

You Can Build It

Book 2

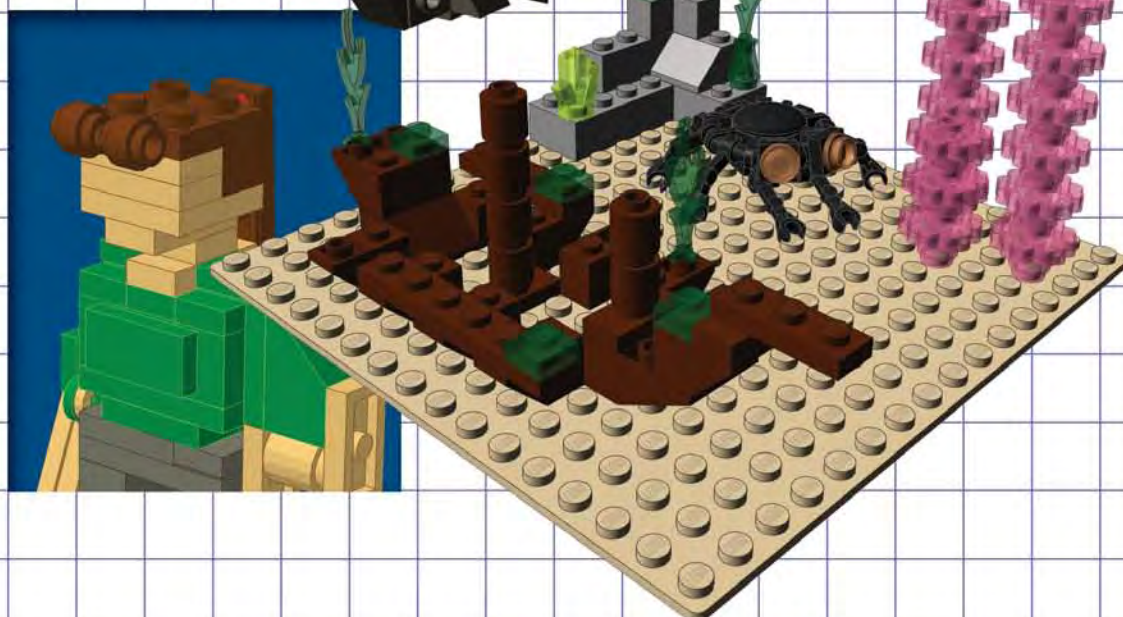
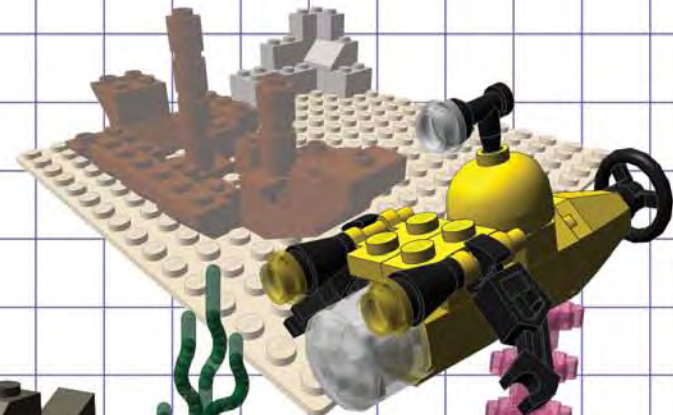
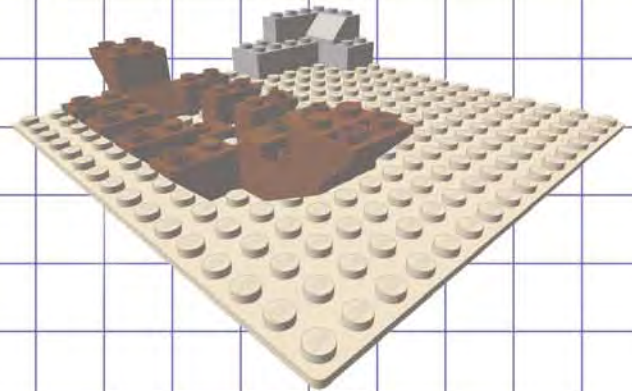
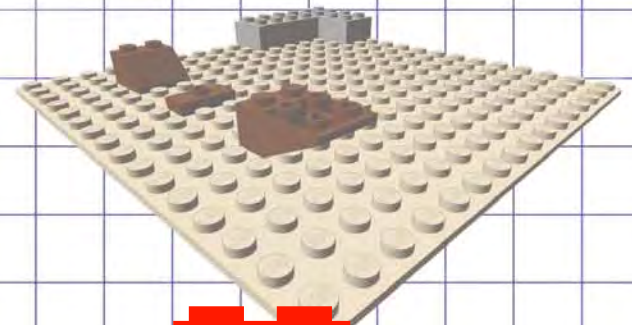
With instructions for building these custom LEGO® creations:

- *USS Constellation*
- Miniland Figures
- Deep Sea Scene
- Mini Yellow Castle

And MANY MORE!

