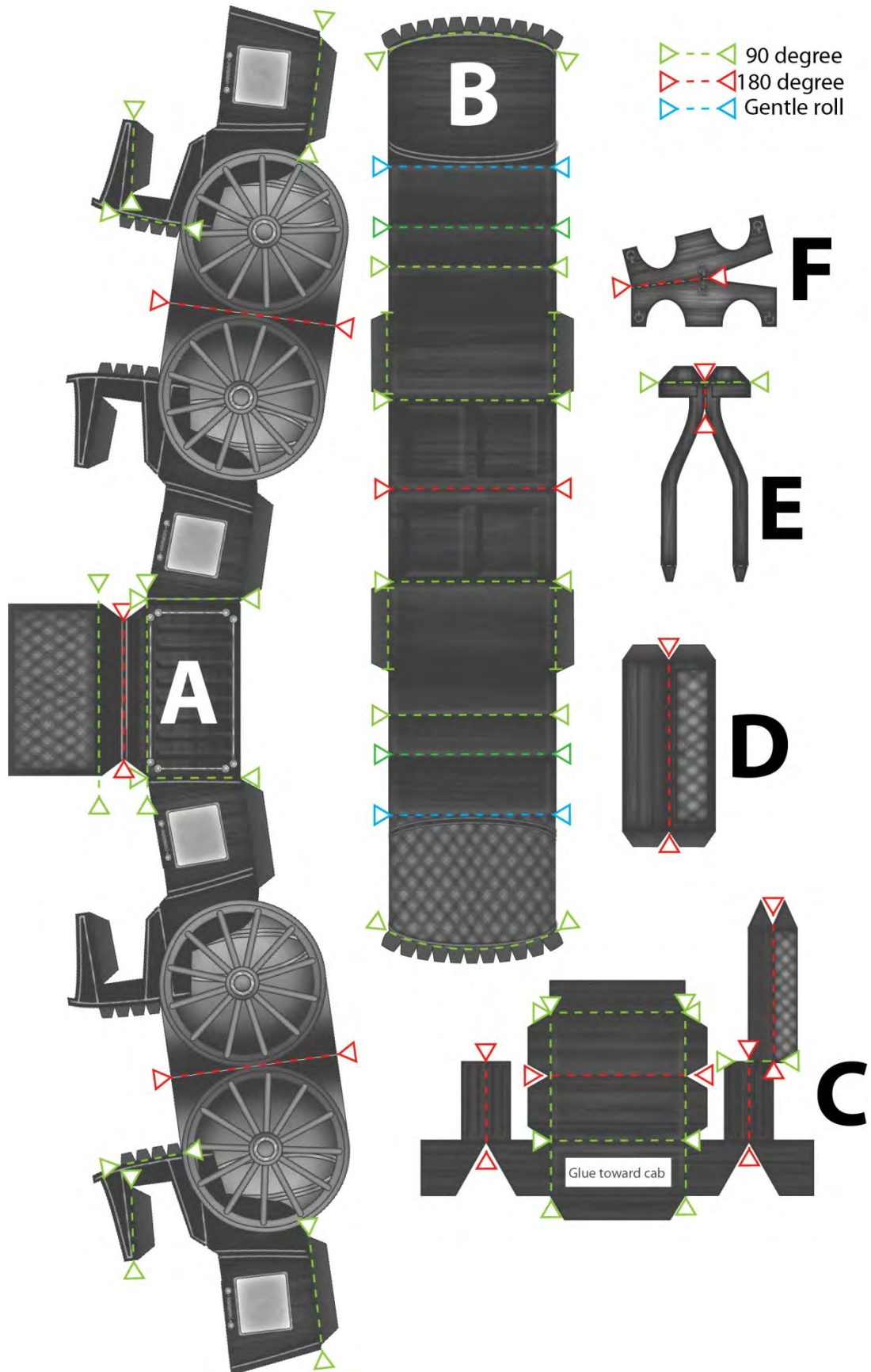
For both vehicles, piece C is the drivers seat. Fold the 180 degree folds and glue in between. Where the seat folds over is a tab, you will want to glue in between the layers of the opposite side to hide the tab. Glue to the cab.

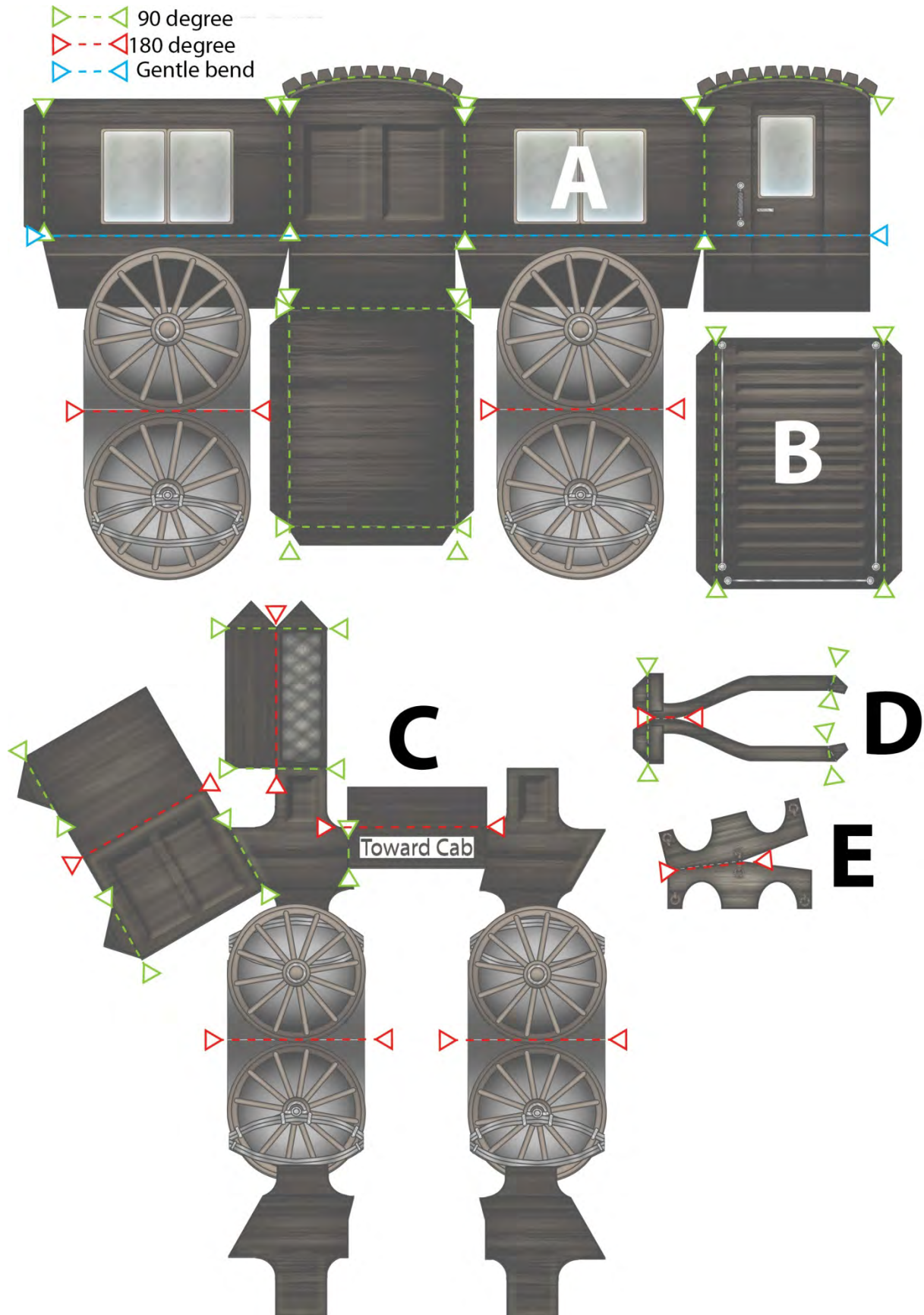
The yokes come in two pieces, make the 180 degree folds. Then the 90 degree folds should flare the tabs outward away from each other. Glue in between the mirrored pieces, and then glue the two pieces together with the tabs. Attach to cab.

Private Omnibus and others.

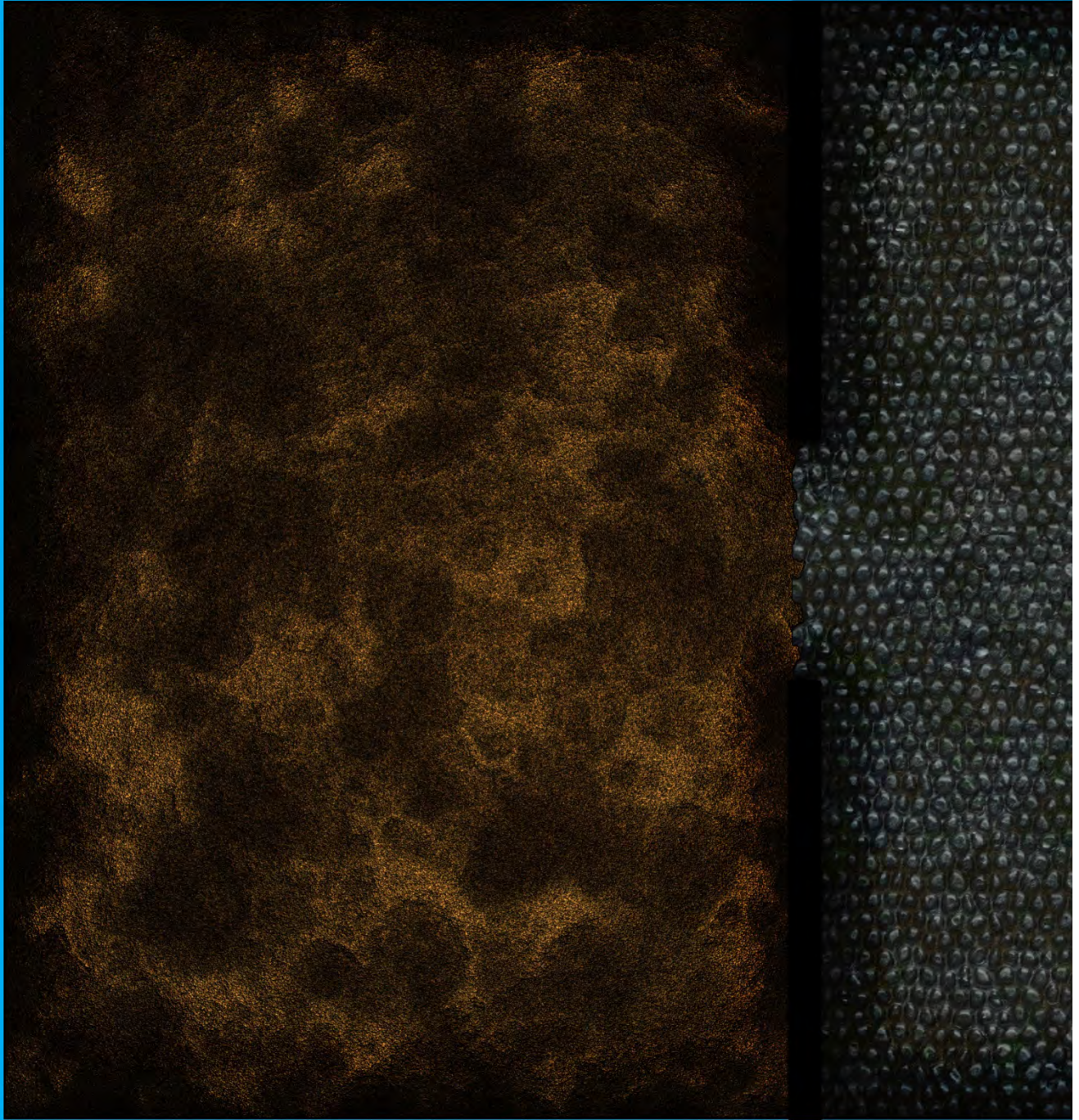
Most of the remaining vehicles are like the Brougham cab, shown below, except the front wheels are attached to the driver's seat. This adds some 180 degrees which should be done first, but otherwise assembly is similar.



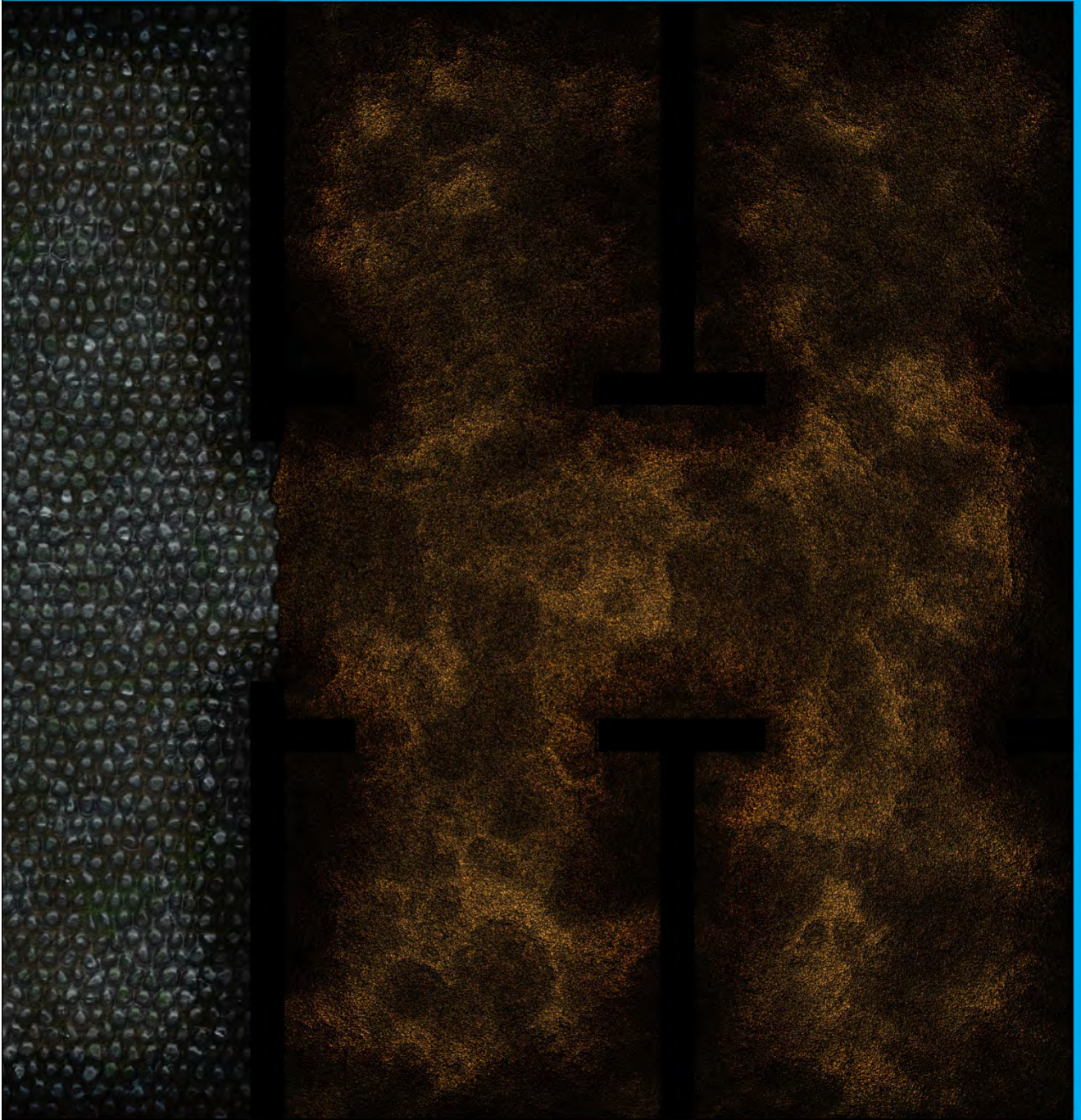




A



B



C



D





E





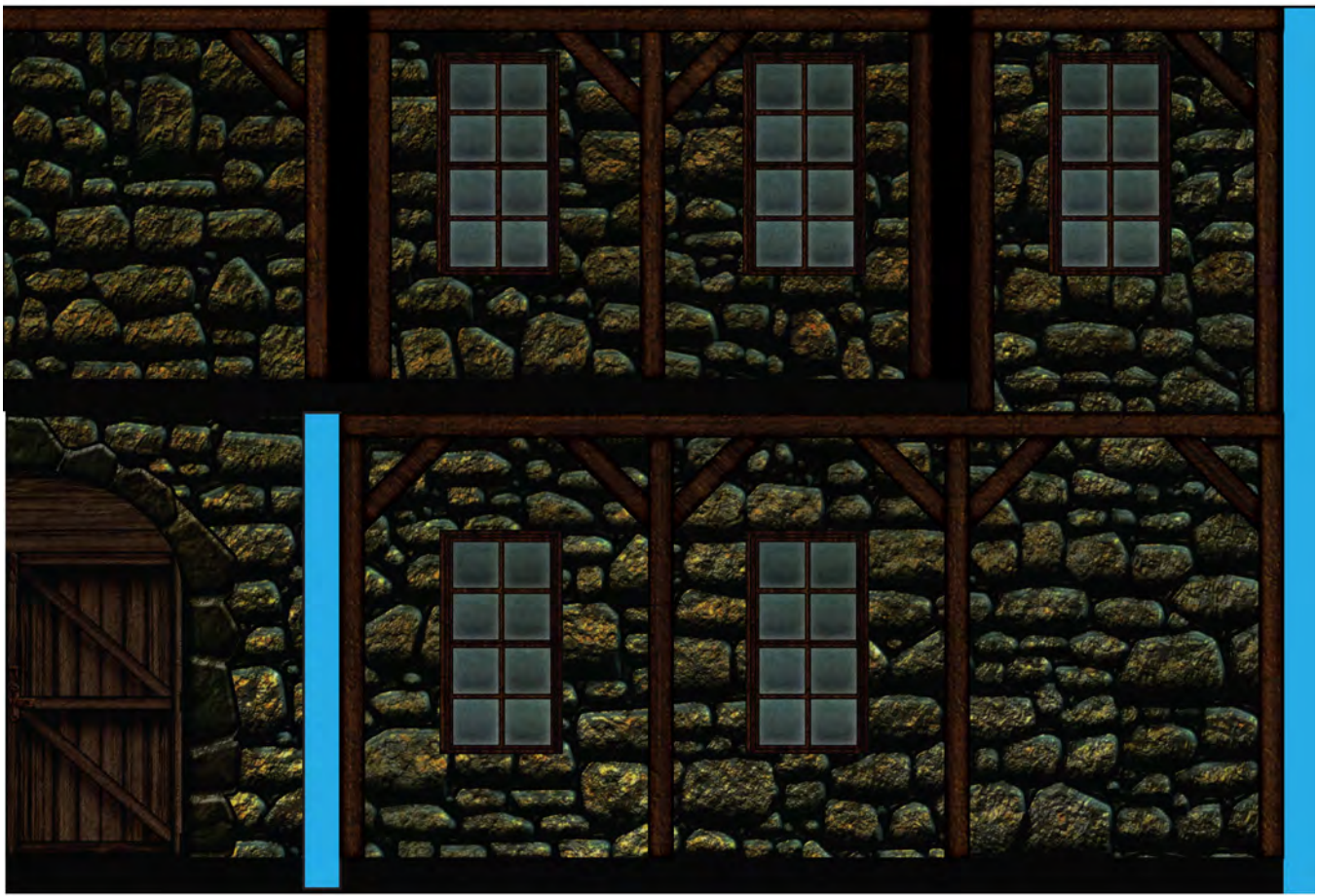
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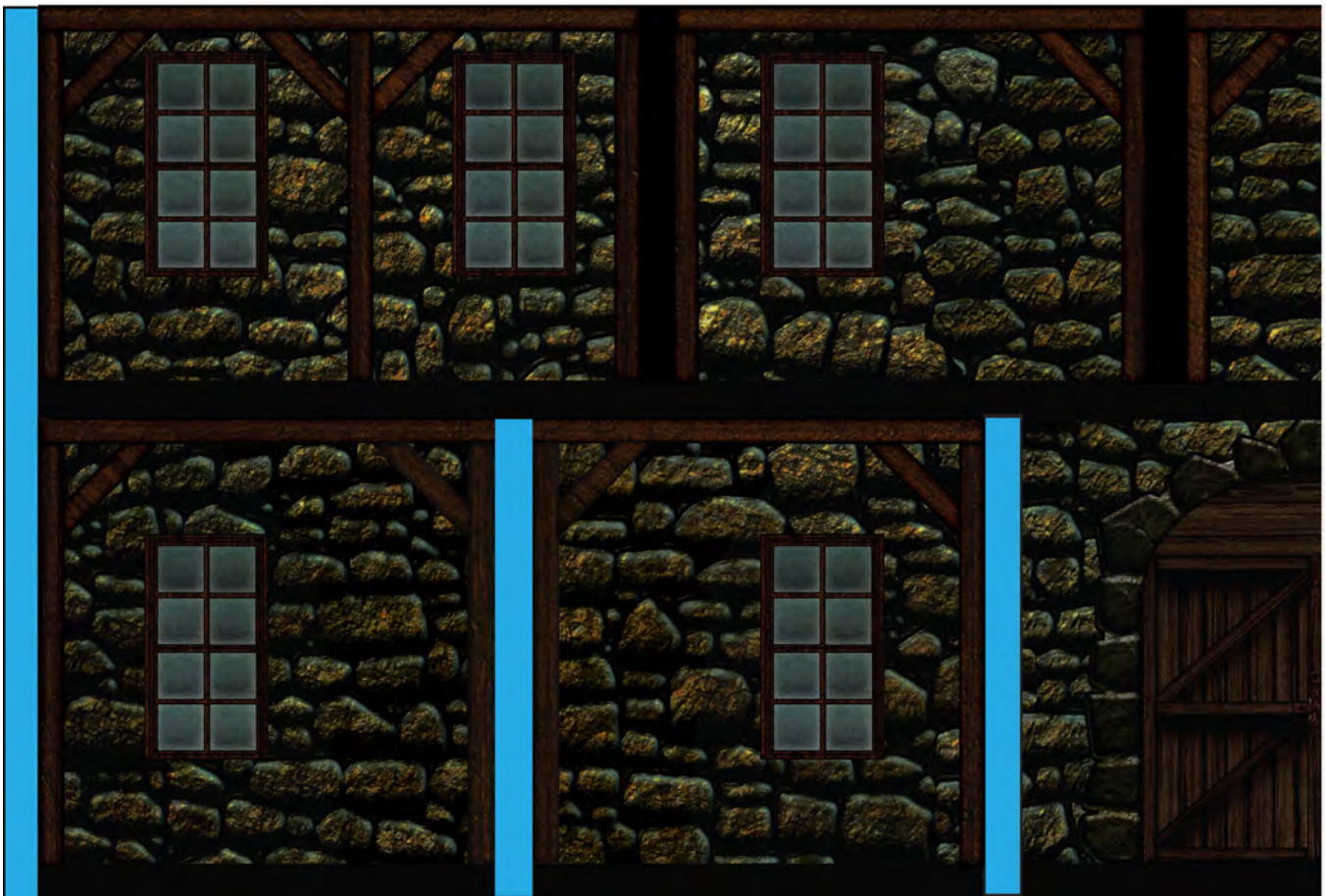
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K



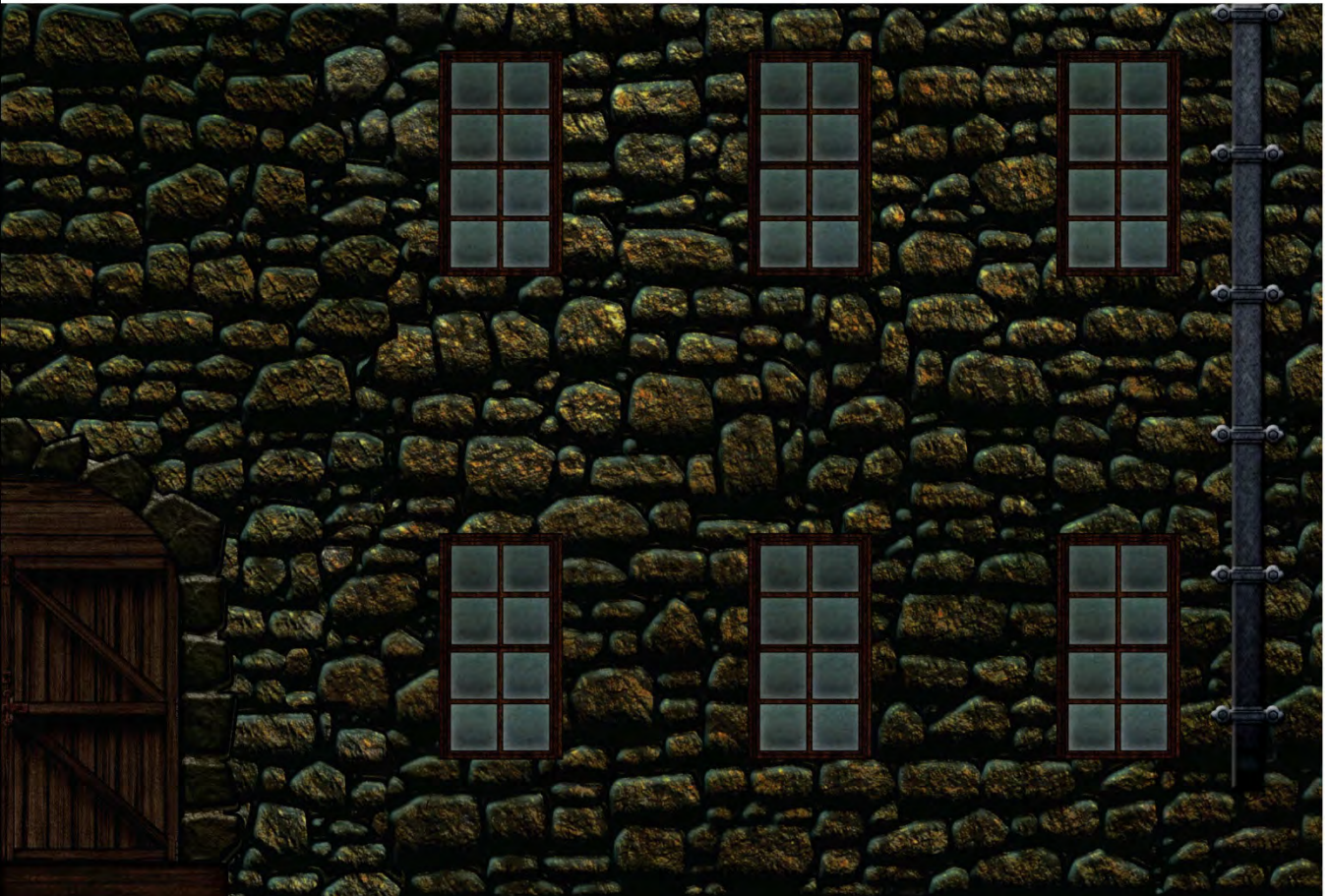
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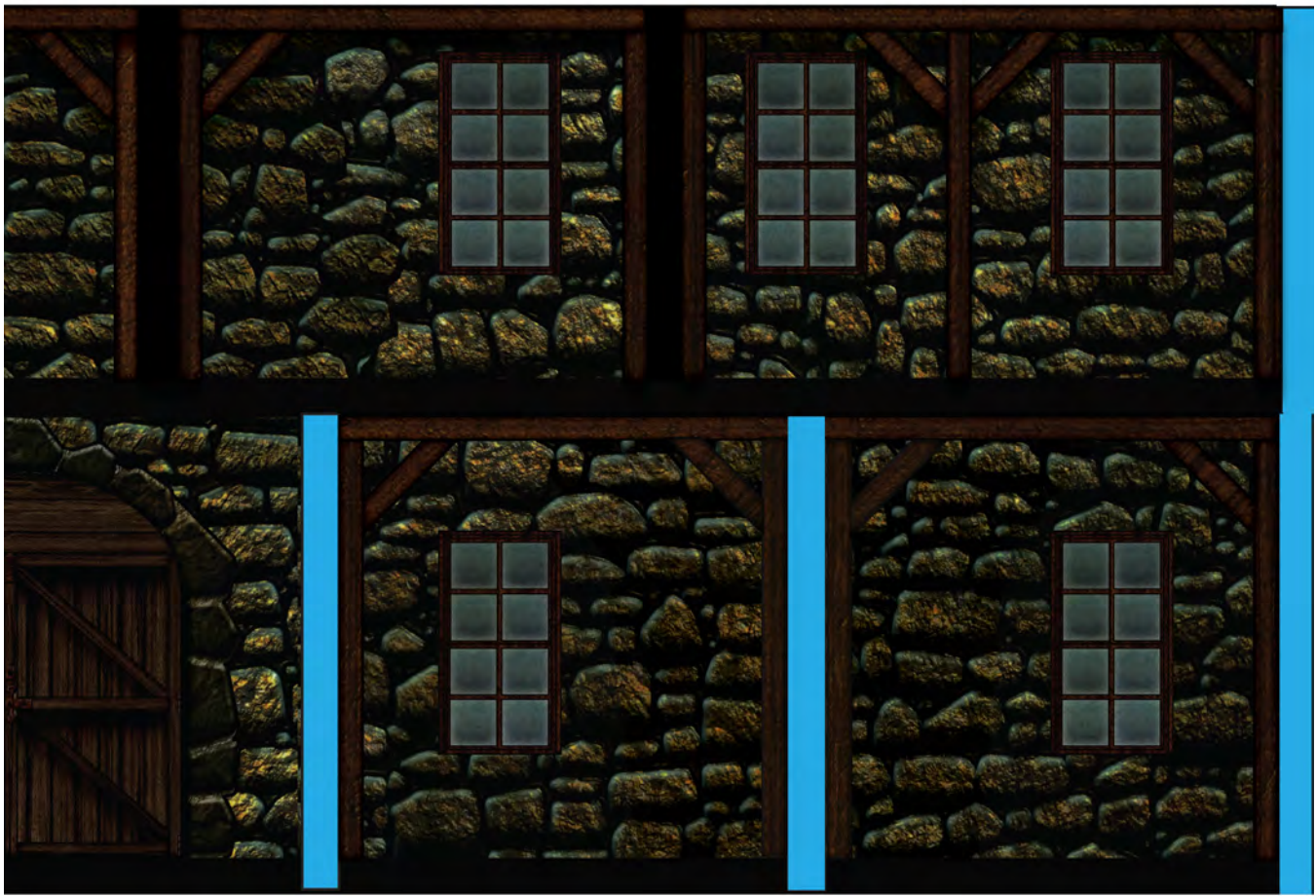
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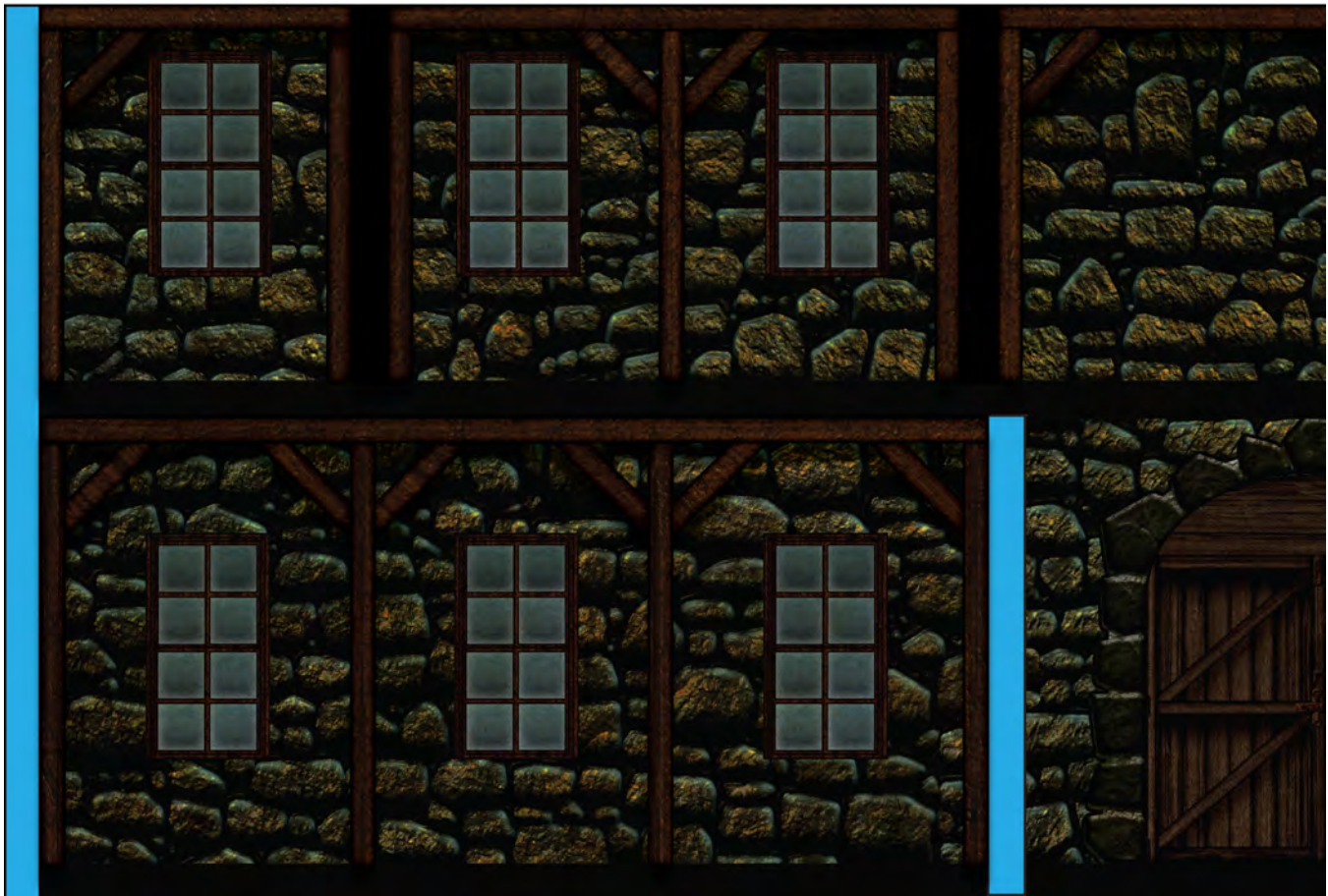
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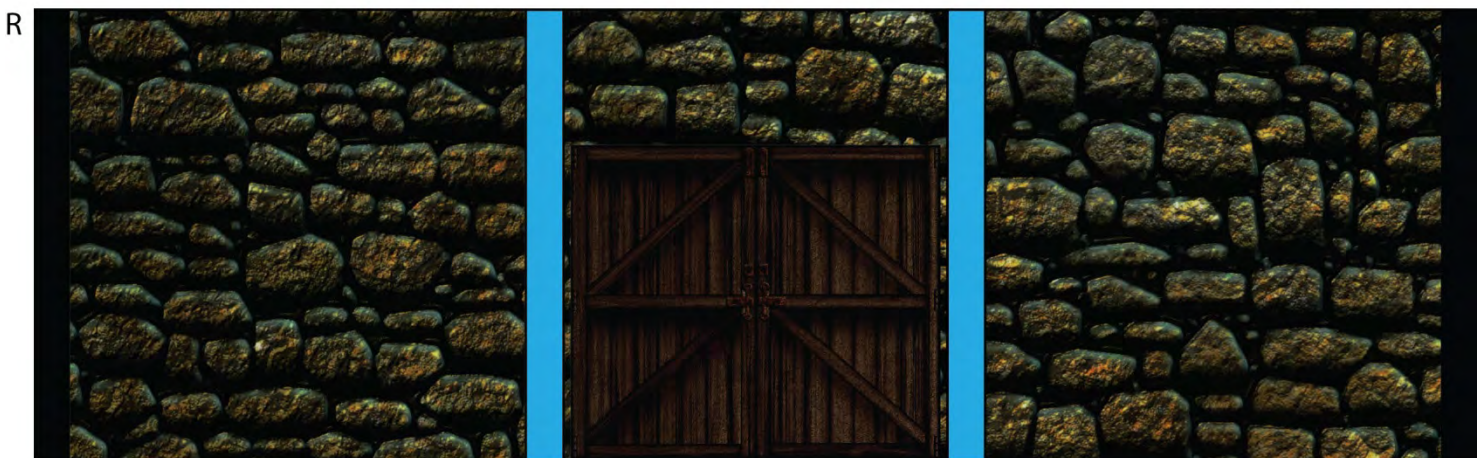


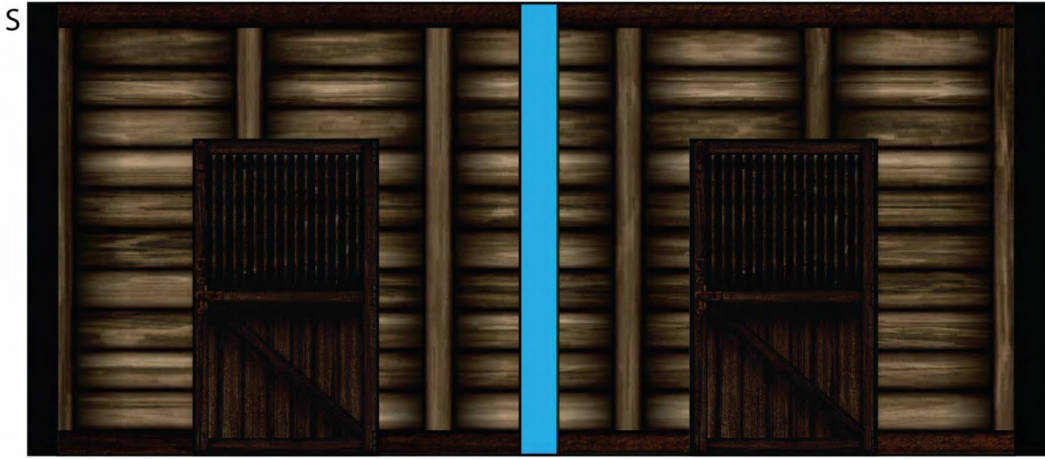
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P





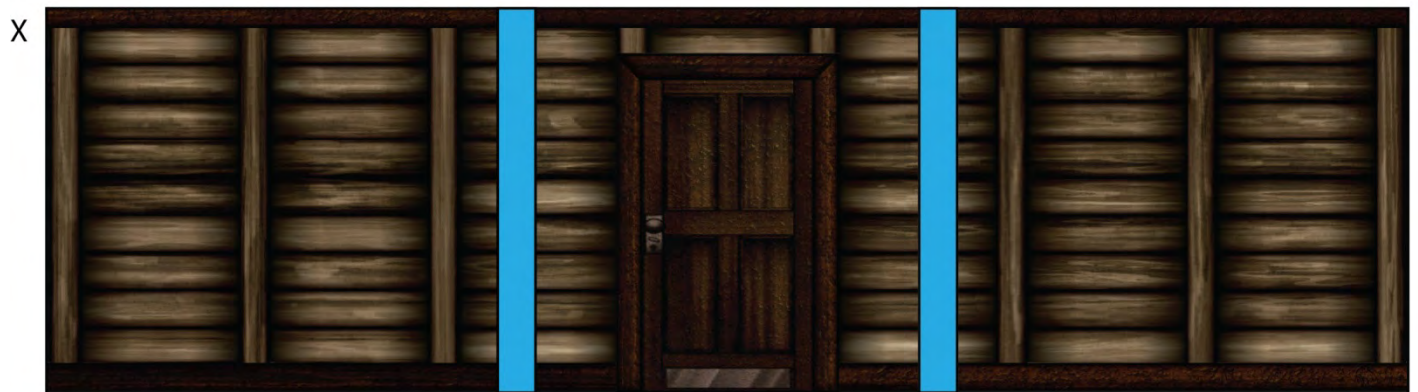
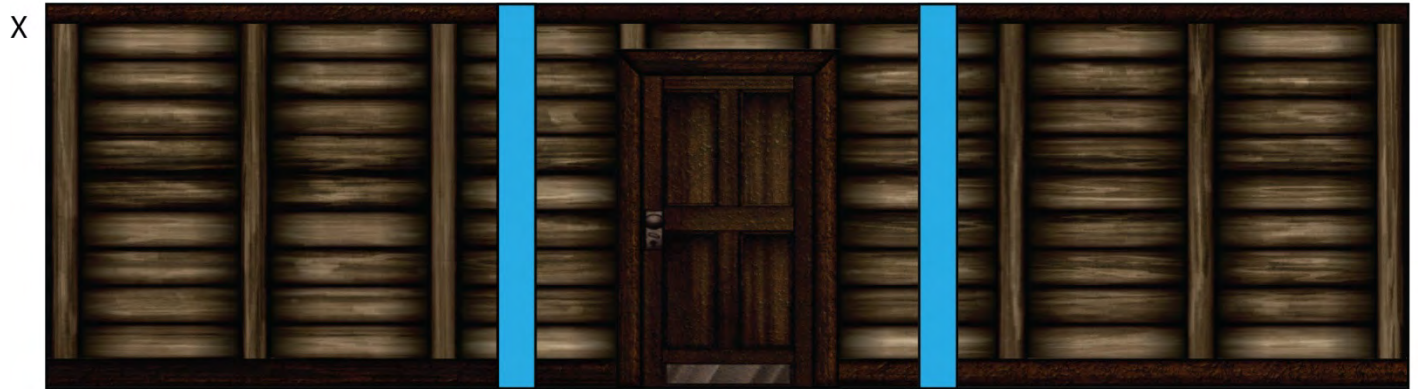