From the
Producers of

Brick Journal
people • building • community

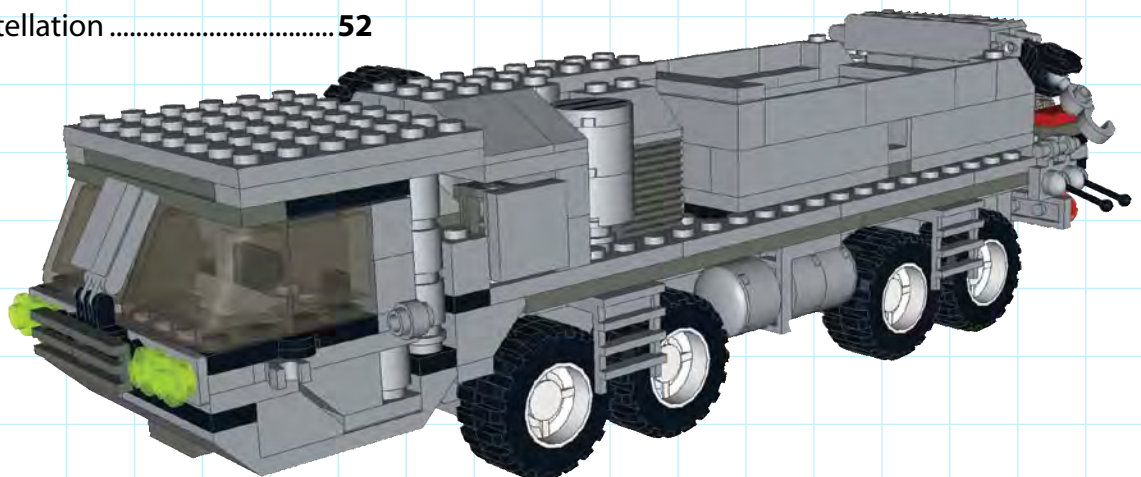
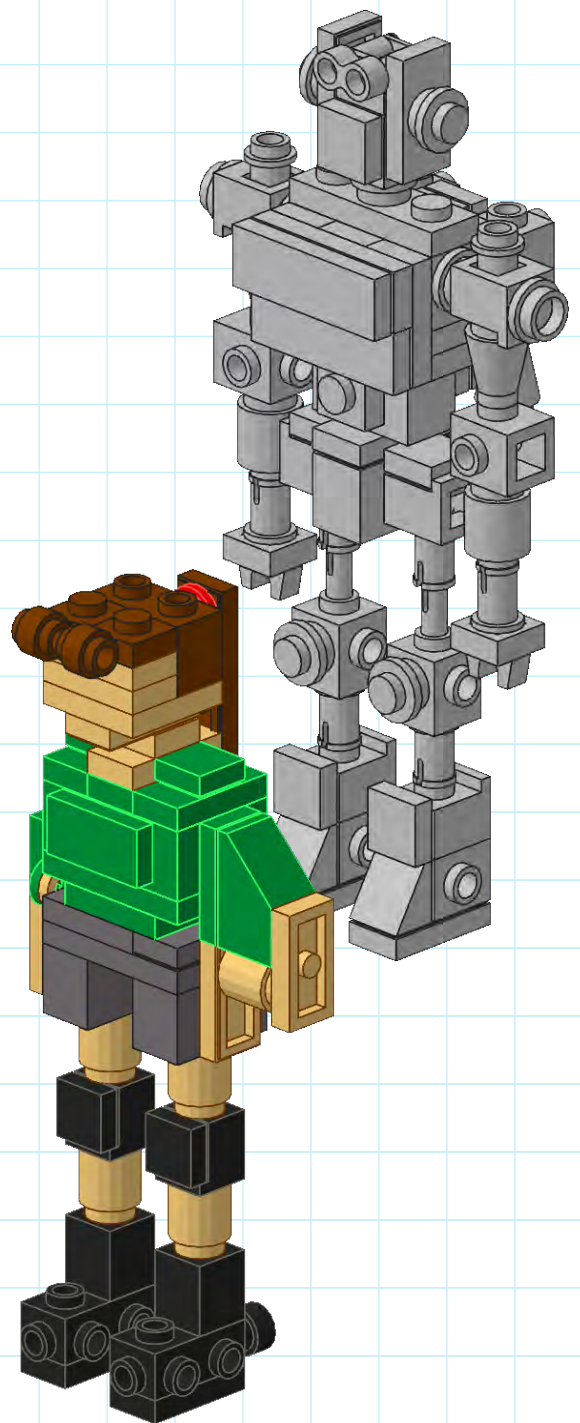


You Can Build It

Book 2

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Sculpture

Skater Girl

Design by Didier Enjary

This model first appeared in Issue 7 of BrickJournal.

This model is Miniland scale, which is a larger scale than minifigure scale. This allows for more detail to be built and incorporated into figures and environments. You'll see this scale at the LEGOLAND park displays.

This model is taken from a Miniland figure and shows some techniques to create arms and hair. You can experiment to create different poses and hair, so give it a try!

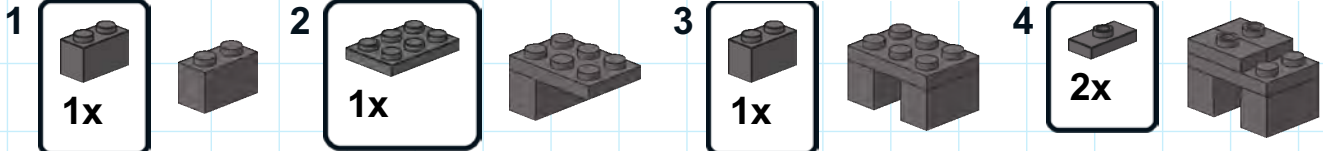


The original model, seen in LEGOLAND.

Parts List

You can find parts on Bricklink.com by searching with the part number.

Qty	Part	Description	Color
1	2429.dat	Hinge Plate 1 x 4 Base	Tan
1	2430.dat	Hinge Plate 1 x 4 Top	Green
1	2431.dat	Tile 1 x 4 with Groove	Brown
2	3004.dat	Brick 1 x 2	Dark Bluish Gray
1	3021.dat	Plate 2 x 3	Green
1	3021.dat	Plate 2 x 3	Dark Bluish Gray
1	3022.dat	Plate 2 x 2	Tan
2	3023.dat	Plate 1 x 2	Black
3	3023.dat	Plate 1 x 2	Tan
1	3023.dat	Plate 1 x 2	Green
1	3024.dat	Plate 1 x 1	Tan
5	3062b.dat	Brick 1 x 1 Round with Hollow Stud	Tan
1	3069b.dat	Tile 1 x 2 with Groove	Green
2	3069b.dat	Tile 1 x 2 with Groove	Tan
1	3069b.dat	Tile 1 x 2 with Groove	Dark Bluish Gray
1	3665.dat	Slope Brick 45 2 x 1 Inverted	Green
1	3700.dat	Technic Brick 1 x 2 with Hole	Brown
2	3700.dat	Technic Brick 1 x 2 with Hole	Green
4	3794a.dat	Plate 1 x 2 without Groove with 1 Centre Stud	Green
1	3794a.dat	Plate 1 x 2 without Groove with 1 Centre Stud	Tan
2	3794a.dat	Plate 1 x 2 without Groove with 1 Centre Stud	Dark Bluish Gray
1	3794b.dat	Plate 1 x 2 with Groove with 1 Centre Stud	Tan
1	3794b.dat	Plate 1 x 2 with Groove with 1 Centre Stud	Green
2	4070.dat	Brick 1 x 1 with Headlight	Black
2	4081b.dat	Plate 1 x 1 with Clip Light Type 2	Brown
1	4274.dat	Technic Pin 1/2	Light Bluish Gray
2	4274.dat	Technic Pin 1/2	Light Blue
2	4595.dat	Brick 1 x 2 x 0.667 with Studs on Sides	Black
1	6141.dat	Plate 1 x 1 Round	Red
2	6541.dat	Technic Brick 1 x 1 with Hole	Green
2	30039.dat	Tile 1 x 1 with Groove	Black
3	30039.dat	Tile 1 x 1 with Groove	Green
2	30071.dat	Brick 1 x 1	Black



Animation Puppet

Model by David Pagano

This model first appeared in Issue 14 of BrickJournal, which spotlighted brickfilming.

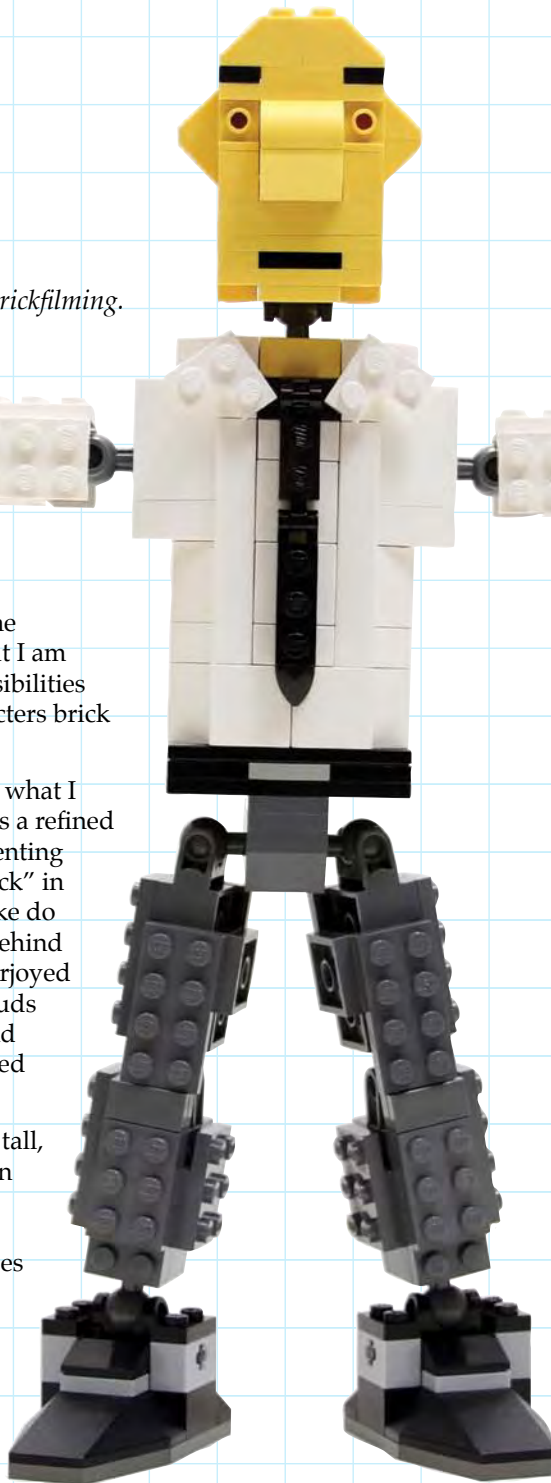
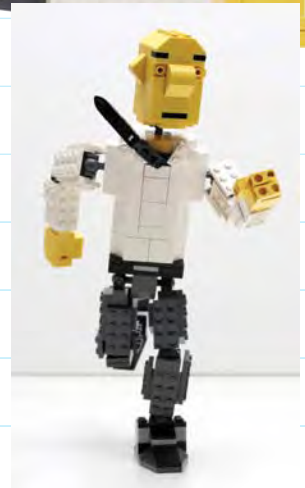
People tend to use minifigures as the main actors in their LEGO films, but I am continuously fascinated by the possibilities inherent in building my own characters brick by brick.

To that end, this charming fellow is what I call a LEGO animation puppet. He's a refined version of the rig I started experimenting with when I made my film "Playback" in 2008. Back then, I was trying to make do with hiding a lot of Bionicle parts behind regular bricks and plates. I was overjoyed when ball-and-socket joints with studs started popping up in Exo-Force and Power Miners sets. Now we just need them in an assortment of colors...

Anyway, this puppet is about 11.5" tall, and he's got 20 points of articulation (23 if you count his tie). His mouth is built to be removable, and can be replaced with different mouth shapes if you feel ambitious enough for lip-syncing (see the inset photo). He can also be made to blink by placing a couple of 1 x 1 yellow tiles over his eyes for a frame or two.

I purposefully designed this particular character with a bald head and plain clothes; that way, you can customize him to your heart's content. Does he need glasses? A giant sword? A pompadour? I'll leave that up to you. Have fun!