Ground Floor



Upper Floor





Y



Z



CC



CC



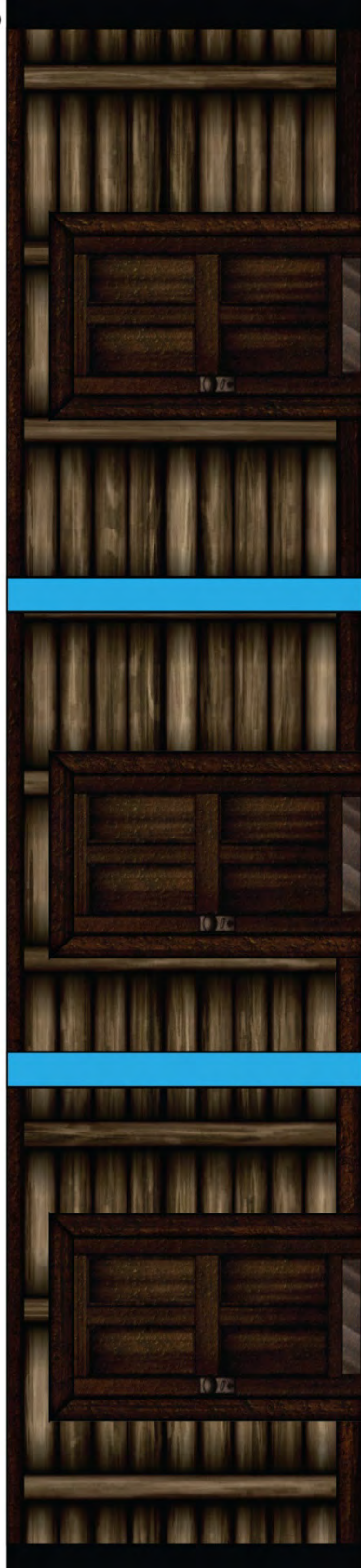
CC



aa



bb



dd

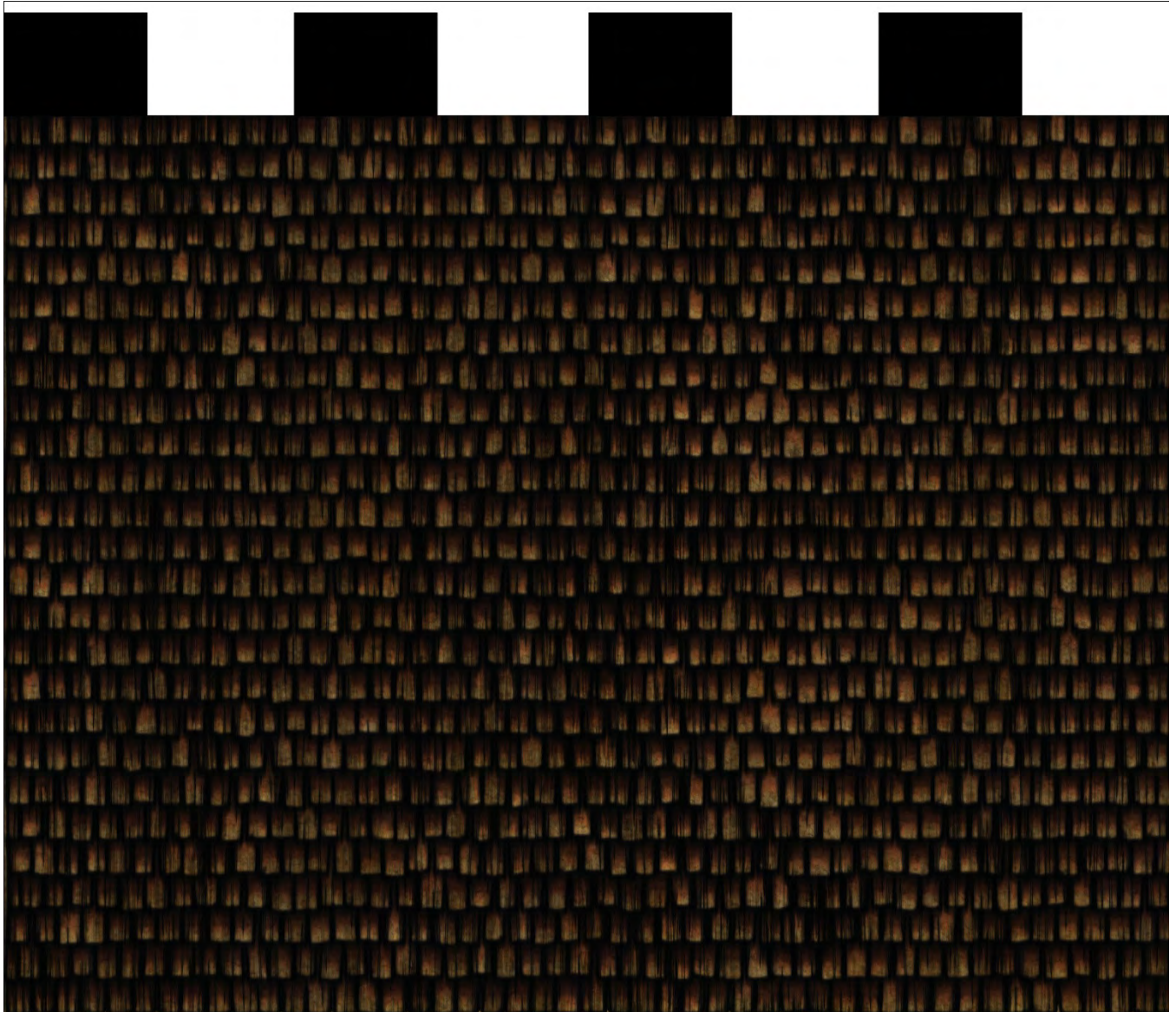


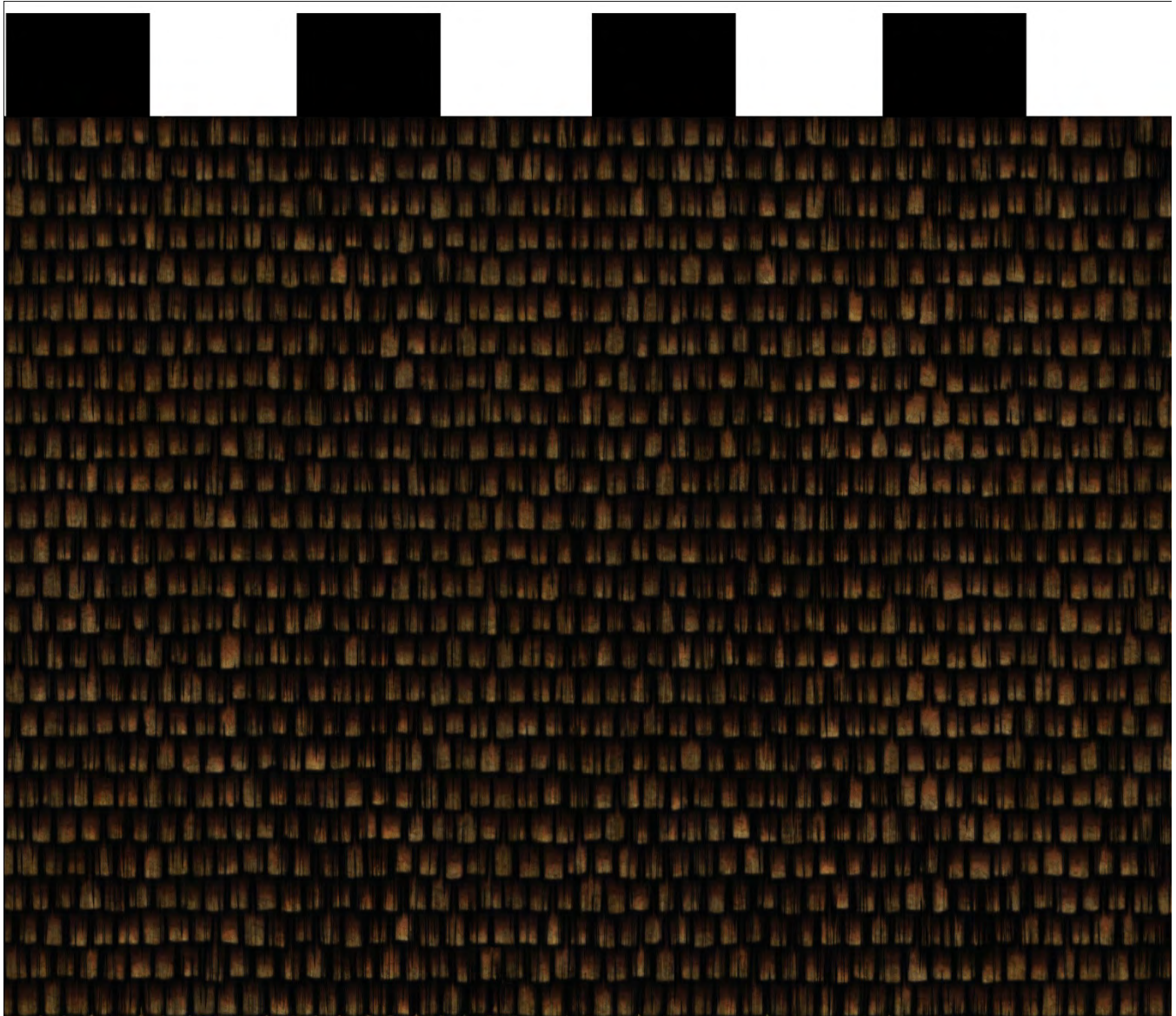
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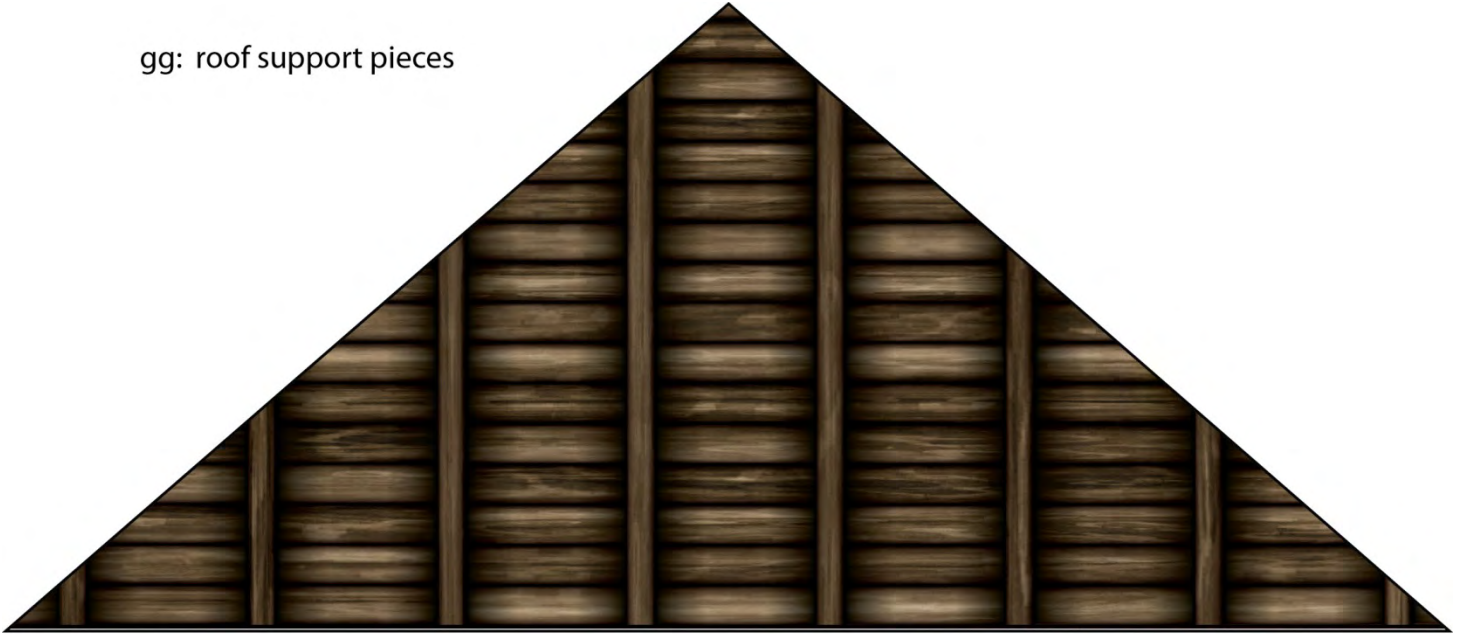
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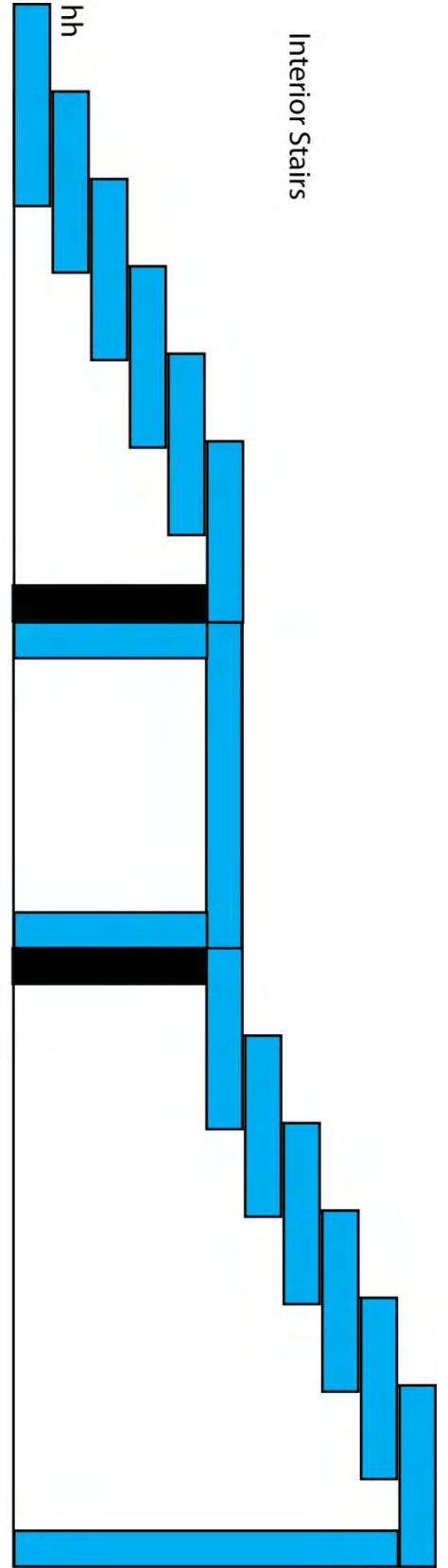
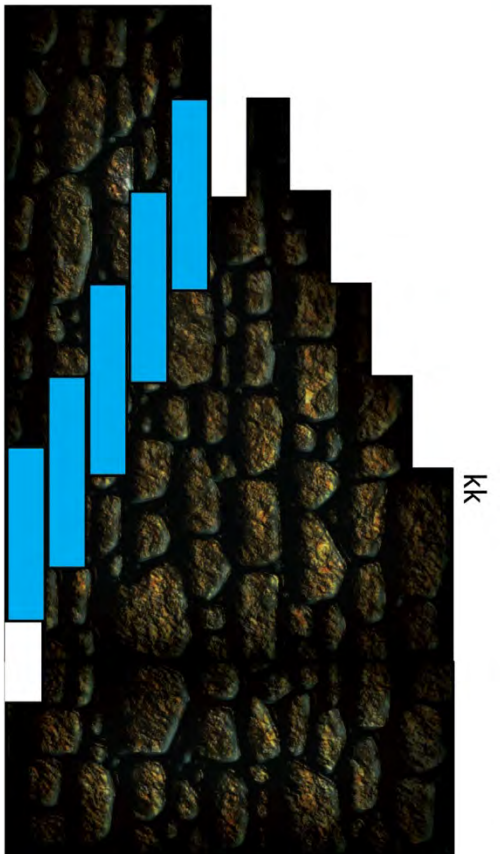
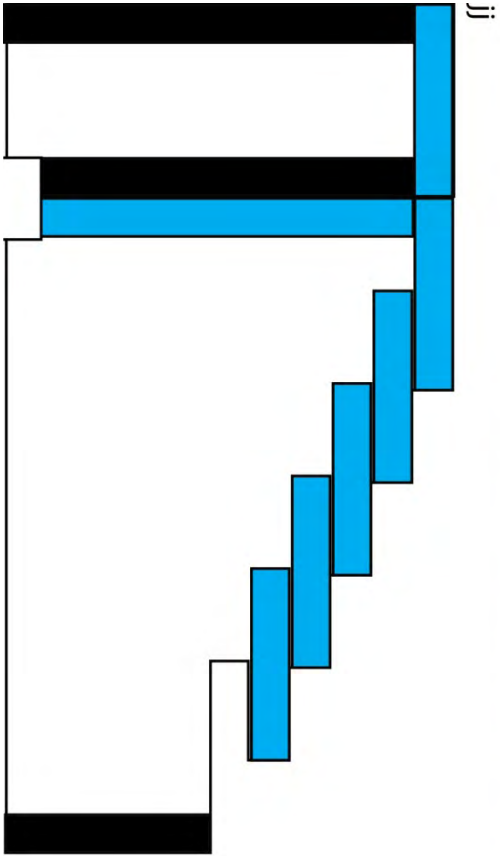