Sculpture



Head and Neck

1 3x

2 1x 2x

3 1x 2x

4 2x 1x

5 2x 1x

6 2x 1x

7 1x 1x

8 2x 2x 2x

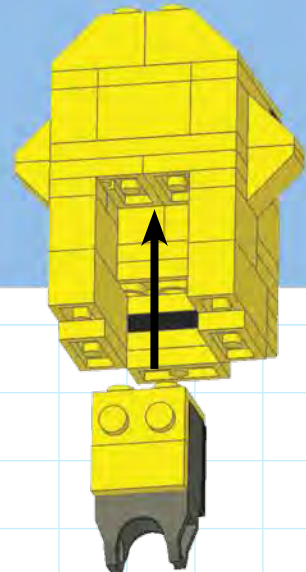
9 2x 1x 1x

10 2x 2x 1x

11 1x

12 2x 2x 1x

13 2x



1 1x

2 1x

3 1x 1x

Sculpture



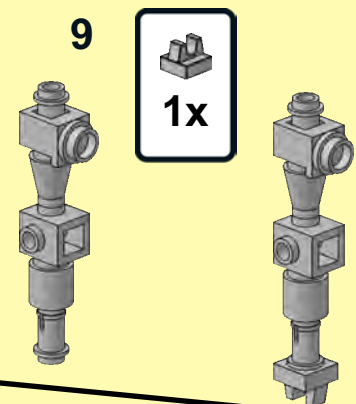
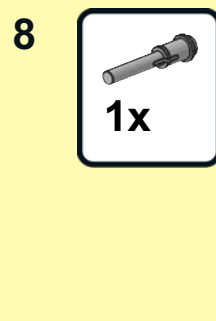
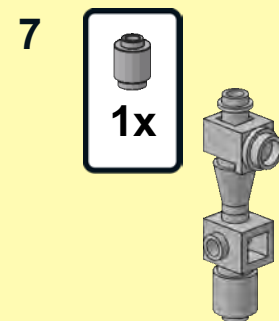
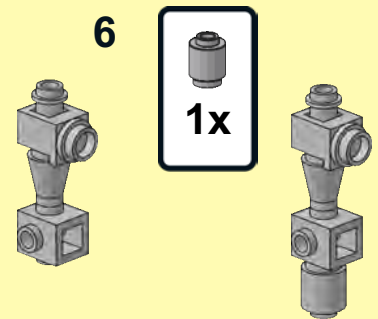
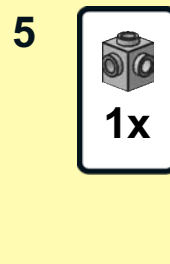
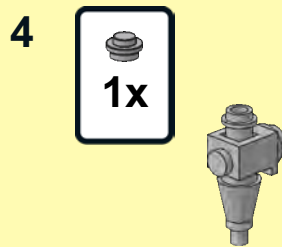
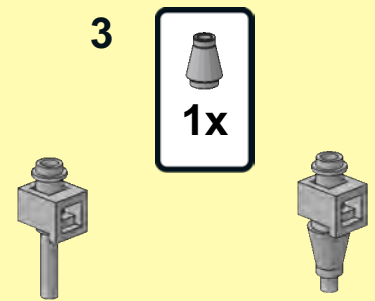
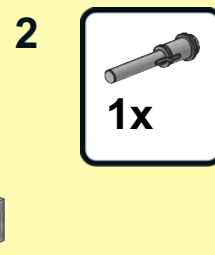
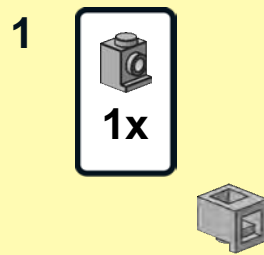
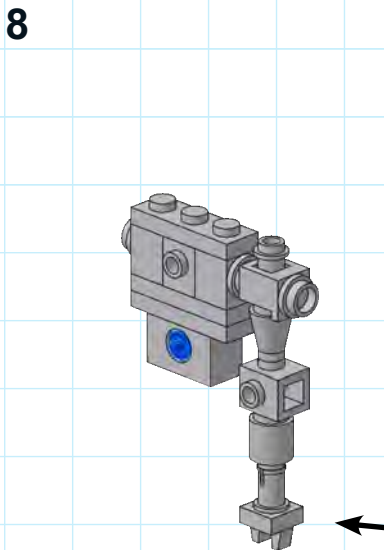
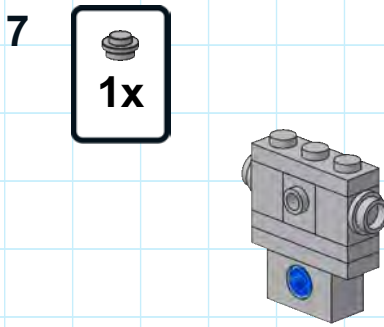
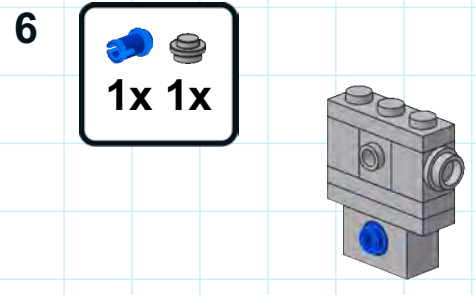
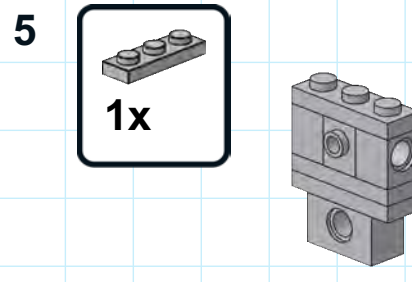
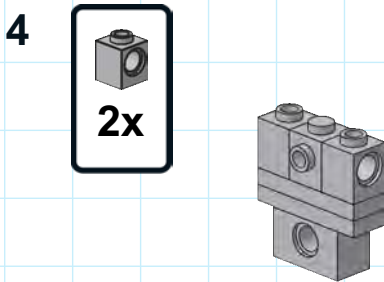
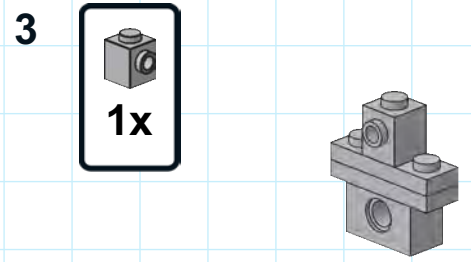
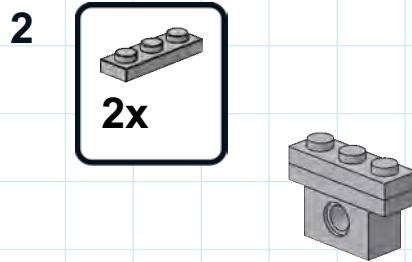
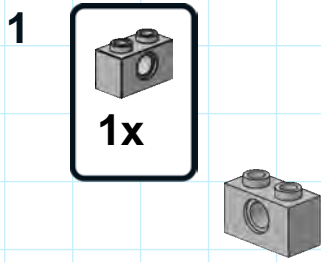
Robot

A challenge was posed to me by a friend of mine to build a robot. I was in the midst of building frantically for a display, and I built a small work shuttle that had arms to hold items. The arms were made from a newer long pin attached to a tile with a clip on it (Take a look at the arms of the bot to the left to see what I am describing). In a fit of inspiration, that arm became the basis for the limbs of the robot. To make him cute, I built a head with eyes and ears - at this scale, a mouth would be tough to do.

The end result is articulated at the shoulders and hips, and the arms and legs can be positioned to 'bend.' You can make him as is, or change his color. See what you can add to him to make him your robot!

Parts List

Qty	Part	Description	Color
2	2555.dat	Tile 1 x 1 with Clip	Light Bluish Gray
1	3021.dat	Plate 2 x 3	Light Bluish Gray
2	3023.dat	Plate 1 x 2	Light Bluish Gray
1	3024.dat	Plate 1 x 1	Light Bluish Gray
6	3062b.dat	Brick 1 x 1 Round with Hollow Stud	Light Bluish Gray
2	3069b.dat	Tile 1 x 2 with Groove	Light Bluish Gray
6	3623.dat	Plate 1 x 3	Light Bluish Gray
2	3700.dat	Technic Brick 1 x 2 with Hole	Light Bluish Gray
3	3794b.dat	Plate 1 x 2 with Groove with 1 Centre Stud	Light Bluish Gray
8	4070.dat	Brick 1 x 1 with Headlight	Light Bluish Gray
1	4274.dat	Technic Pin 1/2	Blue
7	4733.dat	Brick 1 x 1 with Studs on Four Sides	Light Bluish Gray
10	6141.dat	Plate 1 x 1 Round	Light Bluish Gray
4	6188.dat	Cone 1 x 1	Light Bluish Gray
2	6541.dat	Technic Brick 1 x 1 with Hole	Light Bluish Gray
5	30039.dat	Tile 1 x 1 with Groove	Light Bluish Gray
1	30162.dat	Minifig Tool Binoculars Town	Light Bluish Gray
1	47905.dat	Brick 1 x 1 with Studs on Two Opposite Sides	Light Bluish Gray
2	54200.dat	Slope Brick 31 1 x 1 x 2/3	Light Bluish Gray
8	61184.dat	Technic Pin 1/2 with Bar 2L	Light Bluish Gray
3	63864.dat	Tile 1 x 3 with Groove	Light Bluish Gray



Sculpture



This article and model first appeared in Issue 10 of BrickJournal.

Mike Huffman's first puzzle.

Photograph by Mike Huffman



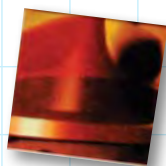
Puzzling LEGO® Models:

Building the World's Smallest LEGO Sliding Puzzle

*Article and Photography
by John Cooper*



*Above: Some of John Cooper's puzzles.
Right: Mike's puzzle module design.*



One of the best parts of being an Adult Fan Of LEGO (AFOL) is the wonderful collaboration and inspiration that occurs within the AFOL community. Here's a good example of how one builder's creative idea became the inspiration for another builder to push the concept to the next level.

Back in November 2006, Mike Huffman was inspired by the LEGO Mosaic sets (#6162 and #6163) and built a fun sliding puzzle. Mike shared his creation with a post on LUGNET (www.lugnet.com, post is <http://news.lugnet.com/announce/moc/?n=3647>), along with some linked photos online. The genius of his design was the interlocking rail and groove sliding modules. Many people have built simple non-interlocking sliding puzzles out of LEGO, but this was the first interlocking design I had seen. Immediately I set out to build my own puzzle to fill a 32x32 stud baseplate.