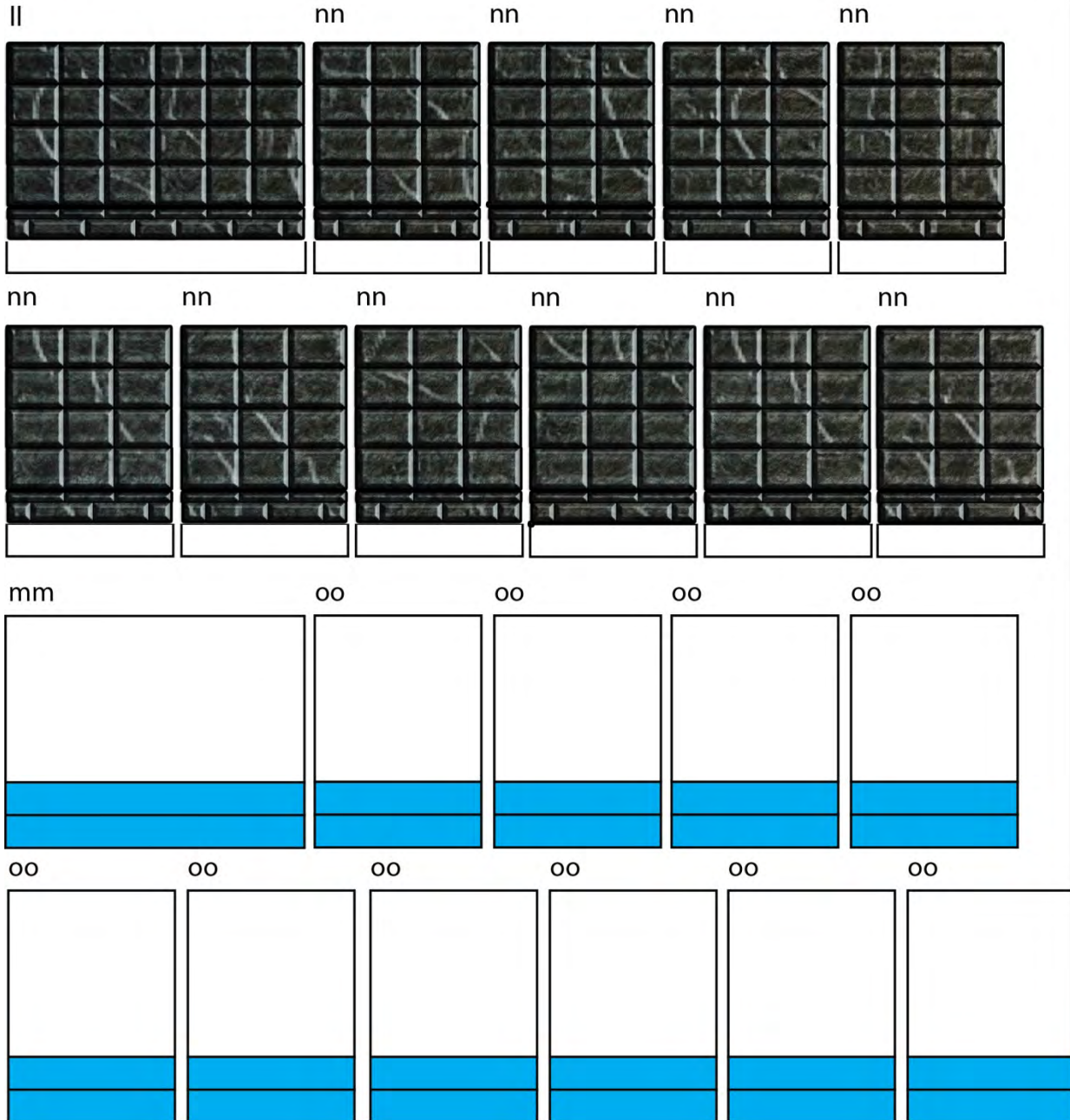


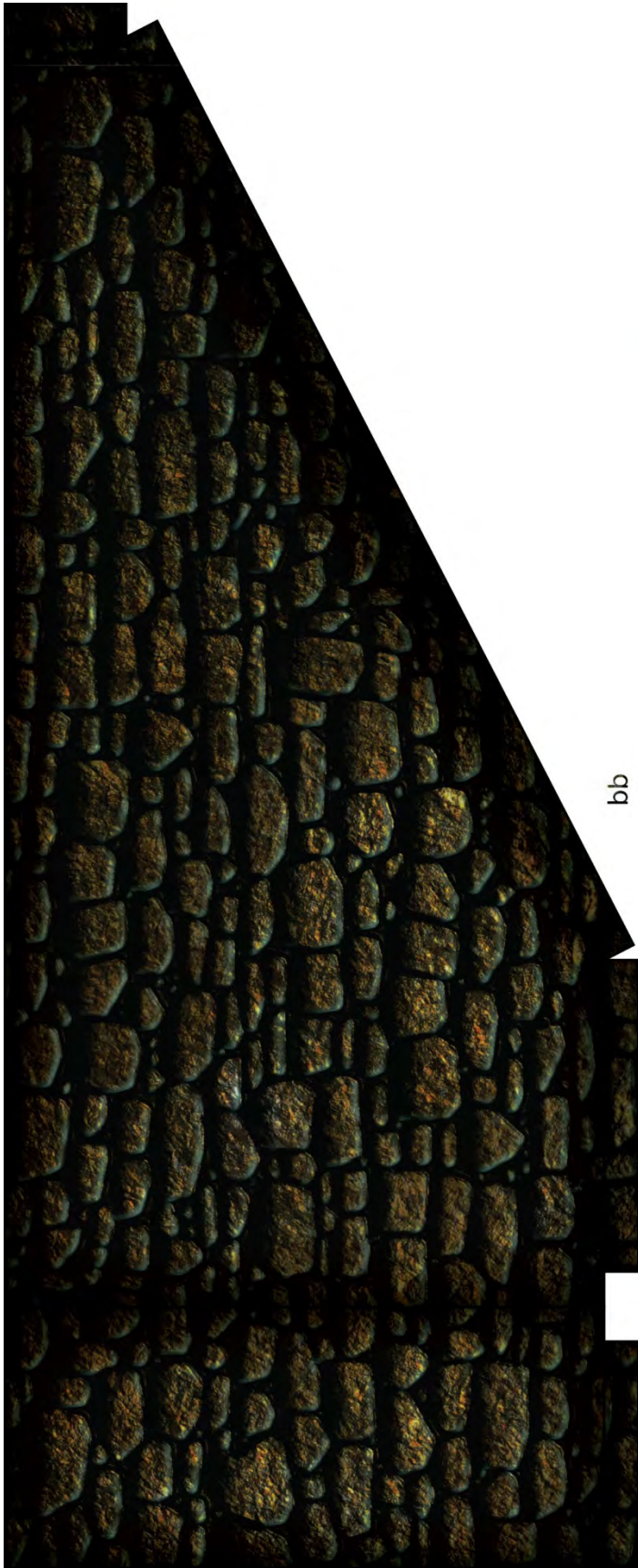


gg: roof support pieces

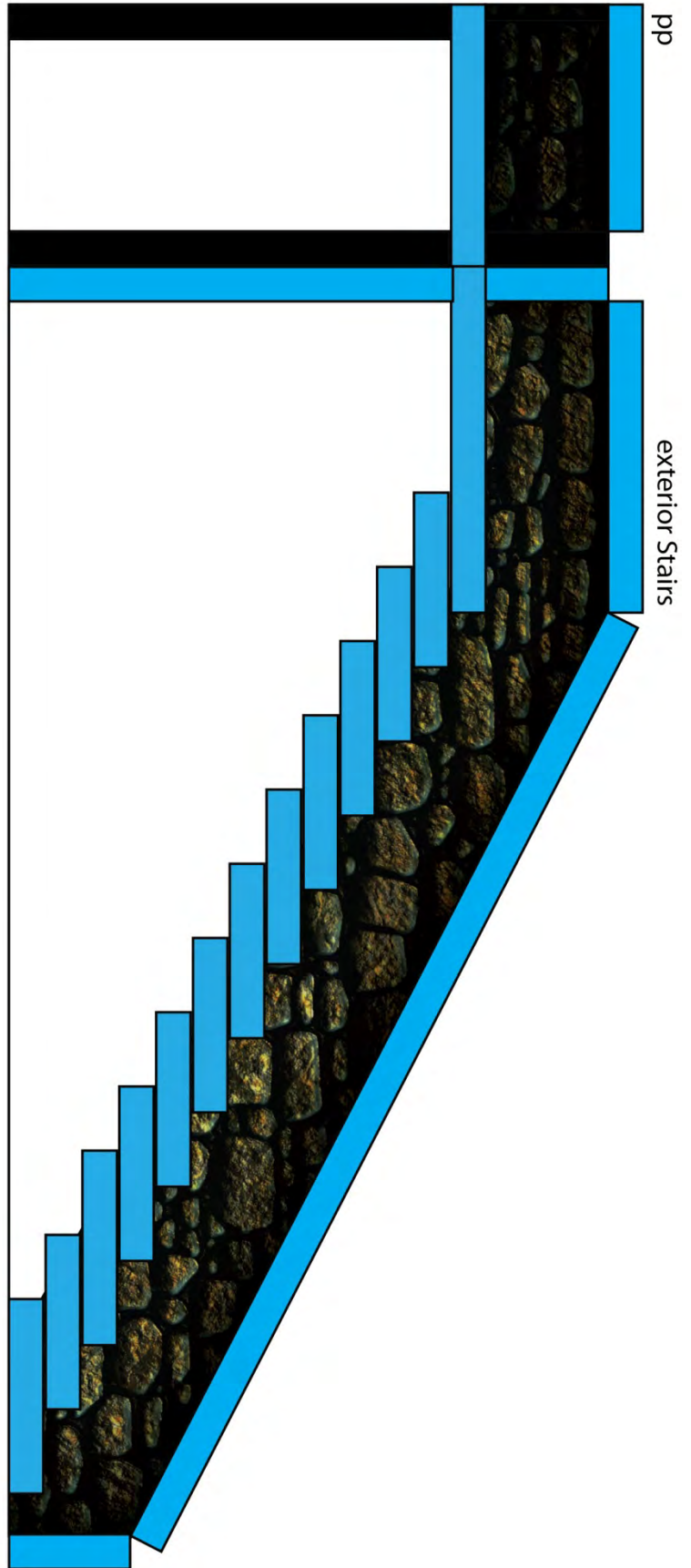






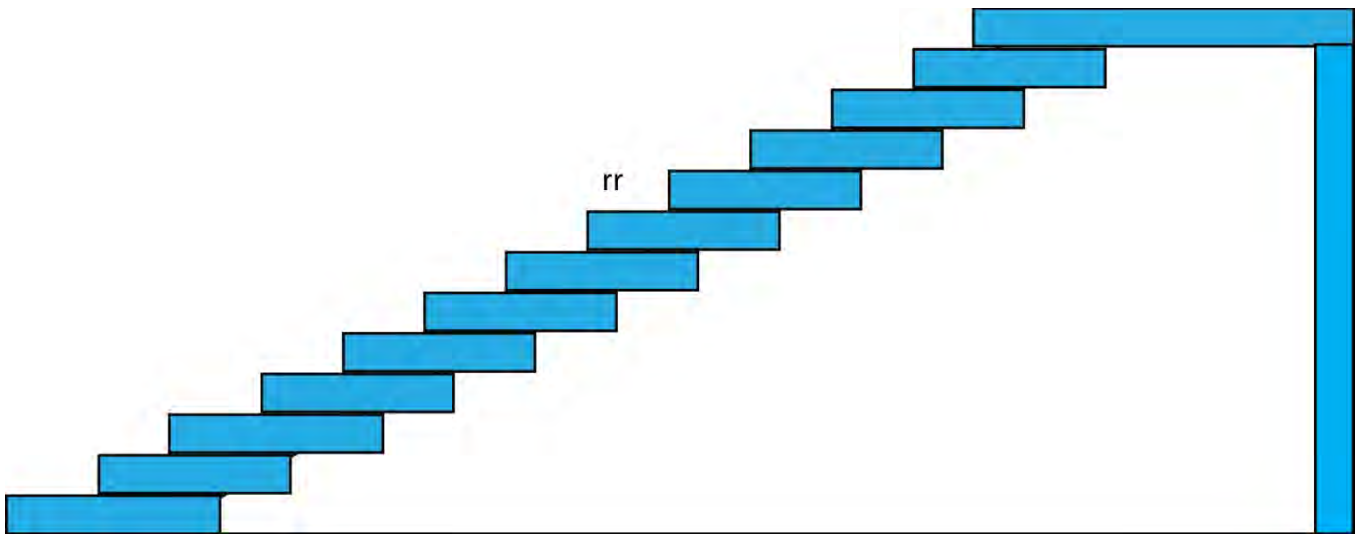


bb



pp

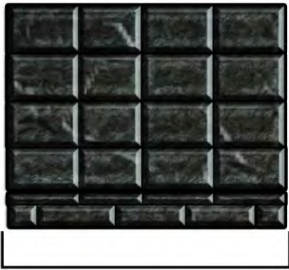
exterior Stairs



ss



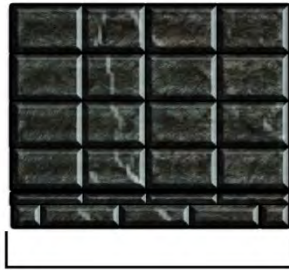
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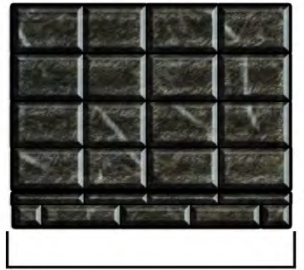
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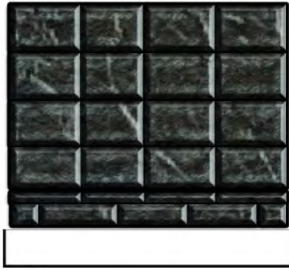
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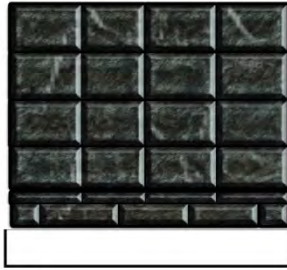
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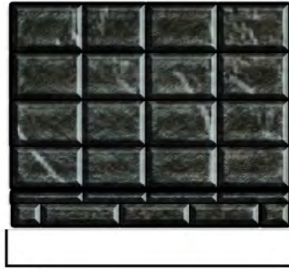
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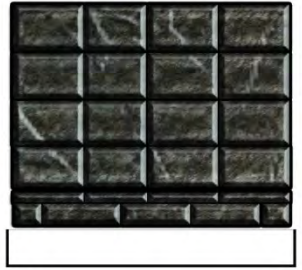
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uu



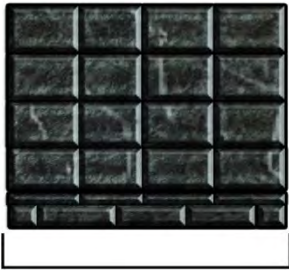
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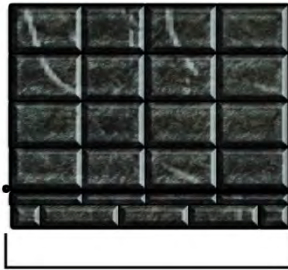
tt



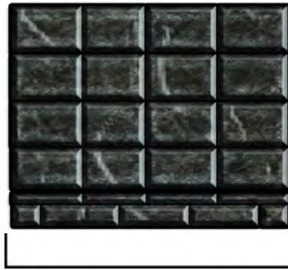
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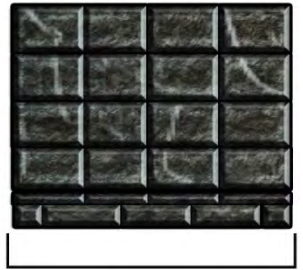
uu



uu



uu



vv



vv



vv



vv



vv



vv



vv



vv



vv



vv



vv



vv

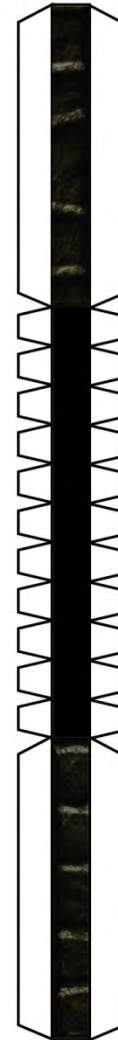


Mount of foamcore

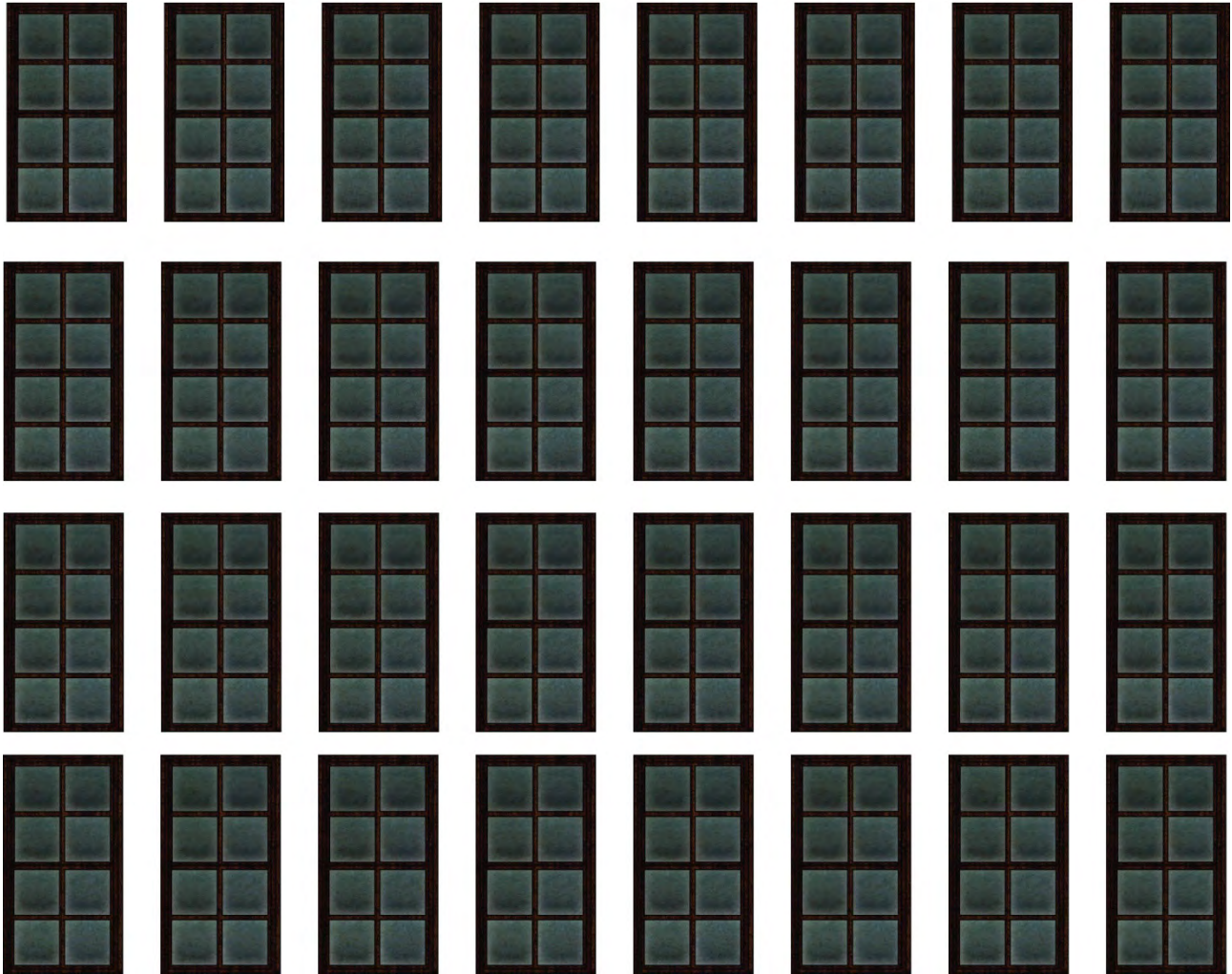
Rabbit reverse side along side edges, 5 mm wide

Fold 90

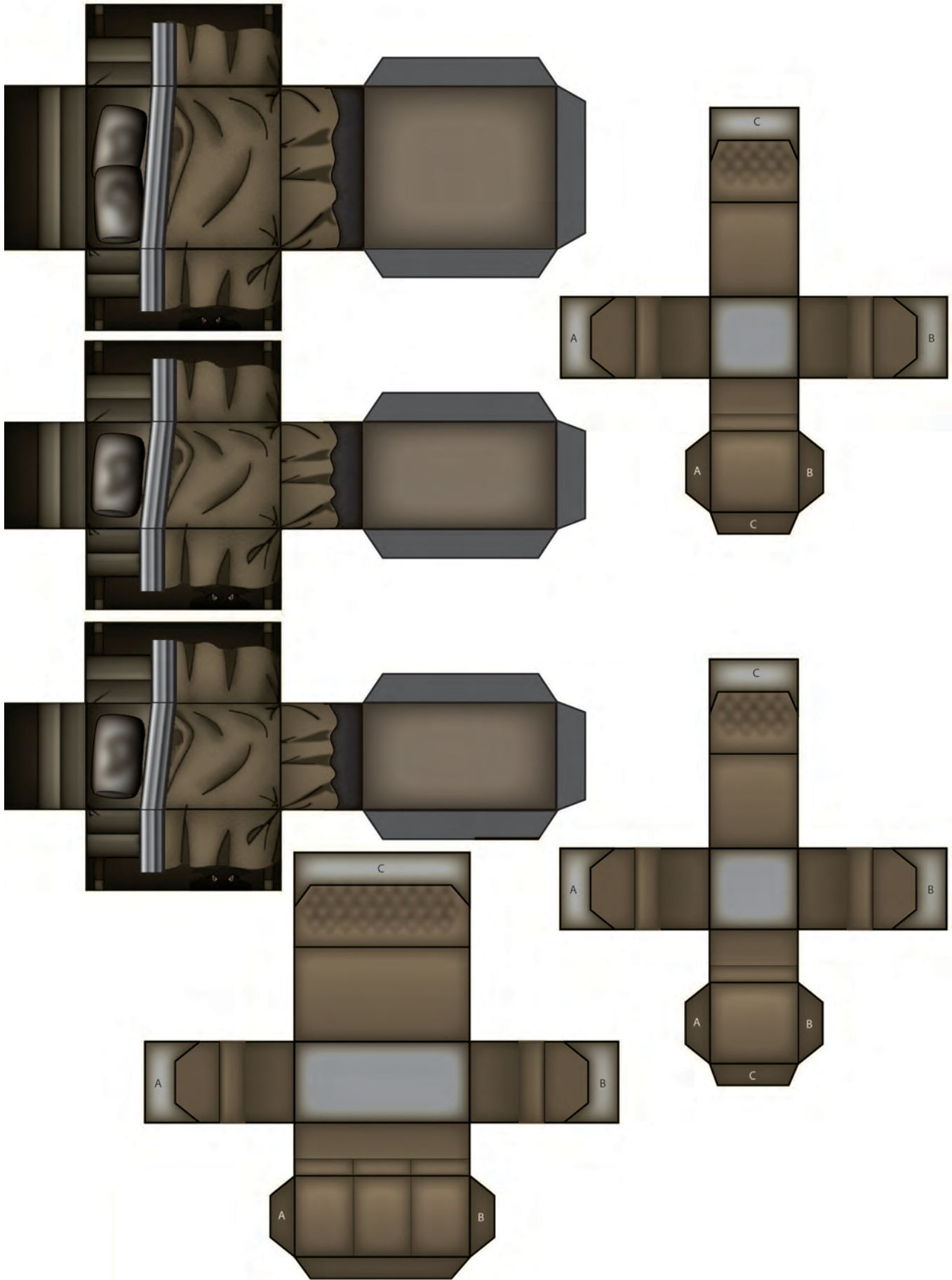
Fold 90



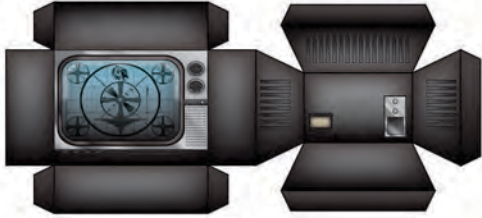
Transparency windows



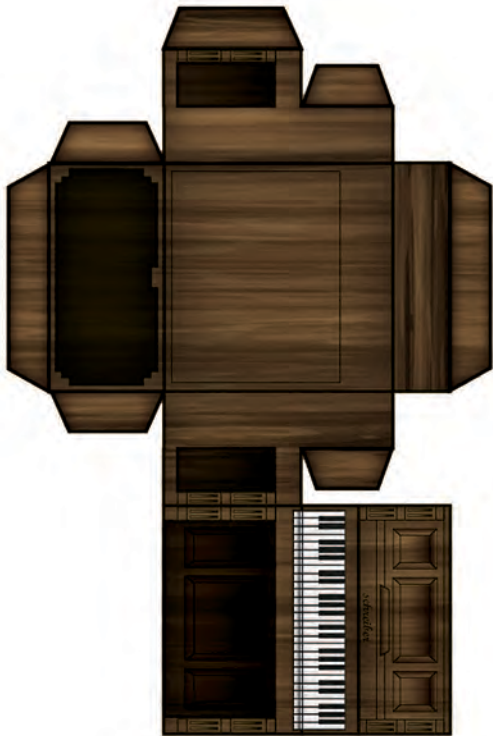
Taller beds



Television set (less than modern tech)



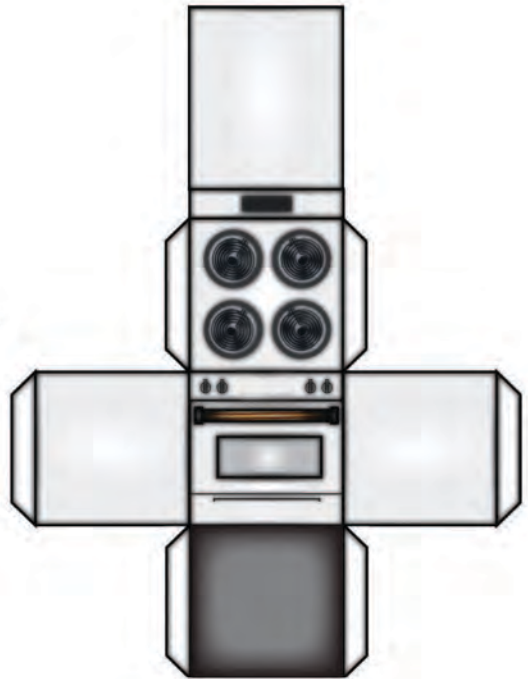
Piano



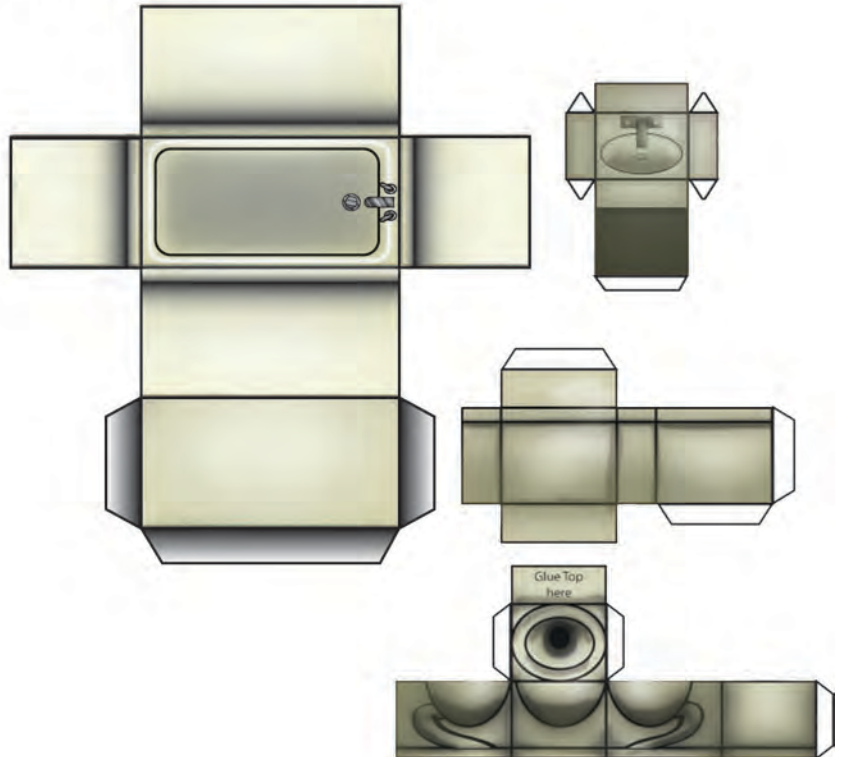
Washing machine



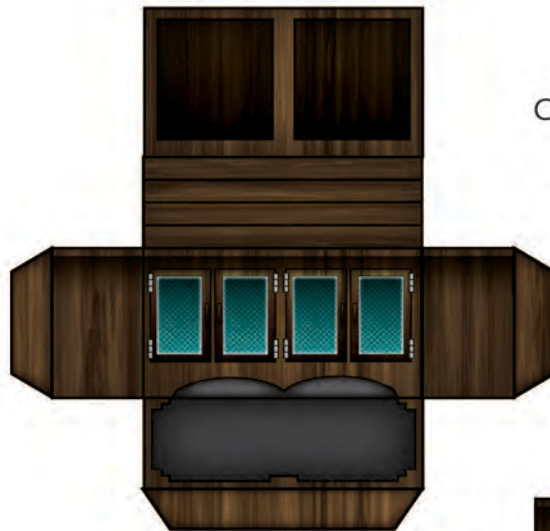
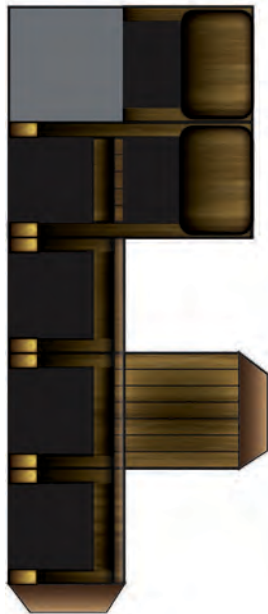
Alternate Stove



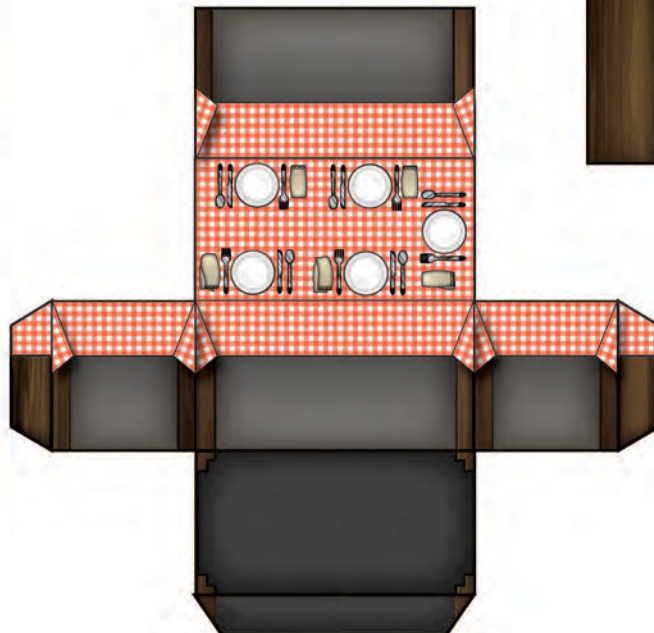
Simple bath tub



Chairs



China Cabinet





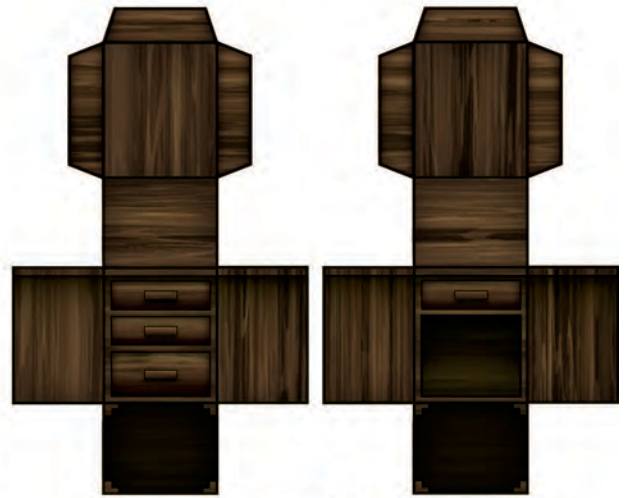
Table



Coffee Table



Night stands

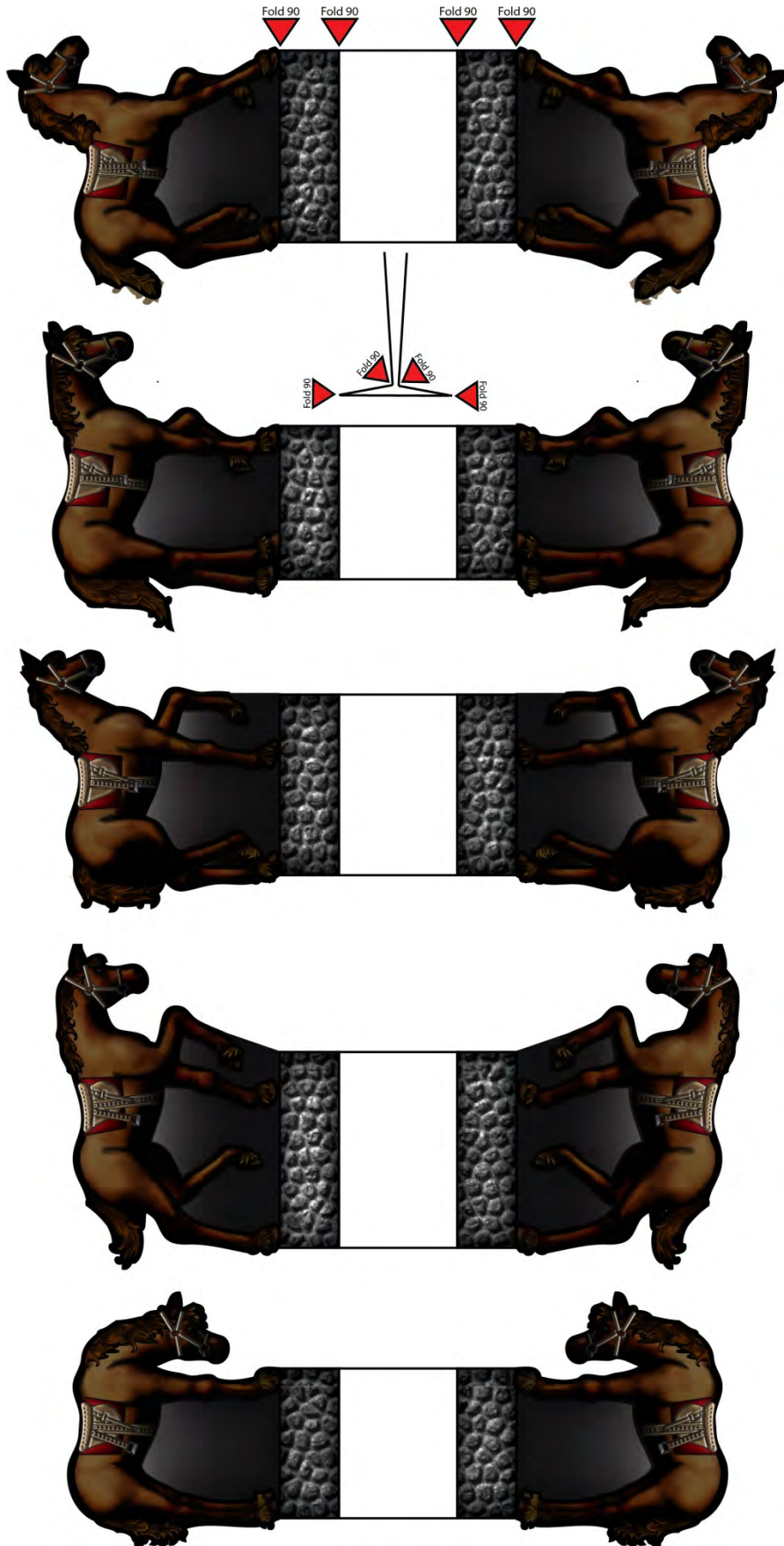


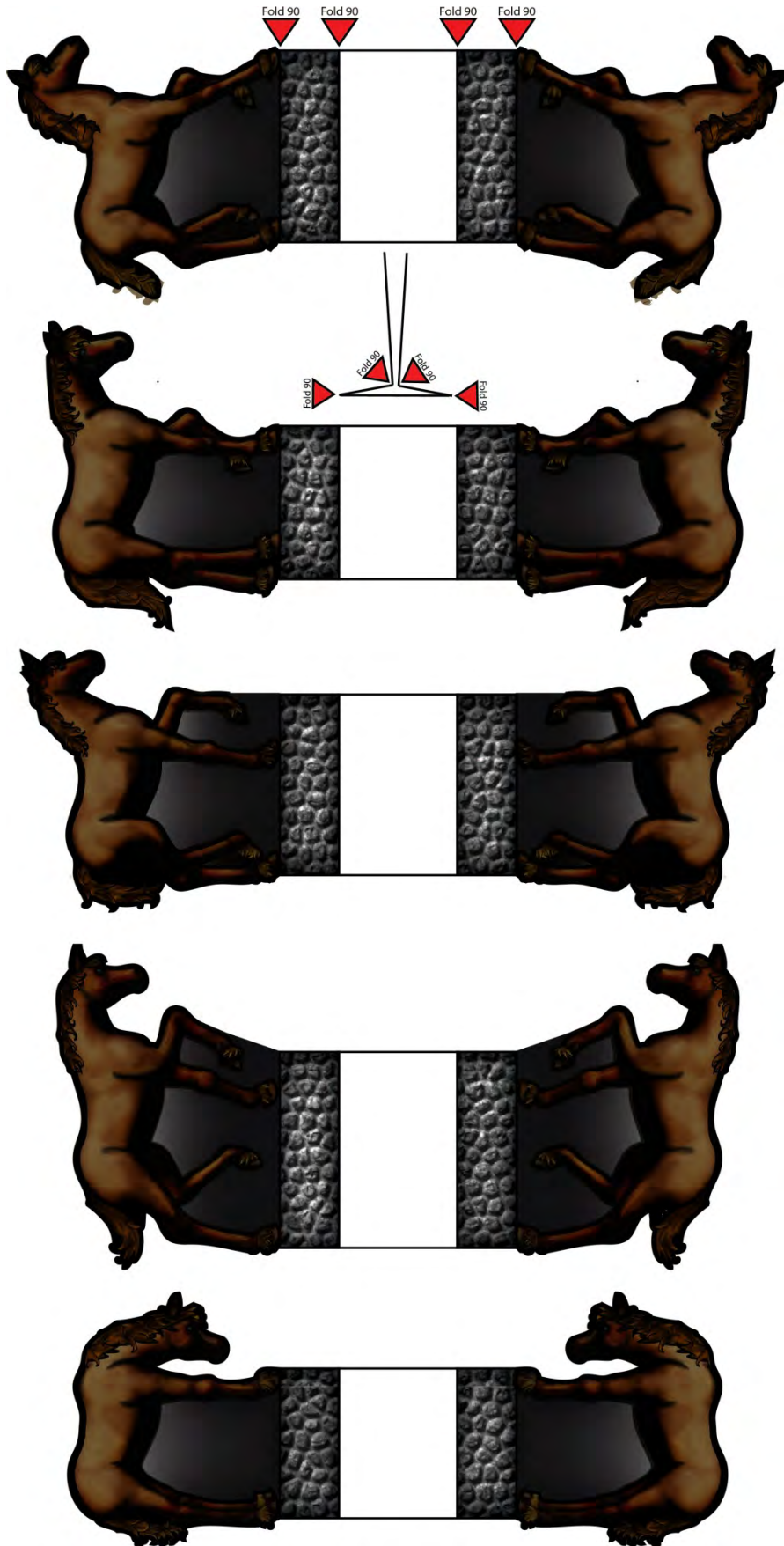
Dressers

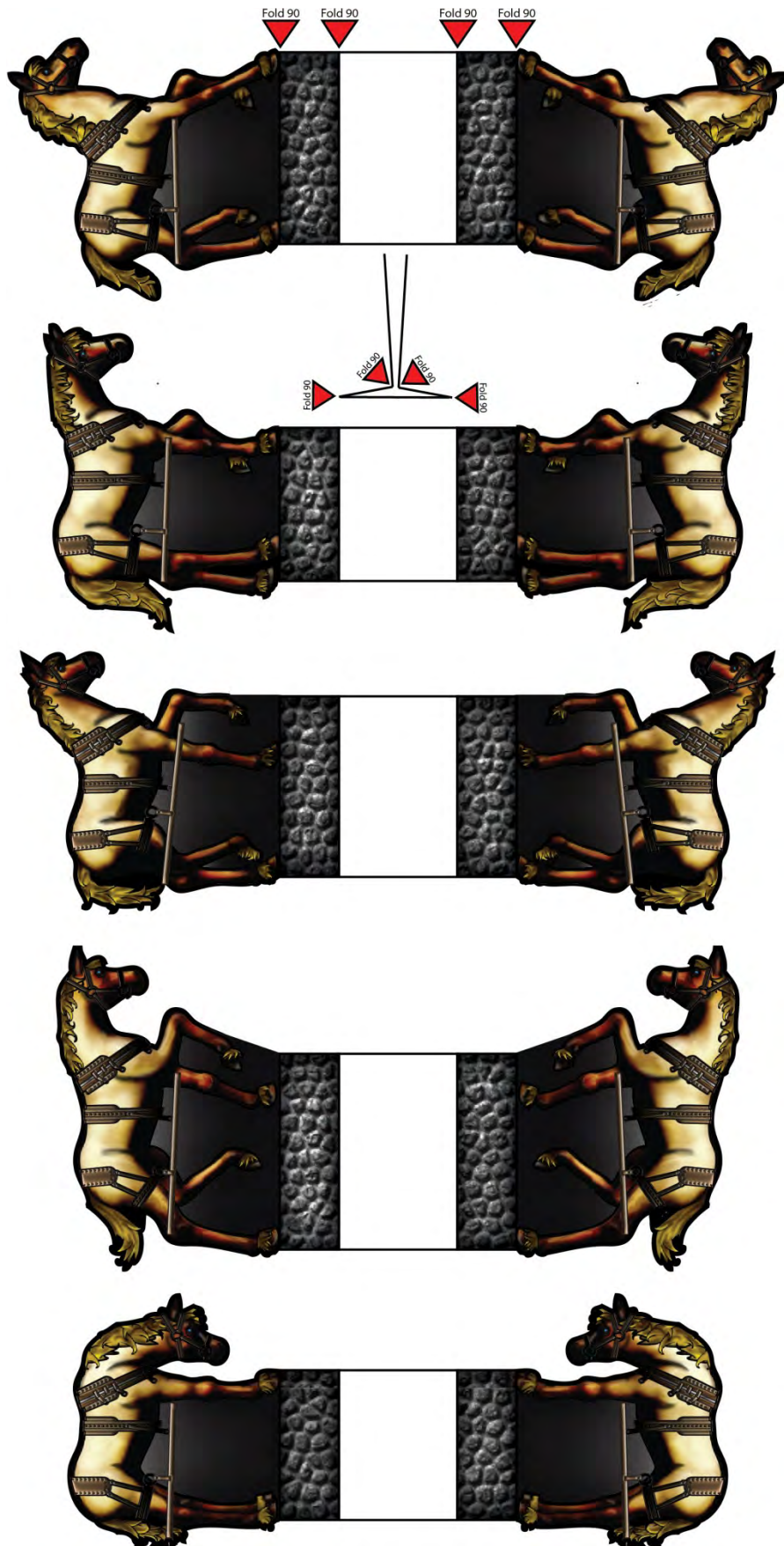


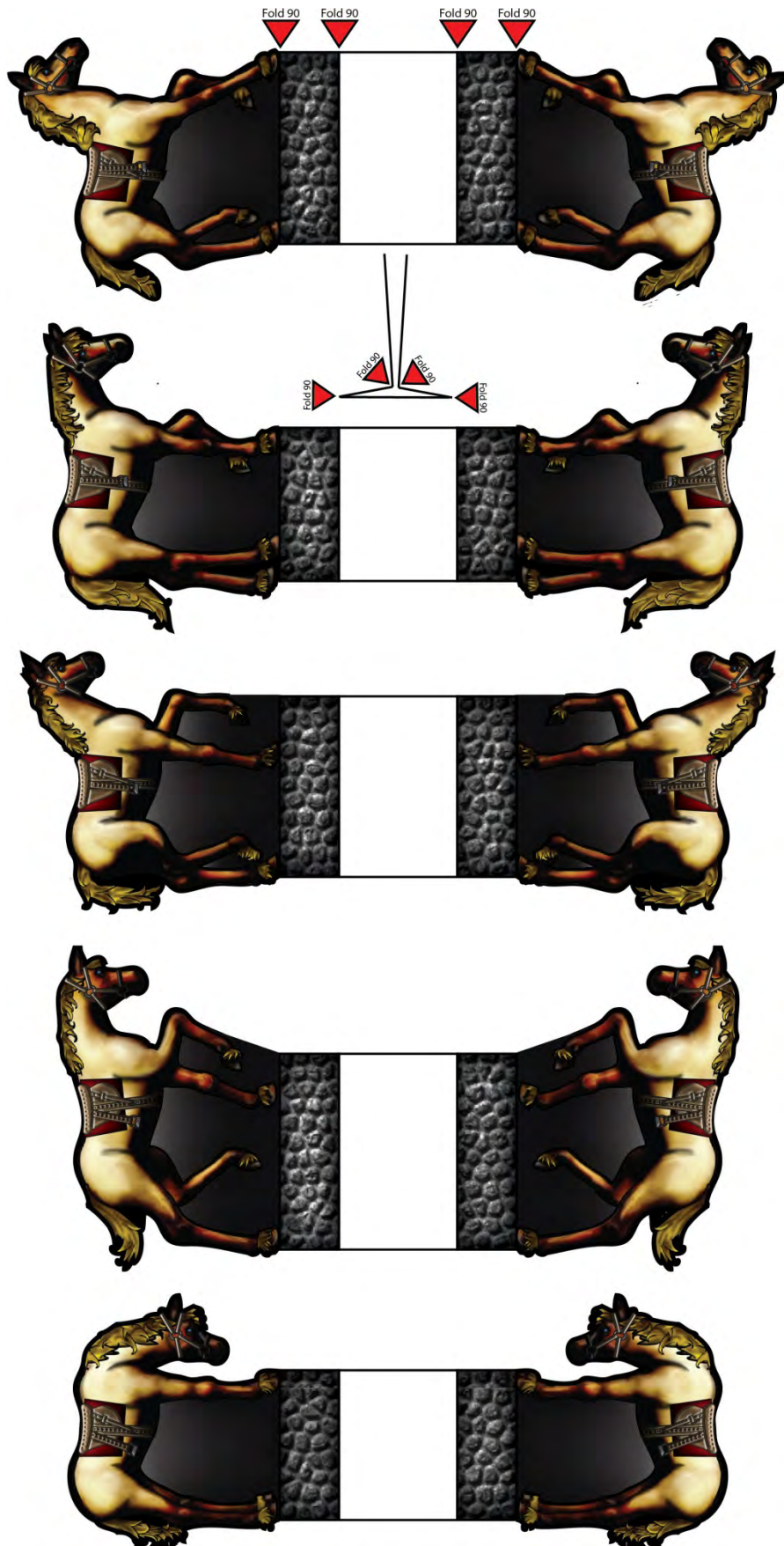
Toy boxes

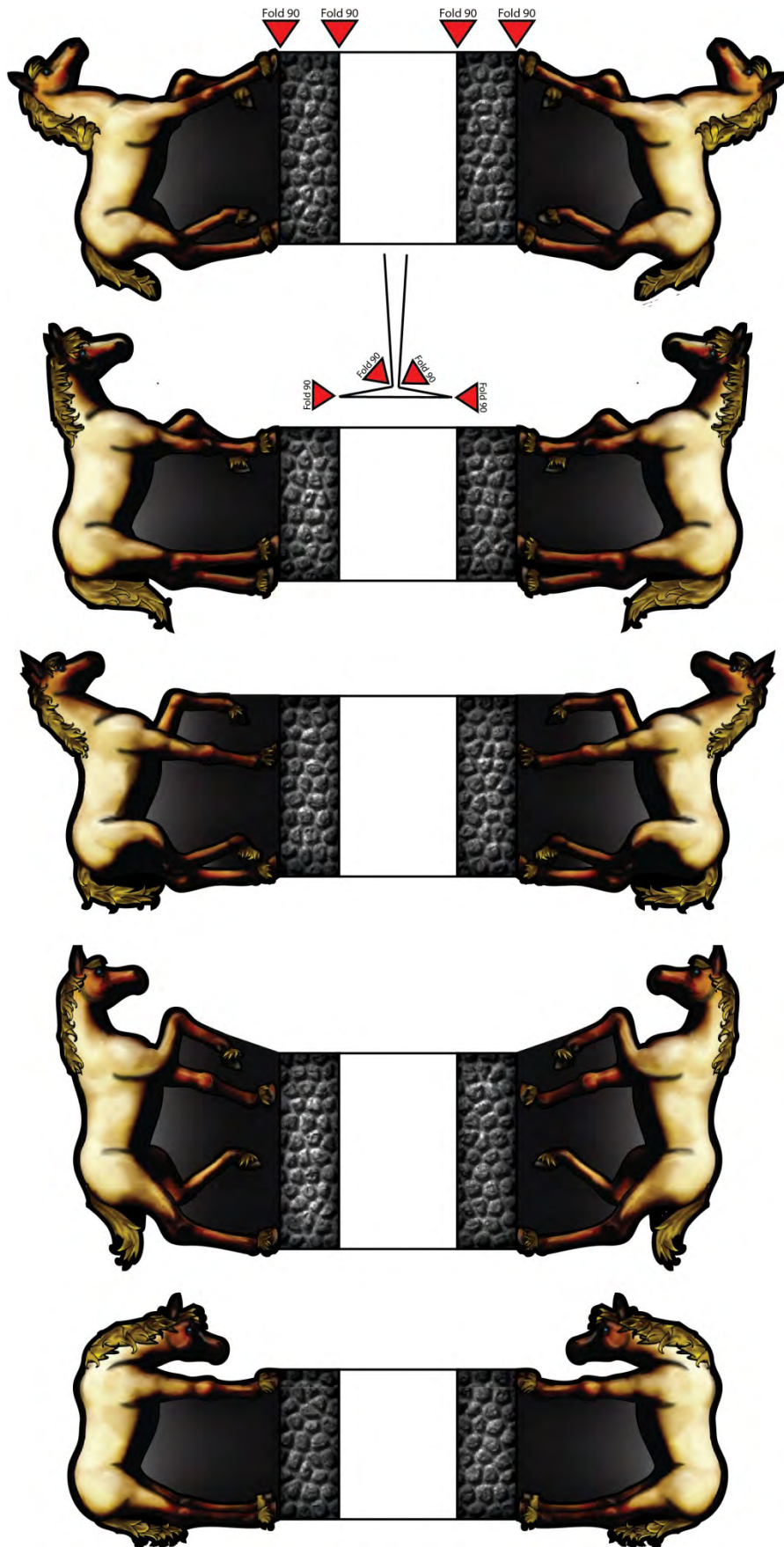