Mike's puzzle design used a 6x6 stud sized sliding module. After building my initial puzzle, I thought it would be great to have a smaller module, allowing more sliding pieces in a similar-sized puzzle. After many attempts with overly complicated 4x4 stud designs, I found a simple solution.

Around this time I got in a dialog with Tommy Armstrong (www.brickengraver.com) about some projects using engraved and printed LEGO tiles. Tommy laid down the challenge "What's the smallest size sliding puzzle you can make?" I began more experimentation with ideas for building an even smaller sliding module. As is often the case, the best solution was based on clever simplicity. An effective 2x2 stud sliding module was devised using an upside down tile.

The puzzle frames utilize the same slotted bricks and rail plates from Mike's original design. Since slotted bricks are only available in 1x4 size, it takes a little creativity in designing the frame for smaller puzzles, particularly the corners. But otherwise, any size puzzle can be made in two stud increments.

One thing that has always annoyed me about sliding puzzles is the empty space necessary to allow movement of the pieces. I wanted to display my LEGO puzzles when not in use, so I made a removable filler piece for display. That way there isn't an empty spot, and the filler piece drops out by turning the puzzle over and tapping it gently.

Mike's original sliding puzzle used 1x1 bricks to create the puzzle picture. With the smaller puzzles it's difficult to get a recognizable image with the resolution of the 1x1 bricks. This is where Tommy's expertise shines. Engraved or printed tiles

are the perfect medium for a detailed image in a small puzzle. When the Nintendo DS Lite armor cases were released in late 2009 with LEGO Star Wars and Indiana Jones images printed on tiles,



Sliding LEGO® Puzzle:

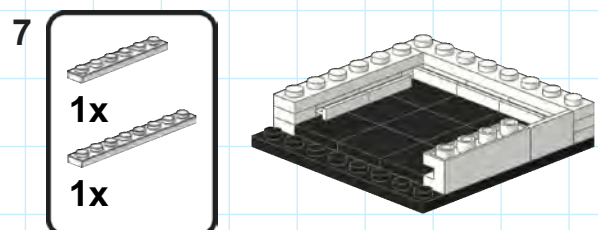
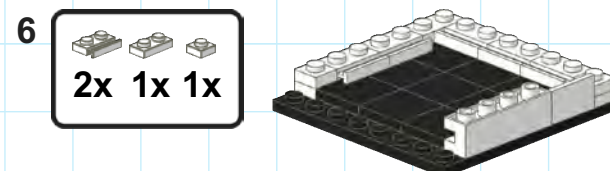
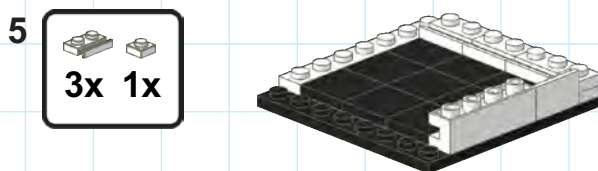
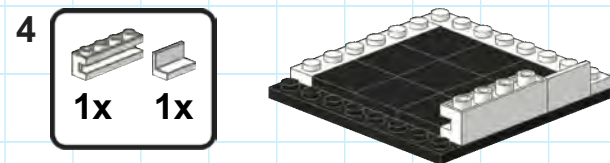
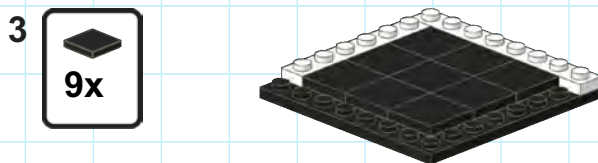
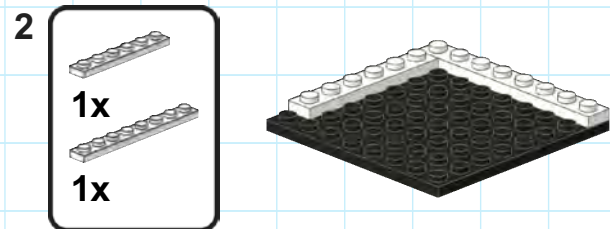
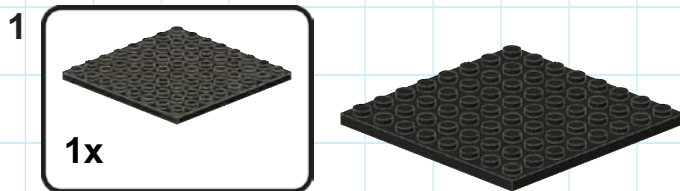
9-Module Puzzle

Design by John Cooper

Here are the instructions to make a 3 module by 3 module puzzle. This will create a puzzle with 8 sliding modules and 1 insert module. With some thought, this can be up-sized to a 4 module by 4 module or larger. Also the colors of the frame can be changed if desired.

Parts List

Qty	Part	Description	Color
1	3023.dat	Plate 1 x 2	White
9	4274.dat	Technic Pin 1/2	White
2	6636.dat	Tile 1 x 6	Black
5	32028.dat	Plate 1 x 2 with Door Rail	White
2	3460.dat	Plate 1 x 8	White
9	3068b.dat	Tile 2 x 2 with Groove	Black
17	3068b.dat	Tile 2 x 2 with Groove	White
1	4865.dat	Panel 1 x 2 x 1	White
1	3070b.dat	Tile 1 x 1 with Groove	White
2	3024.dat	Plate 1 x 1	White
2	3008.dat	Brick 1 x 8	White
1	41539.dat	Plate 8 x 8	Black
9	3003.dat	Brick 2 x 2	White
2	3009.dat	Brick 1 x 6	White
2	3666.dat	Plate 1 x 6	White
3	2653.dat	Brick 1 x 4 with Groove	White
2	4162.dat	Tile 1 x 8	Black



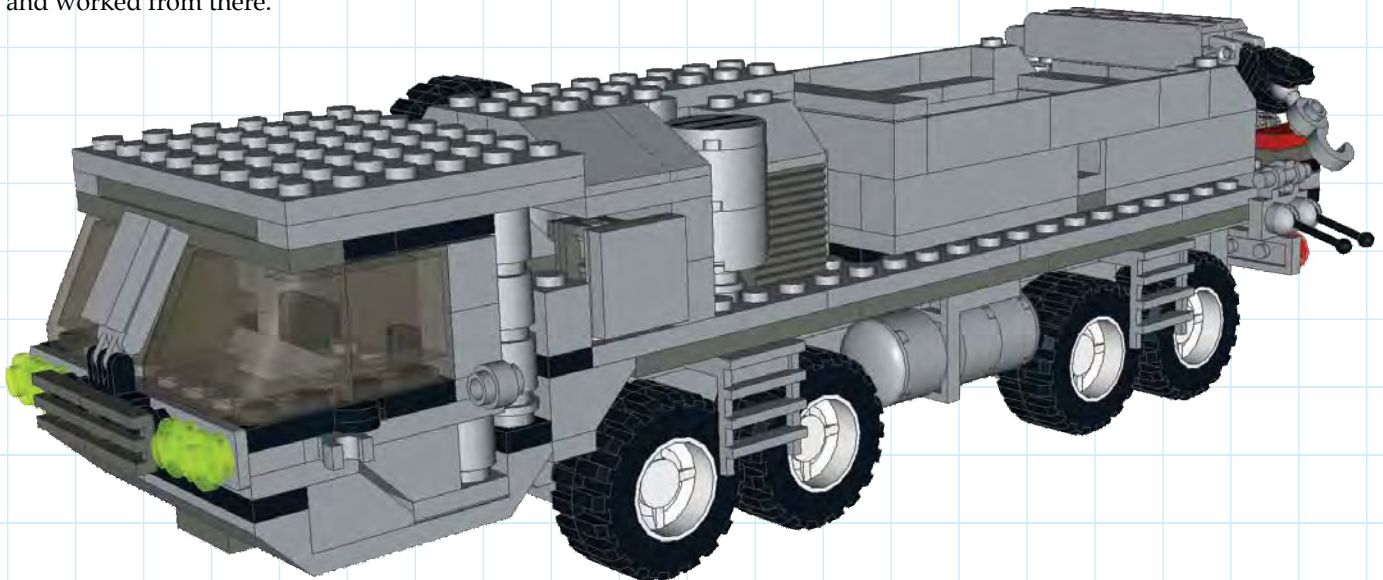
Heavy Duty Truck

Minifigure Scale

Model by Joe Meno

This truck was built about ten years ago when I wanted to see how accurate I could build in minifigure scale. This is based on an Oshkosh Severe Load Vehicle, which is used by the military to deliver cargo. I downloaded some blueprints and matched them up to a minifigure compatible scale - I think I arbitrarily made the truck eight studs wide and worked from there.


The truck has a movable crane, the roof of the cab can be removed to place minifigures, and the doors open. Also the rear cargo area can be modified to have other containers, so you can build pallets or whatever you want.

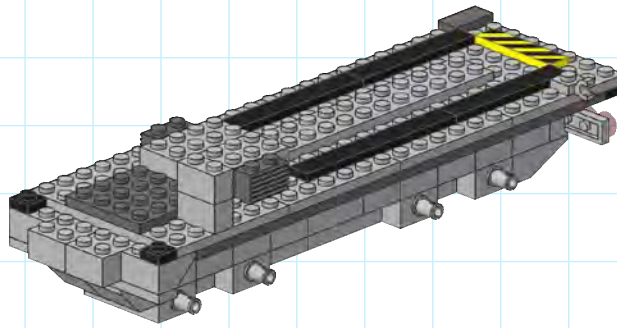



Parts List

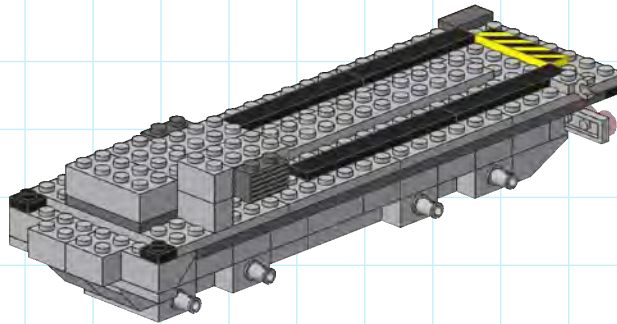
Qty	Part	Description	Color
2	2357.dat	Brick 2 x 2 Corner	Light Bluish Gray
2	2412b.dat	Tile 1 x 2 Grille with Groove	Dark Bluish Gray
2	2429c01.dat	Hinge Plate 1 x 4 (Complete)	Black
1	2431.dat	Tile 1 x 4 with Groove	Light Bluish Gray
1	2431p52.dat	Tile 1 x 4 with Danger Stripes Black Pattern	Yellow
2	2436b.dat	Bracket 1 x 2 - 1 x 4 Type 2	Light Bluish Gray
1	2445.dat	Plate 2 x 12	Light Bluish Gray
1	2452.dat	Hinge Plate 1 x 2 with 3 Fingers On Side	Black
1	2458.dat	Brick 1 x 2 with Pin	Light Bluish Gray
1	2540.dat	Plate 1 x 2 with Handle	Light Bluish Gray
4	2654.dat	Dish 2 x 2	Light Bluish Gray
4	2877.dat	Brick 1 x 2 with Grille	Dark Bluish Gray
17	3001.dat	Brick 2 x 4	Light Bluish Gray
3	3002.dat	Brick 2 x 3	Light Bluish Gray
2	3003.dat	Brick 2 x 2	Light Bluish Gray
2	3004.dat	Brick 1 x 2	Light Bluish Gray
2	3005.dat	Brick 1 x 1	Dark Bluish Gray

Qty	Part	Description	Color
2	3006.dat	Brick 2 x 10	Light Bluish Gray
4	3007.dat	Brick 2 x 8	Light Bluish Gray
1	3008.dat	Brick 1 x 8	Light Bluish Gray
6	3009.dat	Brick 1 x 6	Light Bluish Gray
1	3010.dat	Brick 1 x 4	Light Bluish Gray
1	3020.dat	Plate 2 x 4	Dark Bluish Gray
1	3020.dat	Plate 2 x 4	Light Bluish Gray
1	3021.dat	Plate 2 x 3	Dark Bluish Gray
2	3021.dat	Plate 2 x 3	Light Bluish Gray
3	3023.dat	Plate 1 x 2	Light Bluish Gray
3	3023.dat	Plate 1 x 2	Black
4	3024.dat	Plate 1 x 1	Black
1	3031.dat	Plate 4 x 4	Dark Bluish Gray
1	3034.dat	Plate 2 x 8	Light Bluish Gray
7	3036.dat	Plate 6 x 8	Light Bluish Gray
1	3039.dat	Slope Brick 45 2 x 2	Dark Bluish Gray
4	3039.dat	Slope Brick 45 2 x 2	Light Bluish Gray
6	3040b.dat	Slope Brick 45 2 x 1	Light Bluish Gray
8	3062b.dat	Brick 1 x 1 Round with Hollow Stud	Light Bluish Gray
1	3068b.dat	Tile 2 x 2 with Groove	Light Bluish Gray
1	3069b.dat	Tile 1 x 2 with Groove	Dark Bluish Gray