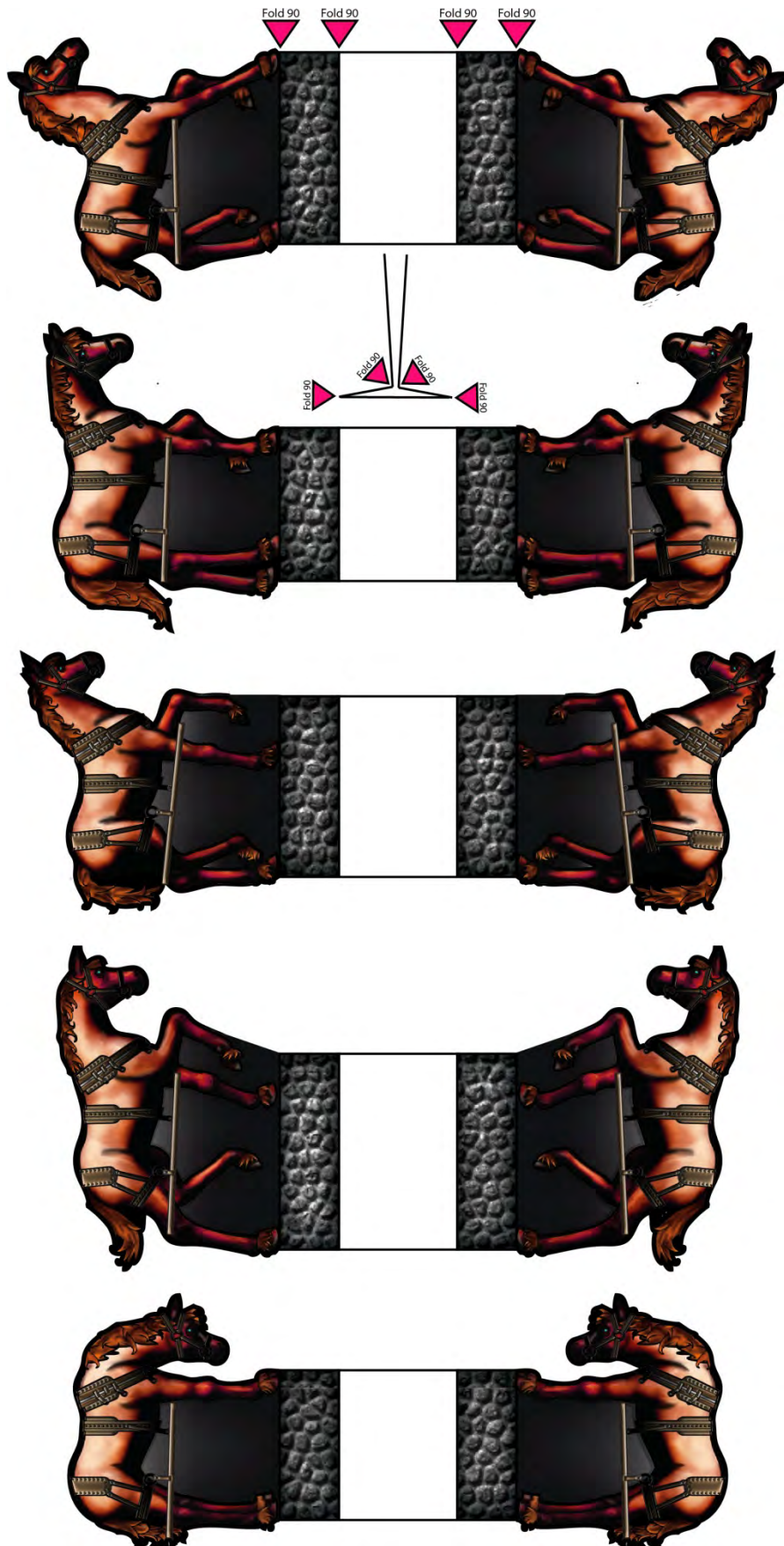


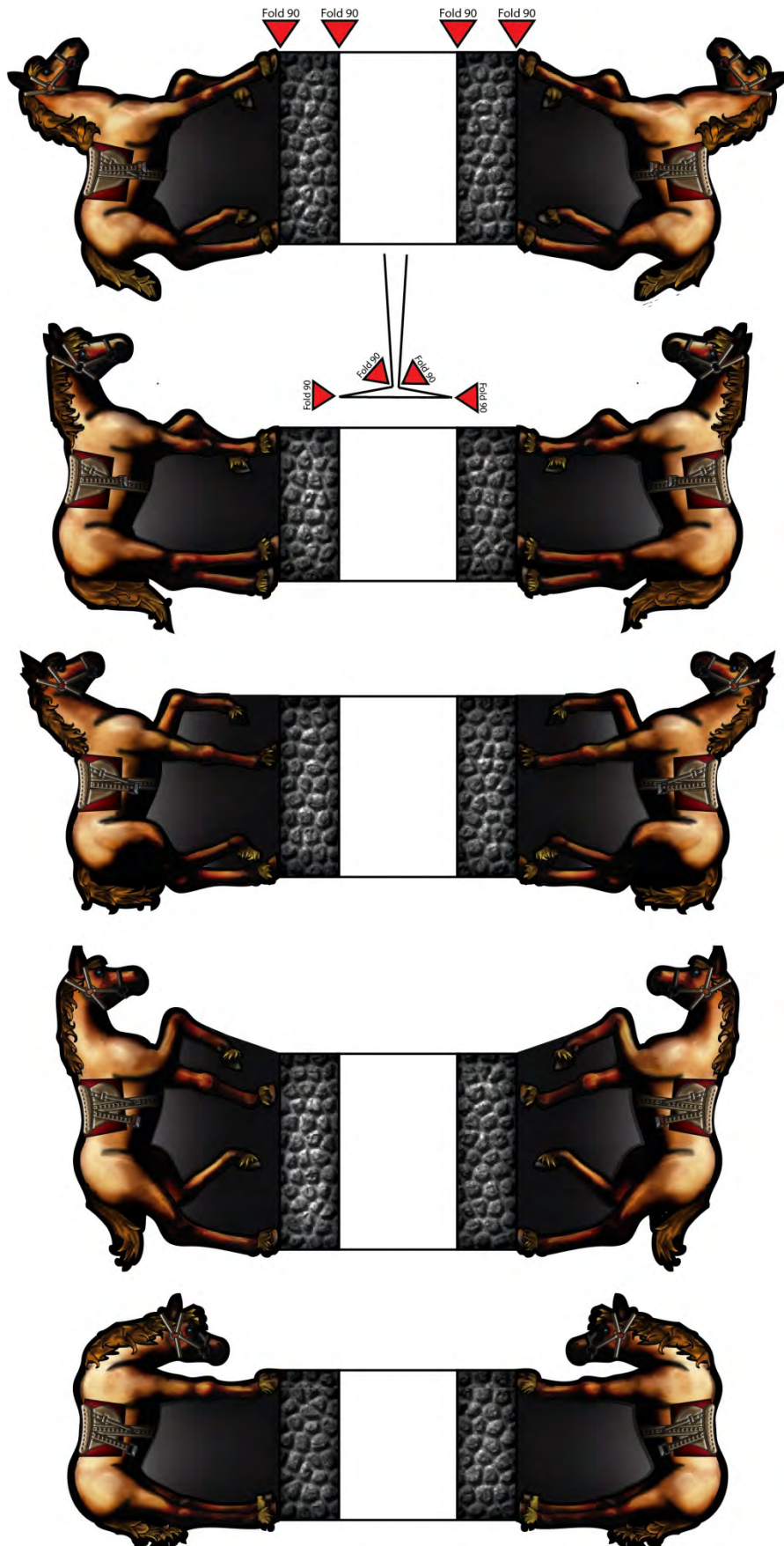


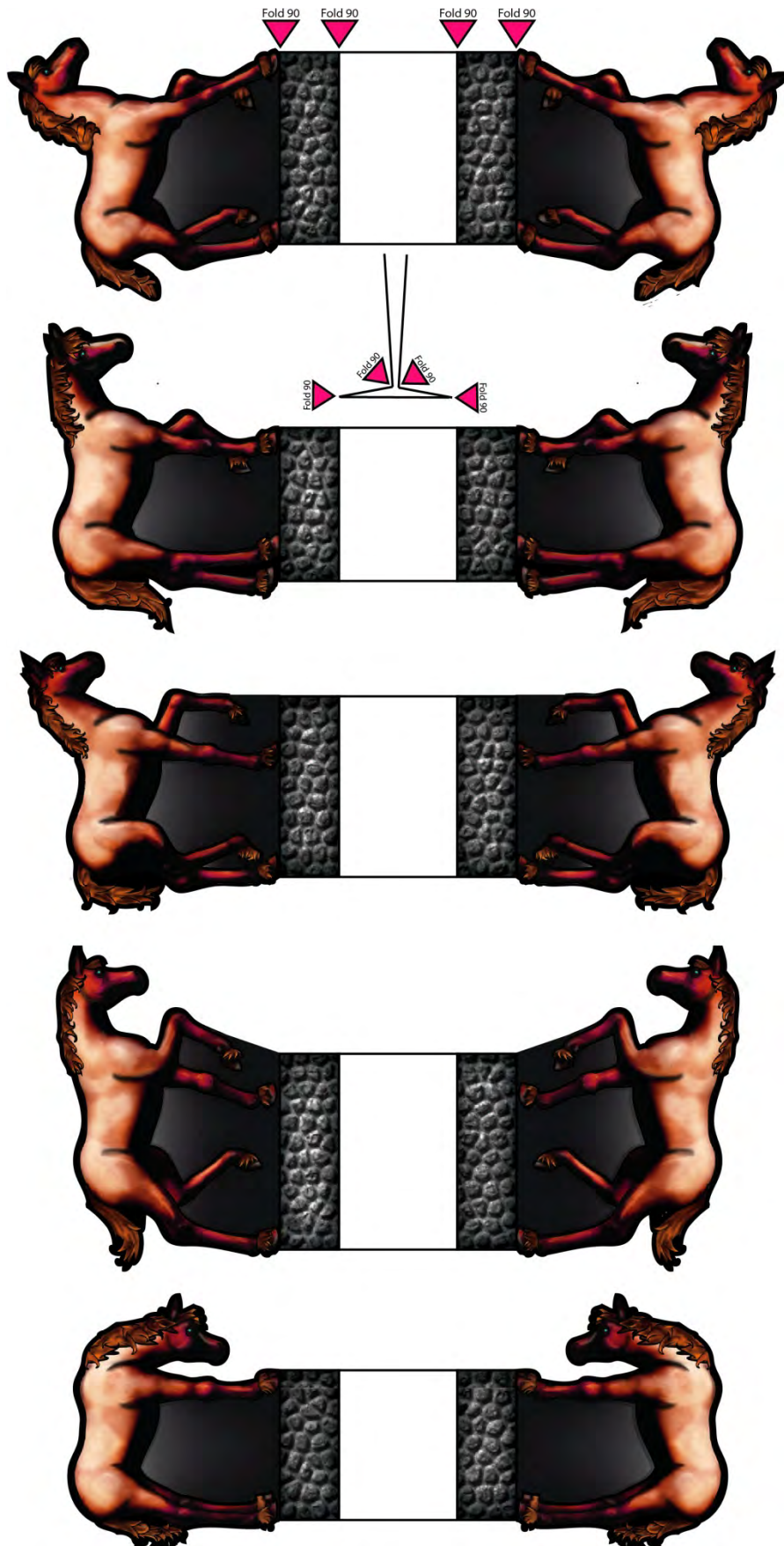


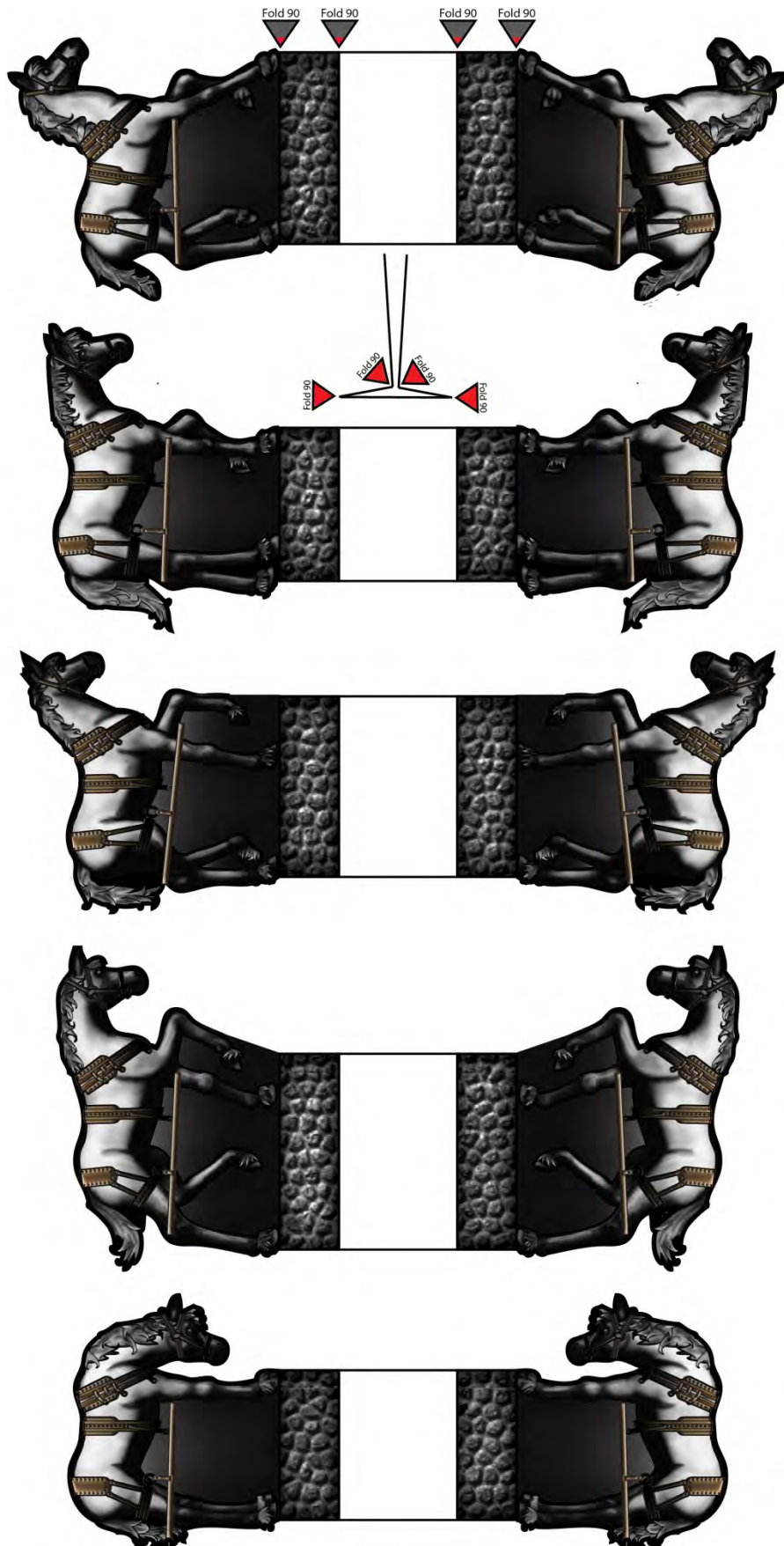


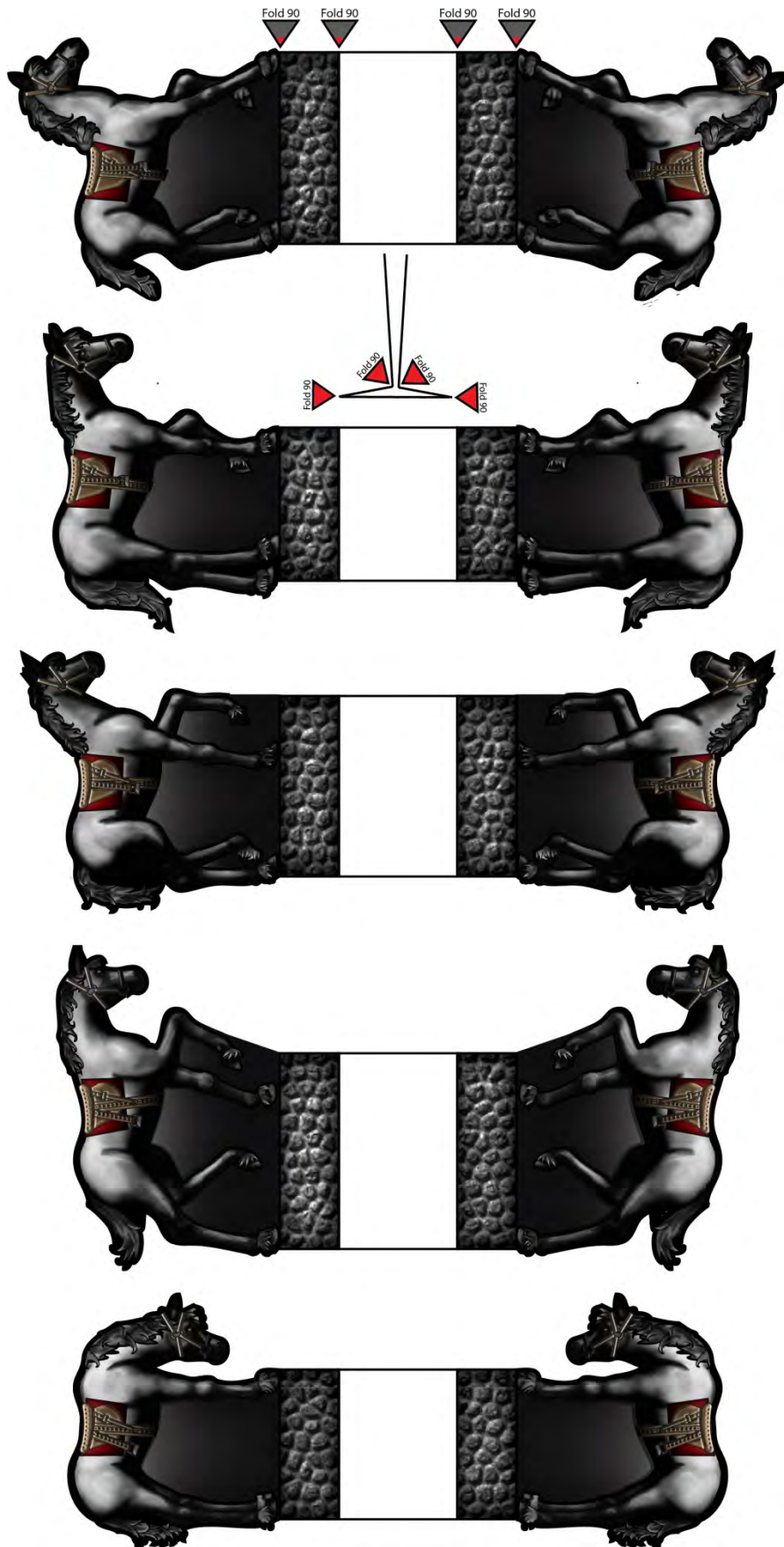


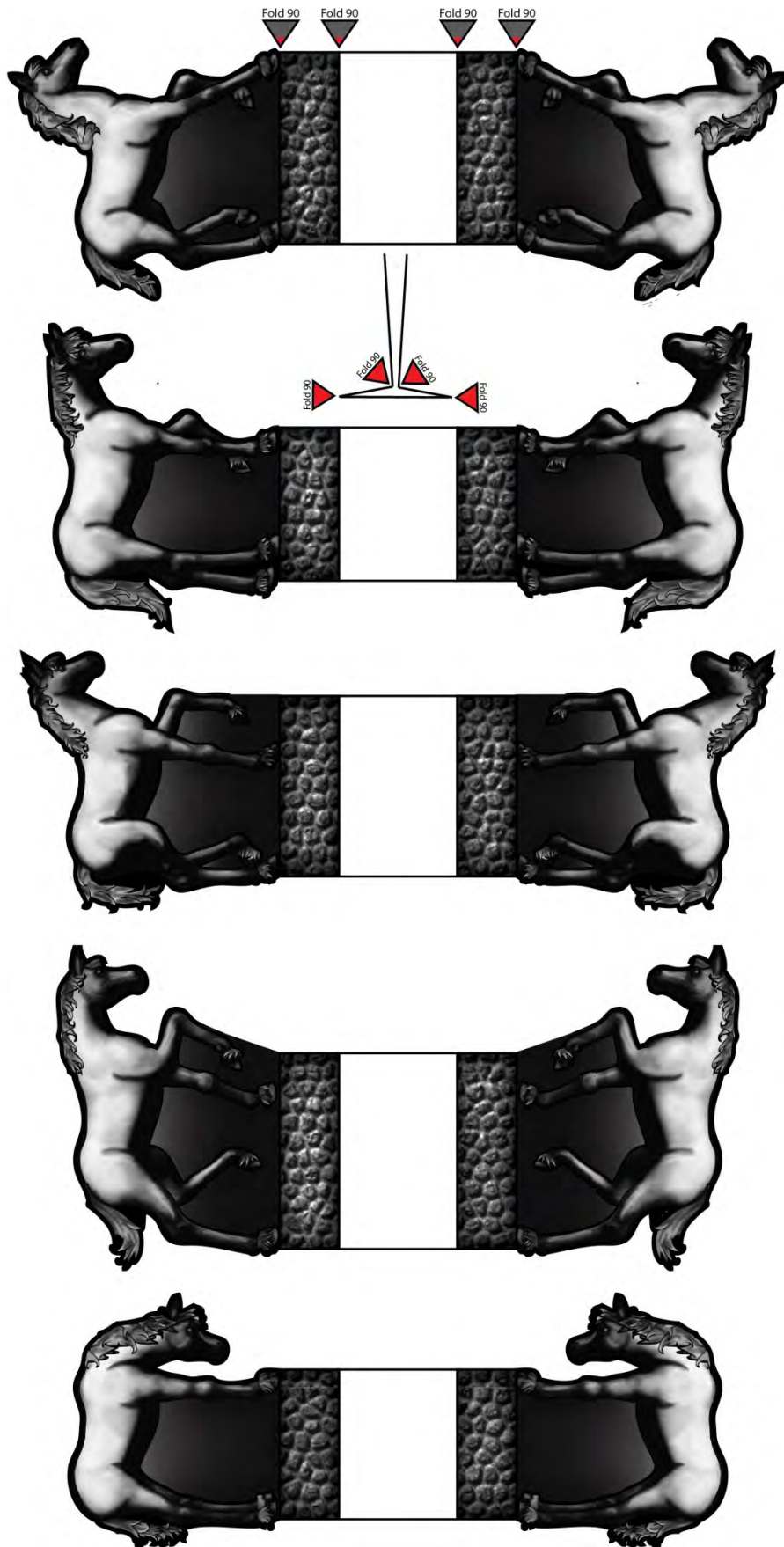




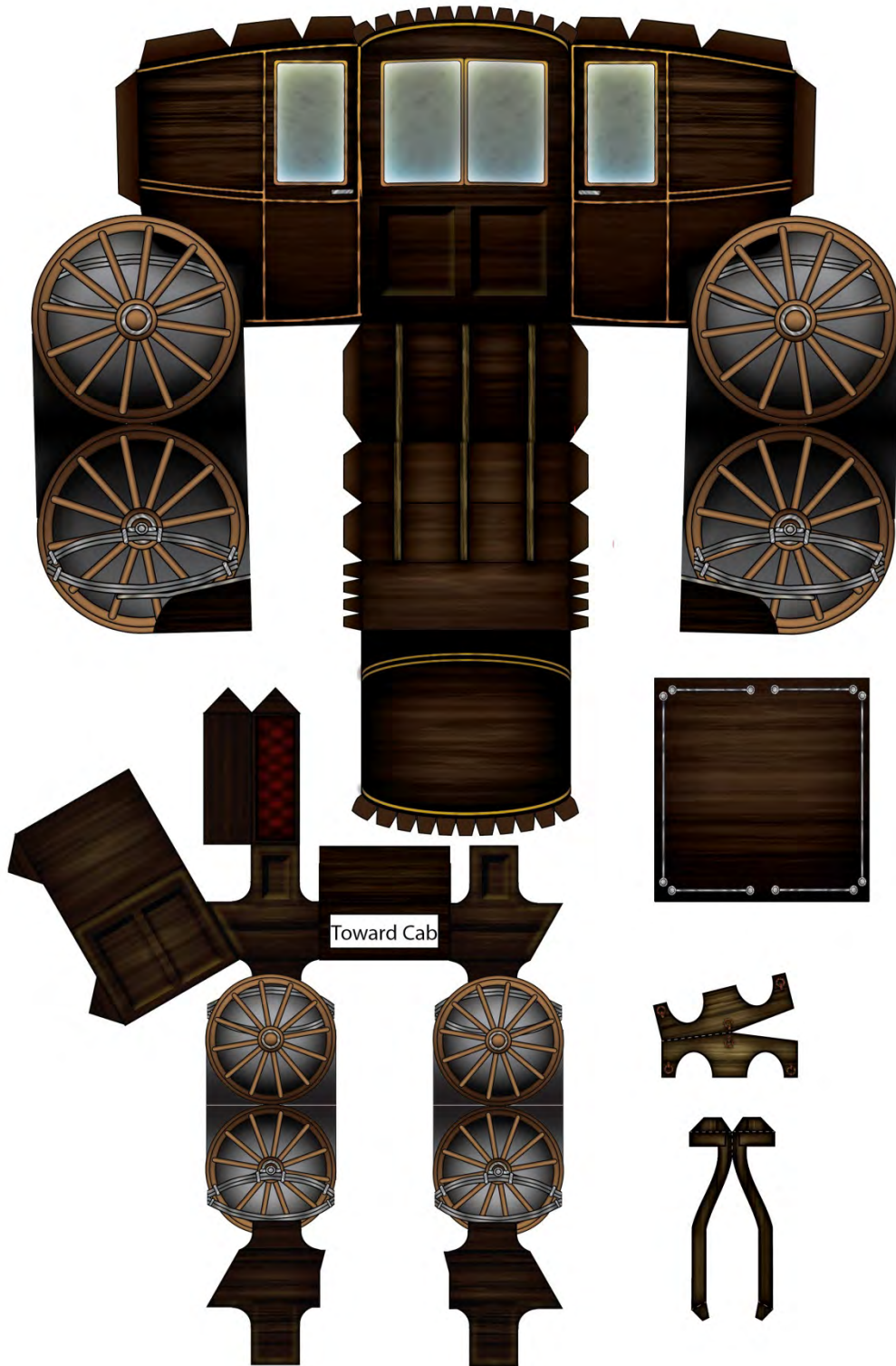




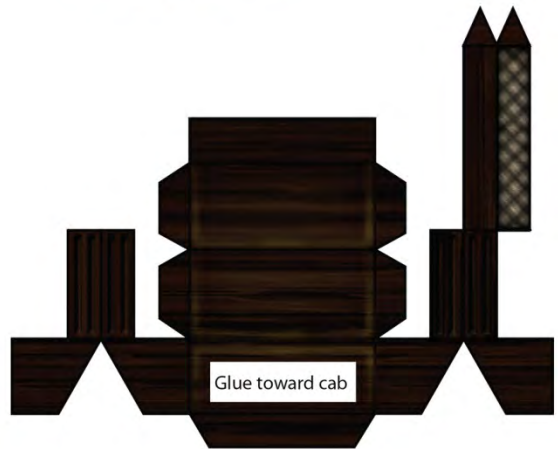
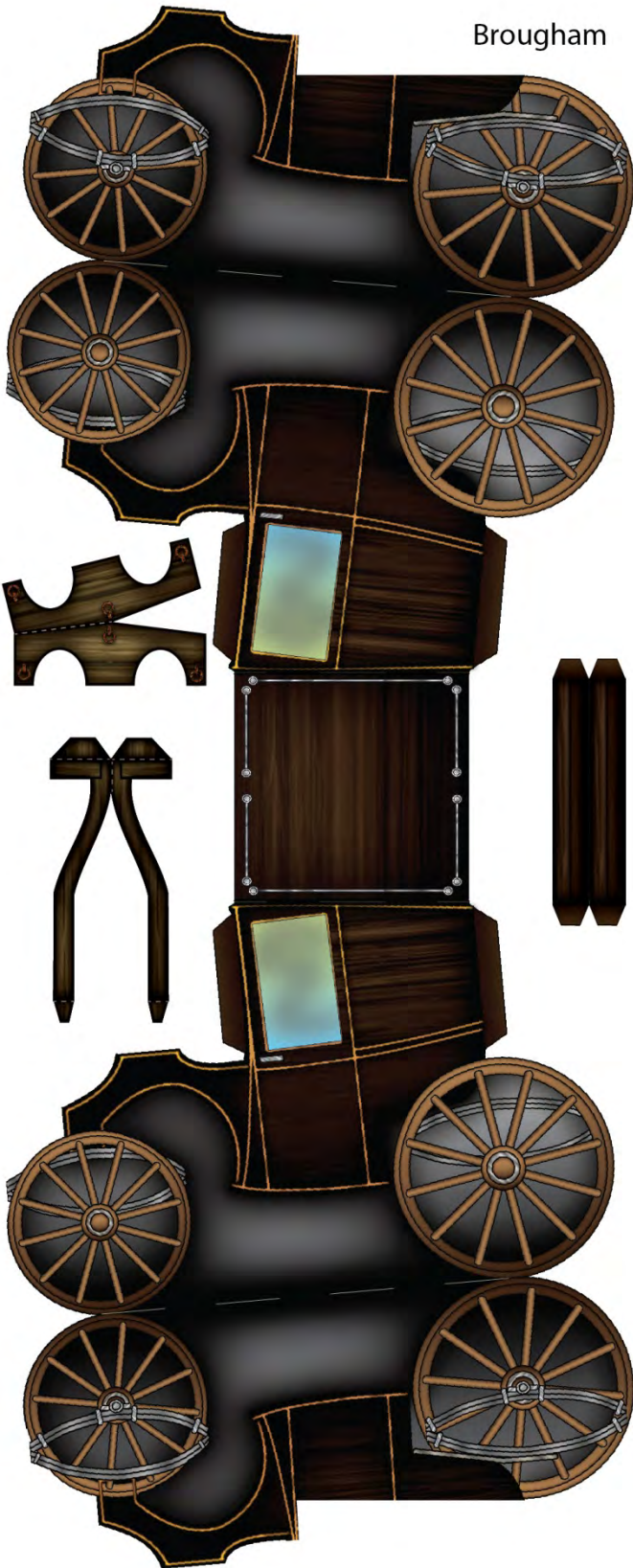




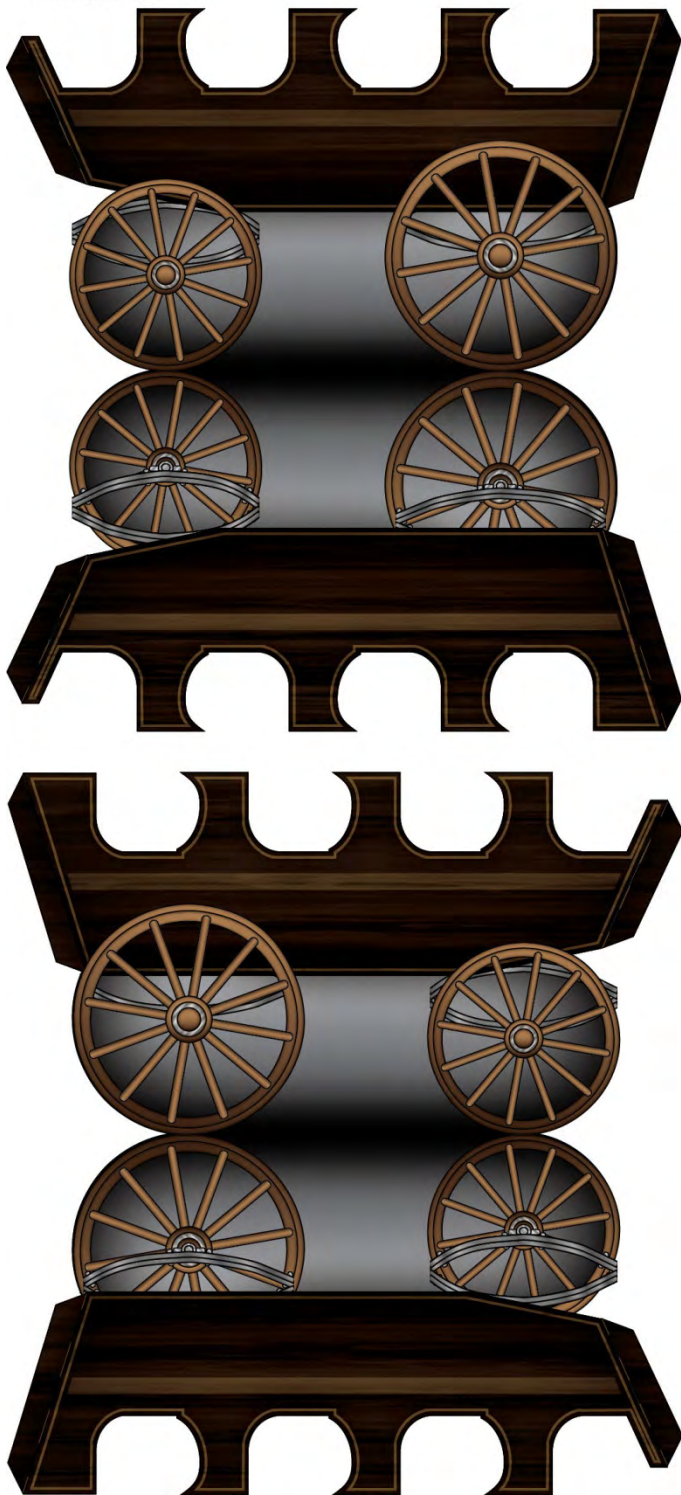




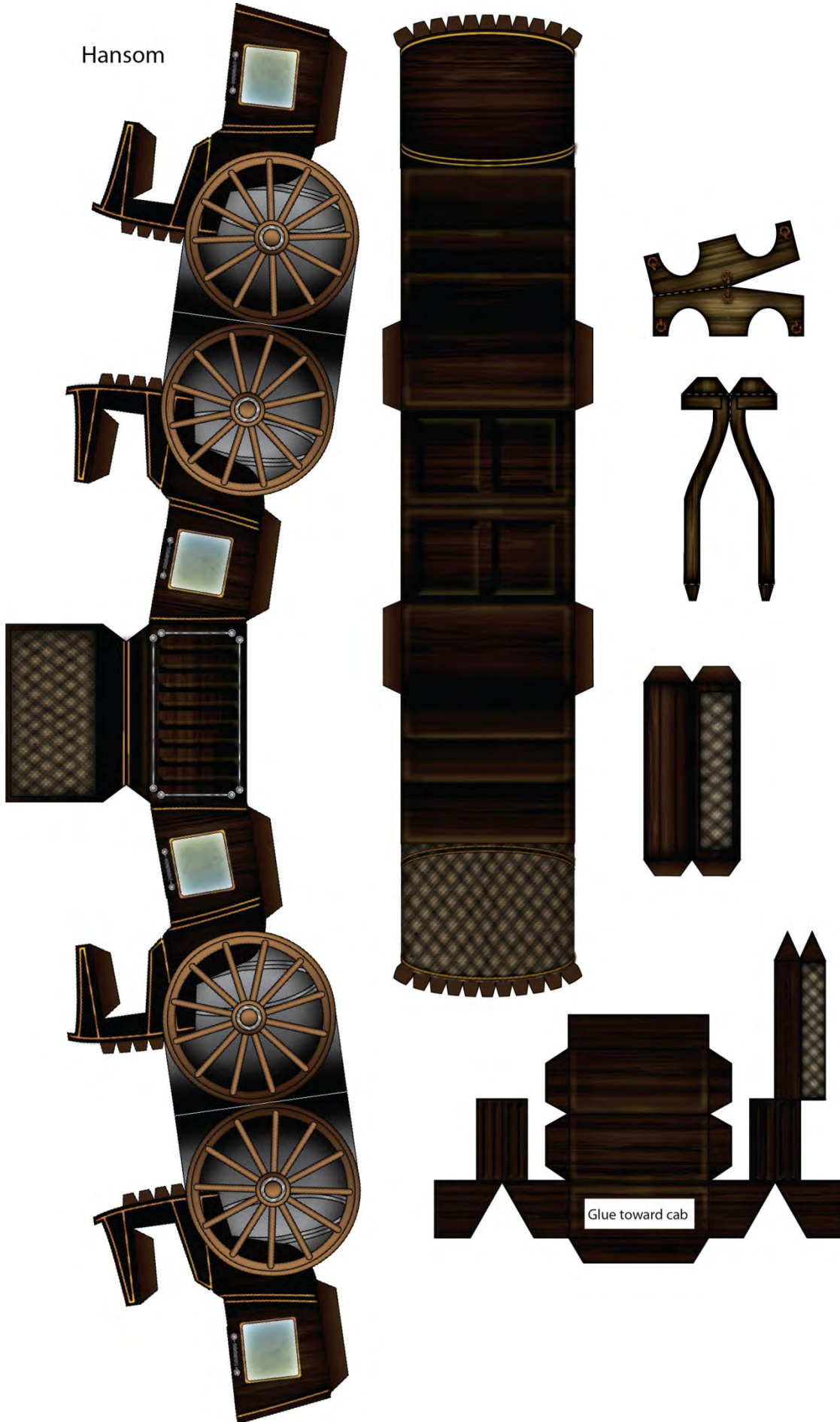
Brougham

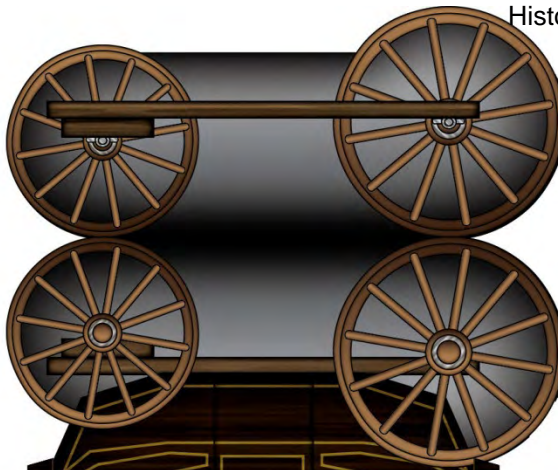


Charabanc

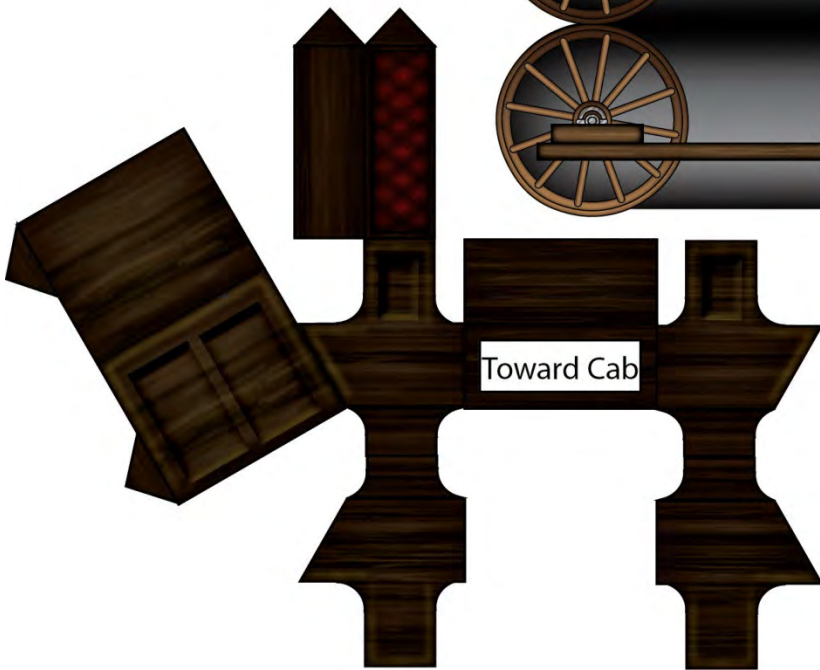


Hansom

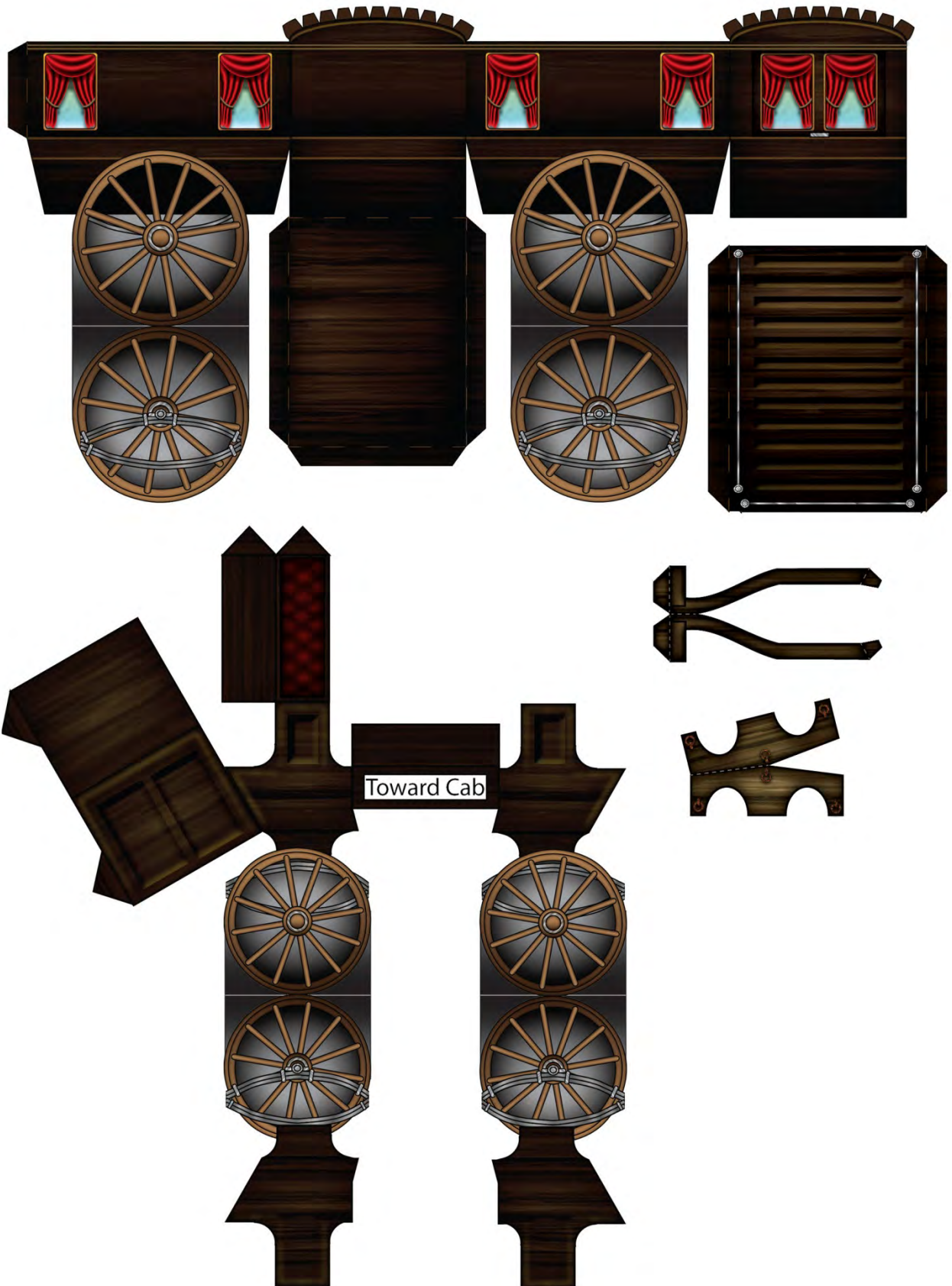




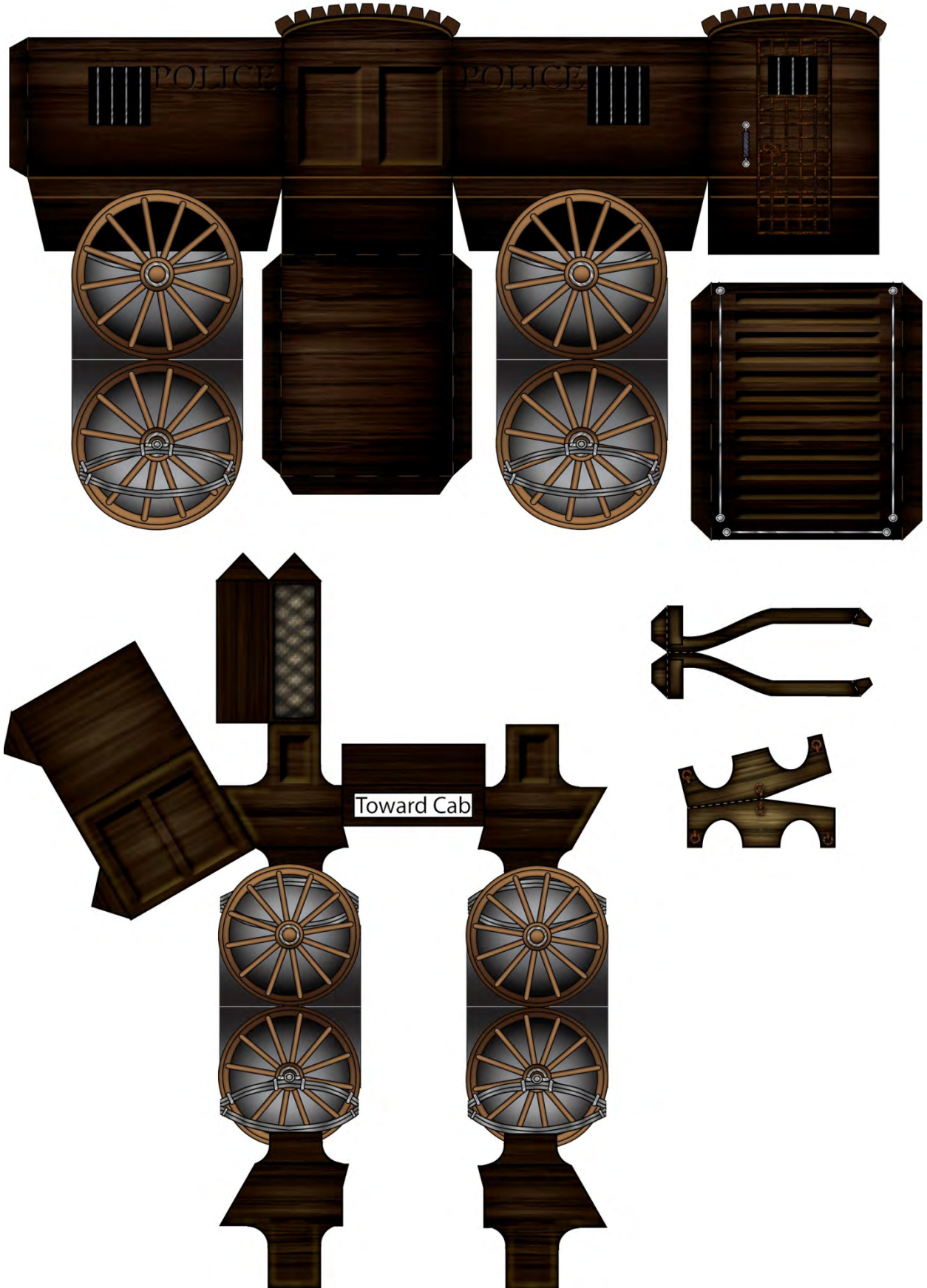
Front



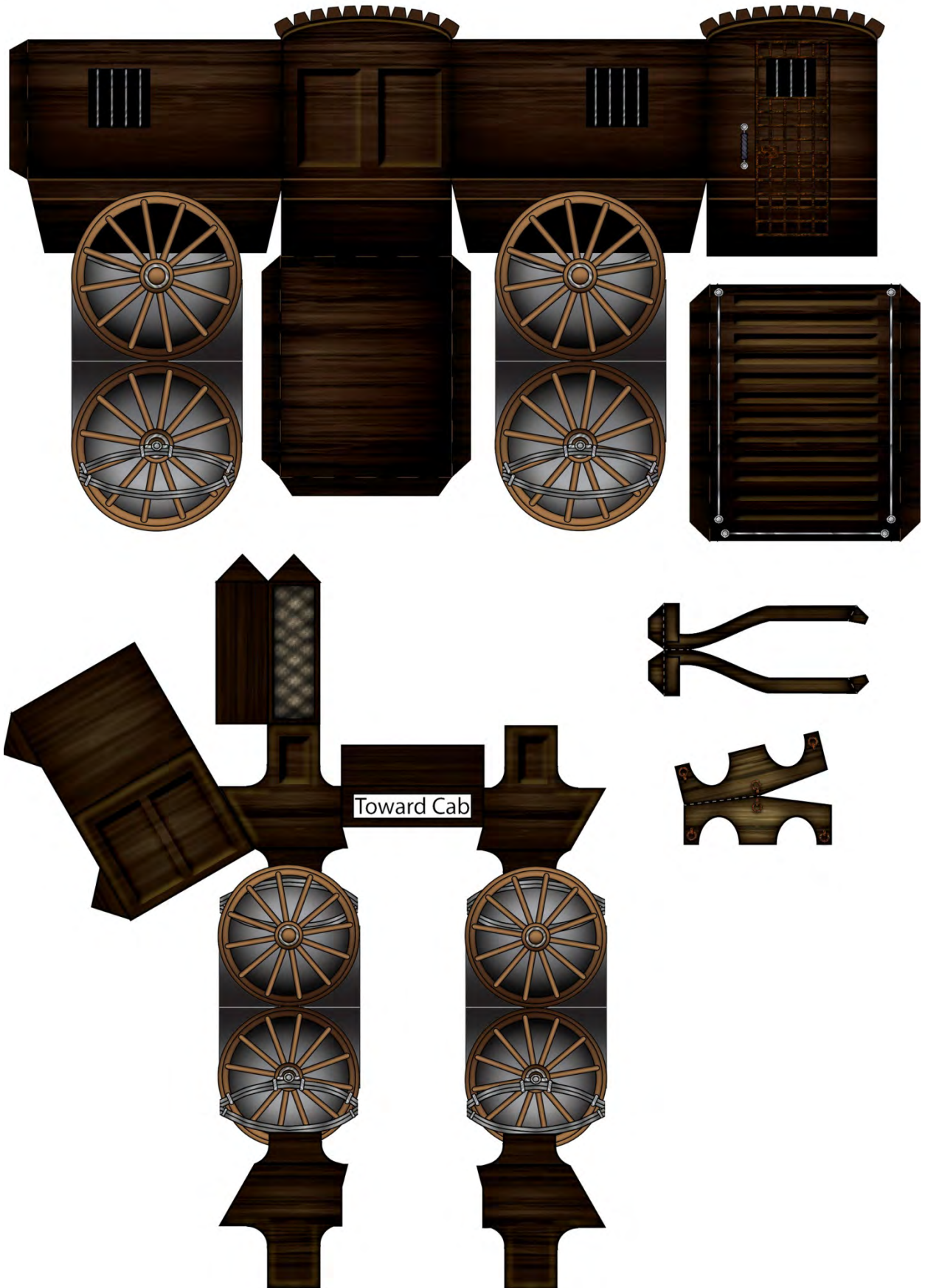
Funeral wagon, enclosed build



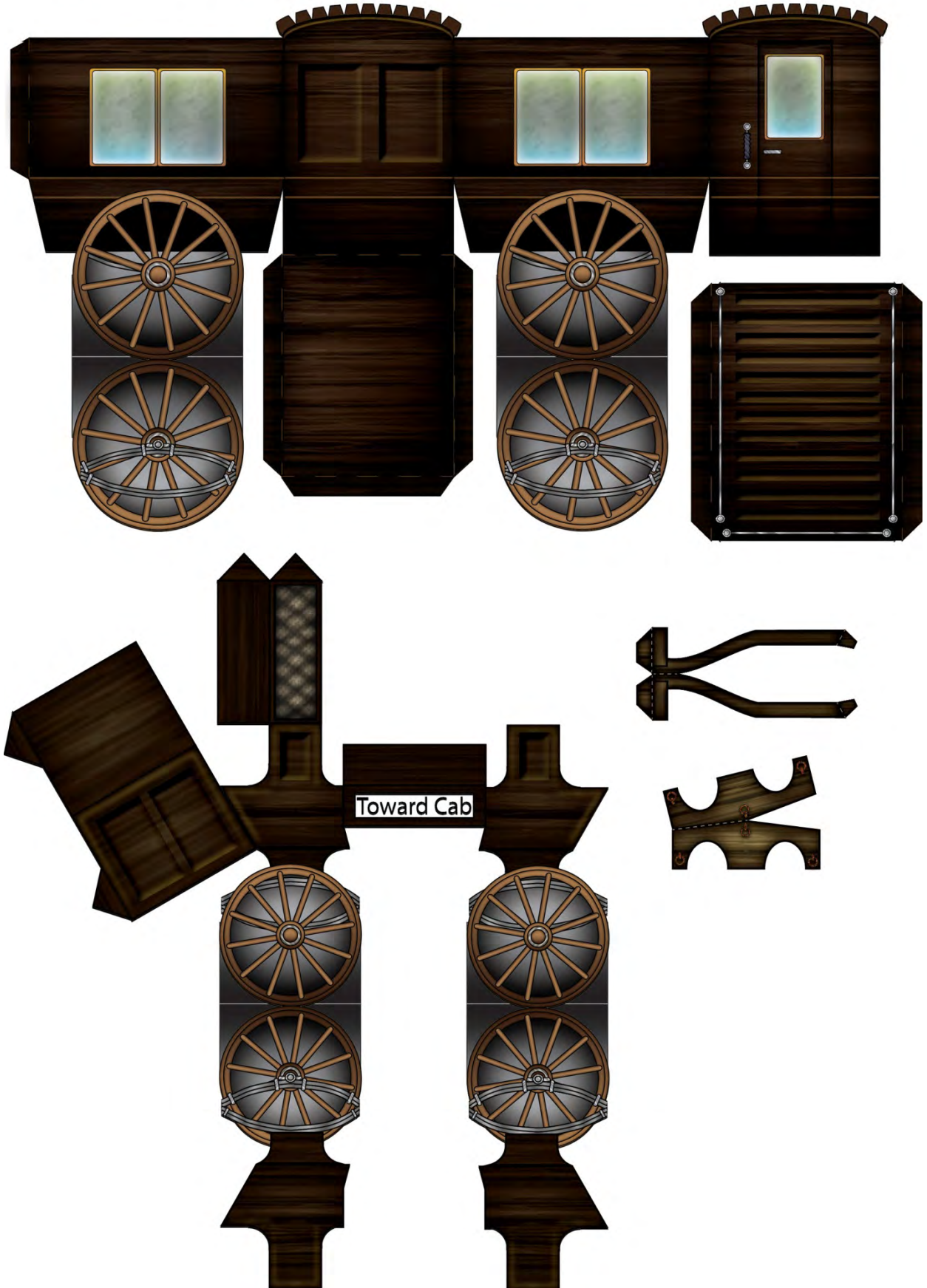