32  2x




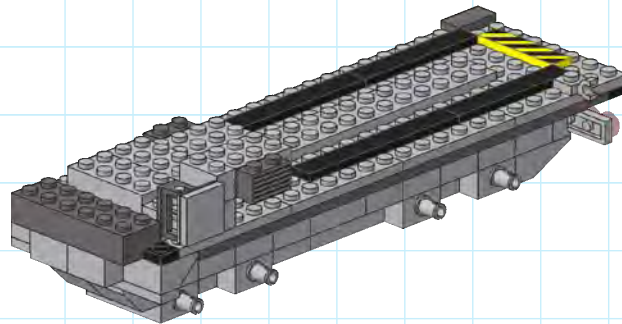
33  2x





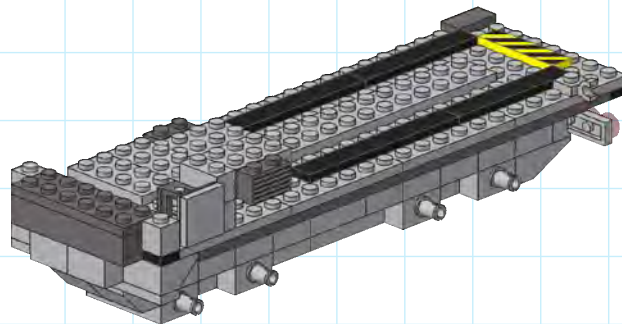
34

1		2		3		4	
	1x		1x		1x		1x
							

35  1x



36  1x  2x



Miniscale

Mini Deep Sea Diorama

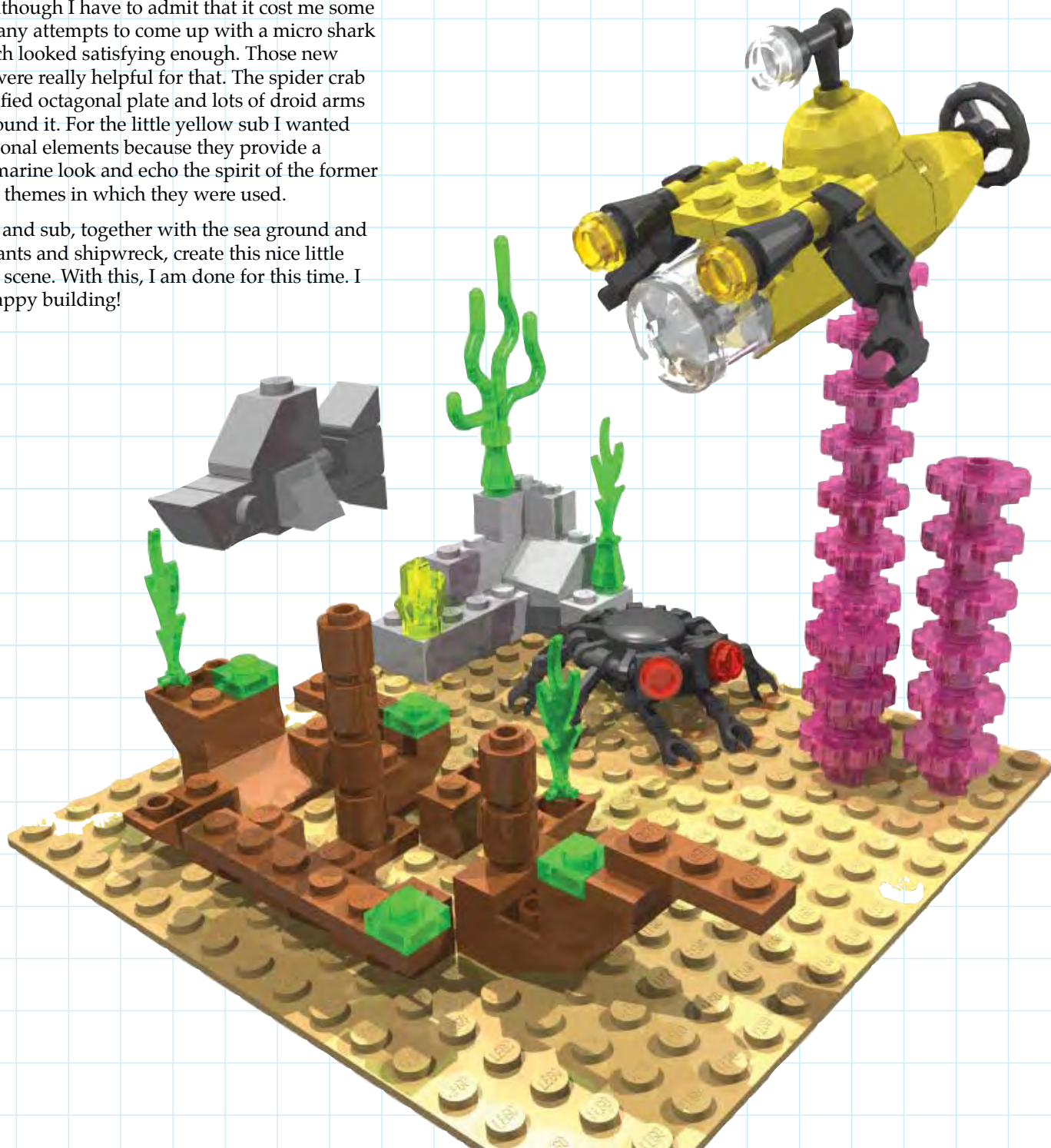
This article and model first appeared in Issue 10 of BrickJournal.

With more than one hundred pieces, this mini diorama has slightly more parts than an average mini model. It consists of the sea bottom with a small shipwreck, a giant spider crab, a sixgill shark (those could be found within depths of more than 2,000 meters) and a small yellow submarine exploring the sea ground.

Building this was quite fun, as it's different from what I usually build. I especially enjoyed building the small creatures, although I have to admit that it cost me some time and many attempts to come up with a micro shark design which looked satisfying enough. Those new 1x1 slopes were really helpful for that. The spider crab uses a modified octagonal plate and lots of droid arms attached around it. For the little yellow sub I wanted to use octagonal elements because they provide a typical submarine look and echo the spirit of the former underwater themes in which they were used.

Crab, shark and sub, together with the sea ground and its rocks, plants and shipwreck, create this nice little underwater scene. With this, I am done for this time. I wish you happy building!

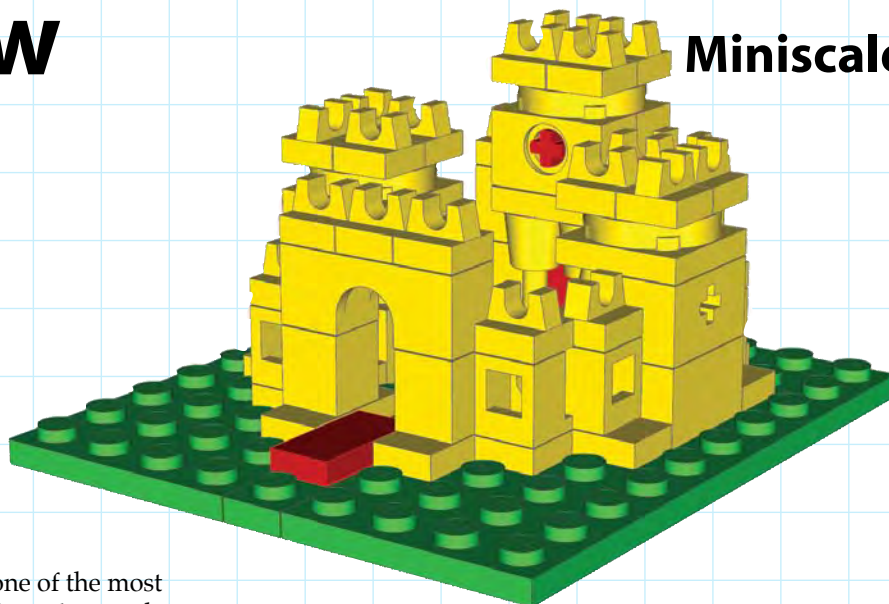
*Design and Instructions
by Christopher Deck*



Mini Yellow Castle

Miniscale

*Design and Instructions
by Christopher Deck*



Today we want to take a closer look at one of the most famous castle sets of all times! It was released more than 30 years ago in 1978 and marks the beginning of the LEGO® castle line. Today set 375 it is often just referred to as “Yellow Castle” and still is one of the most wanted castle sets.