Police wagon, enclosed build



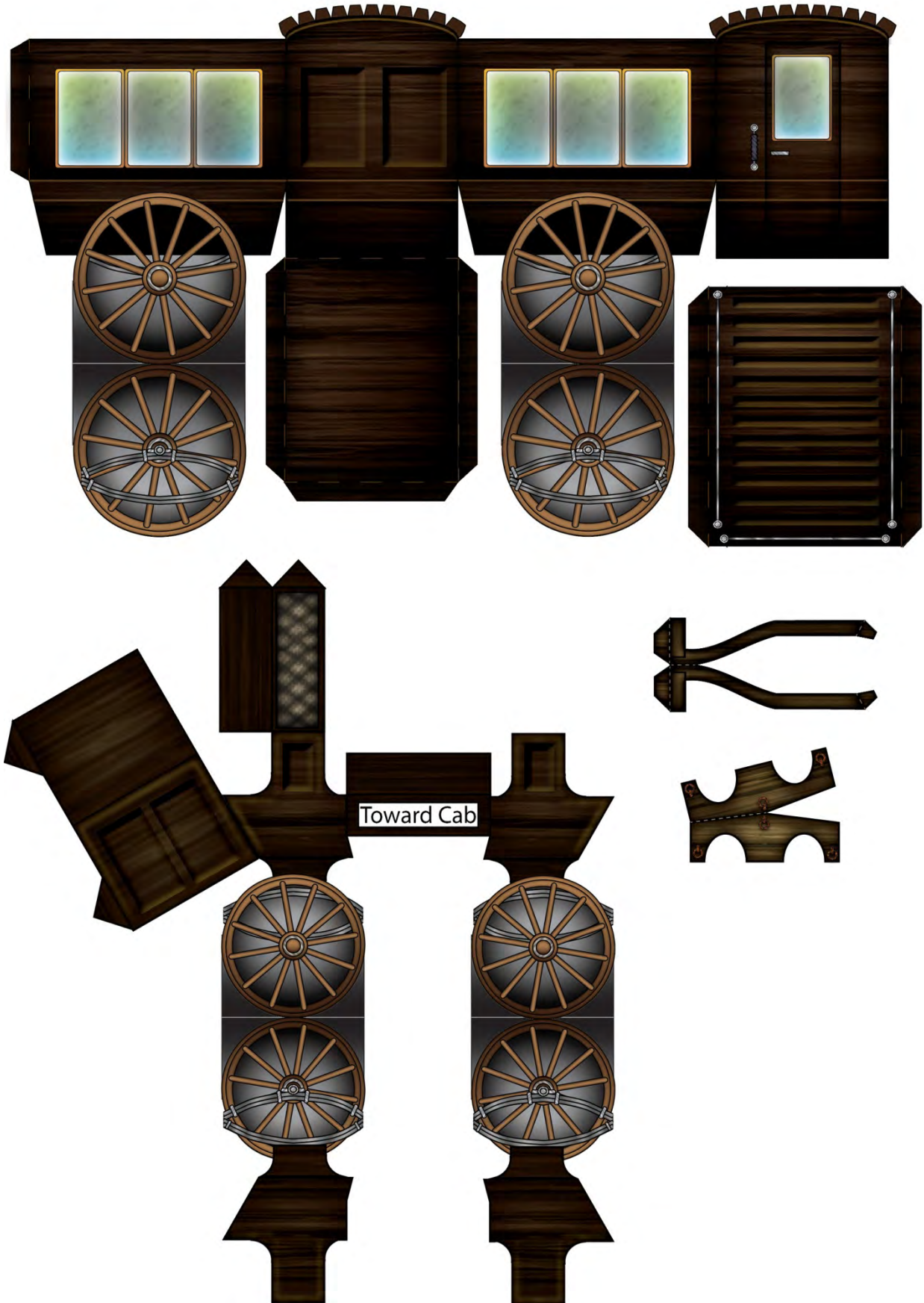
Police wagon, enclosed build



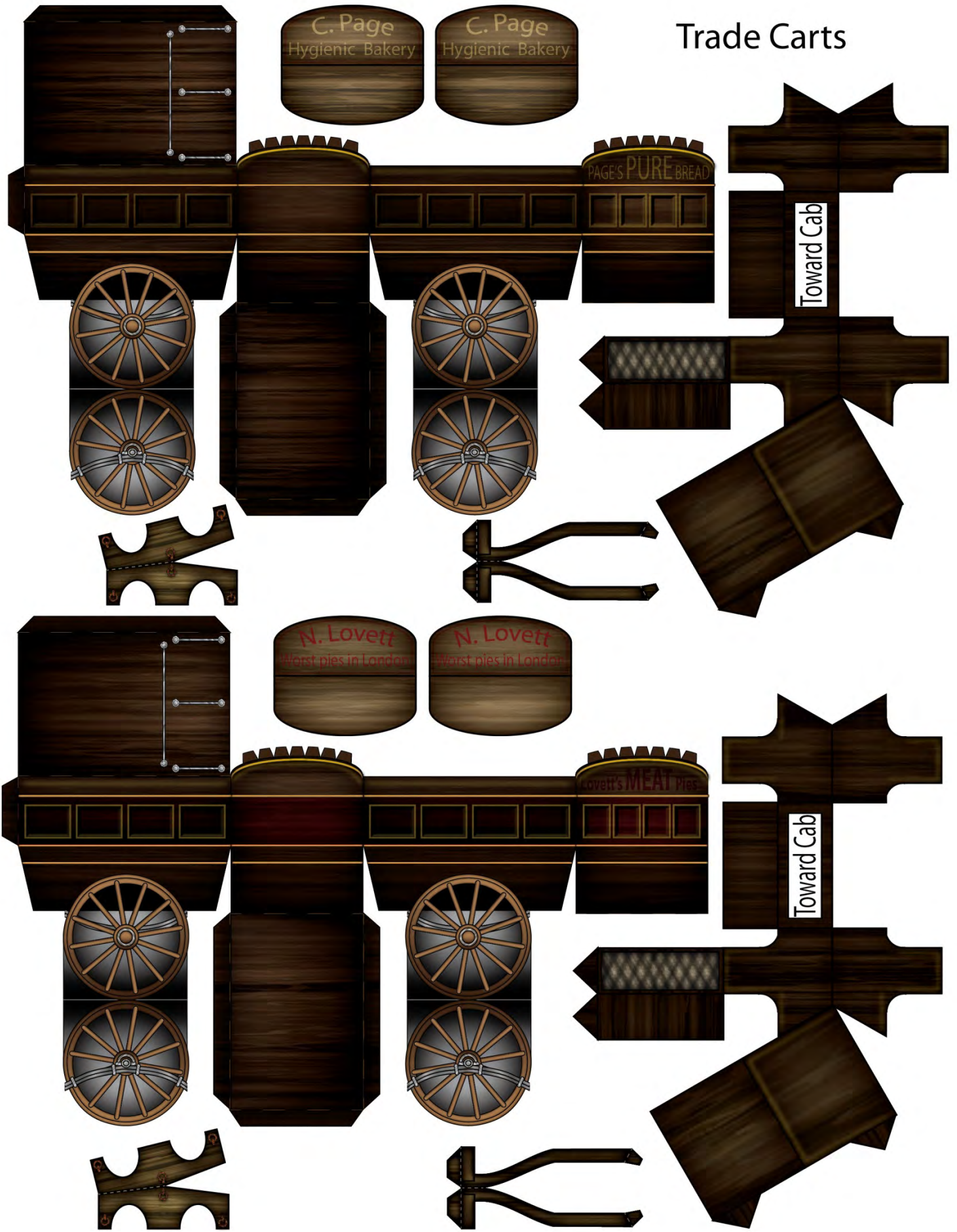
Private Omnibus, enclosed build



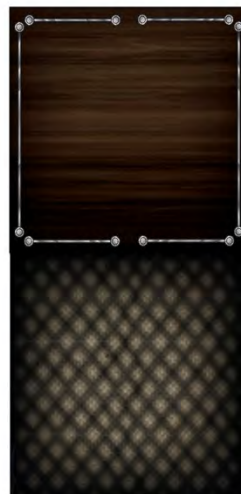
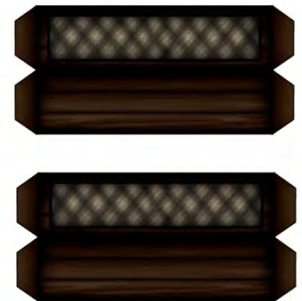
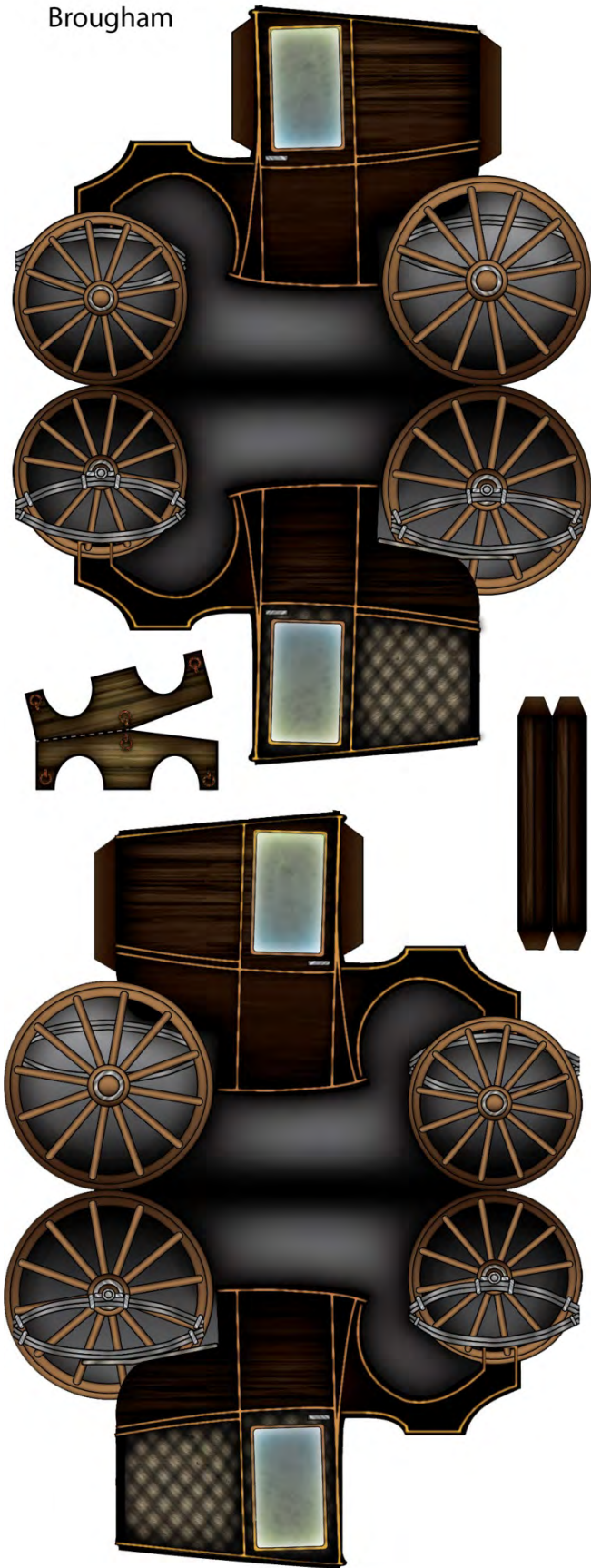
Private Omnibus, enclosed build



Trade Carts



Brougham



Brougham