My tribute to this legendary set is the micro version which I want to present to you now. The basis of this tiny model is 7x7 studs and thus requires a lot of jumper plates as well as a 3-piece-base plate to be centered. This is necessary to build up the many corners and edges of the castle. The piece used most for this model is the 1x1 tile with clip which is the obvious choice for the pinnacles of a micro castle.

However, the things that really make this castle unique and always recognizable are the red spots in the yellow colour scheme: The two gates and mainly the red window of the tower in the centre of the castle. The micro version features both red gates, and also the nice red window in the tower. For this we need two Technic® bricks next to each other. The rear one has an axle hole and holds a 2-wide red axle while the front one has a standard hole which leaves some empty space around the axle. This creates the illusion of a red window frame.

With that I think we’re done and have a finished micro building. I wish you happy building!

This article and model first appeared in Issue 8 of BrickJournal. which focused on castles.

Parts List

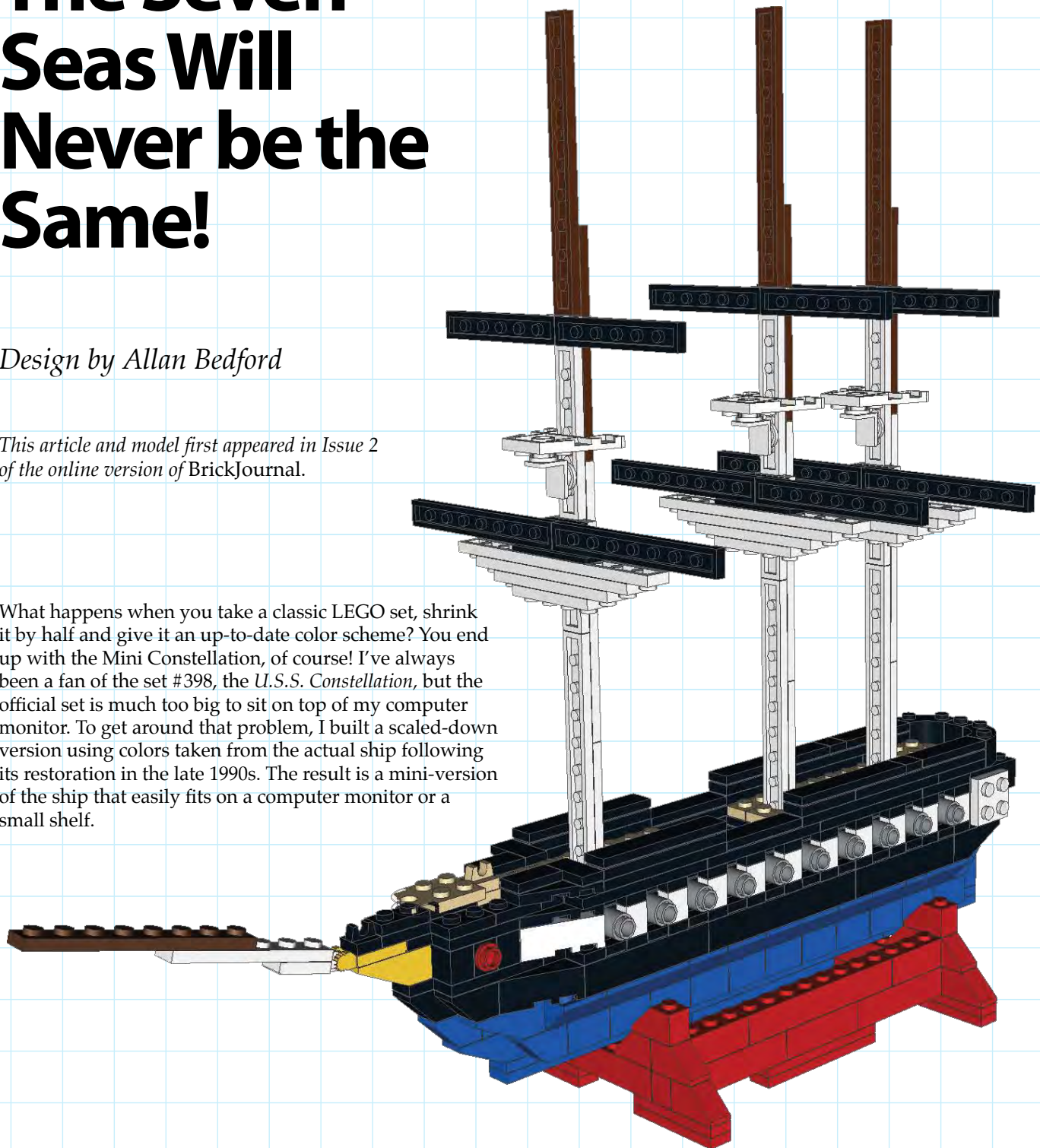
Qty.	Part	Description	Color
1	4490.dat	Arch 1 x 3	Yellow
1	3659.dat	Arch 1 x 4	Yellow
4	3005.dat	Brick 1 x 1	Yellow
6	4070.dat	Brick 1 x 1 with Headlight	Yellow
2	3003.dat	Brick 2 x 2	Yellow
4	6188.dat	Cone 1 x 1	Yellow
2	30002.dat	Minifig Goblet	Yellow
2	3024.dat	Plate 1 x 1	Yellow
1	3023.dat	Plate 1 x 2	Yellow
9	3794.dat	Plate 1 x 2 with 1 Stud	Yellow
1	4477.dat	Plate 1 x 10	Bright Green
2	3022.dat	Plate 2 x 2	Yellow
3	4032.dat	Plate 2 x 2 Round	Yellow
2	3030.dat	Plate 4 x 10	Bright Green
1	32062.dat	Technic Axle 2 Notched	Red
3	32064.dat	Technic Brick 1 x 2 with Axlehole	Yellow
1	3700.dat	Technic Brick 1 x 2 with Hole	Yellow
23	2555.dat	Tile 1 x 1 with Clip	Yellow
2	3070b.dat	Tile 1 x 1 with Groove	Yellow
1	3069b.dat	Tile 1 x 2 with Groove	Red
1	3068b.dat	Tile 2 x 2 with Groove	Red

The Seven Seas Will Never be the Same!

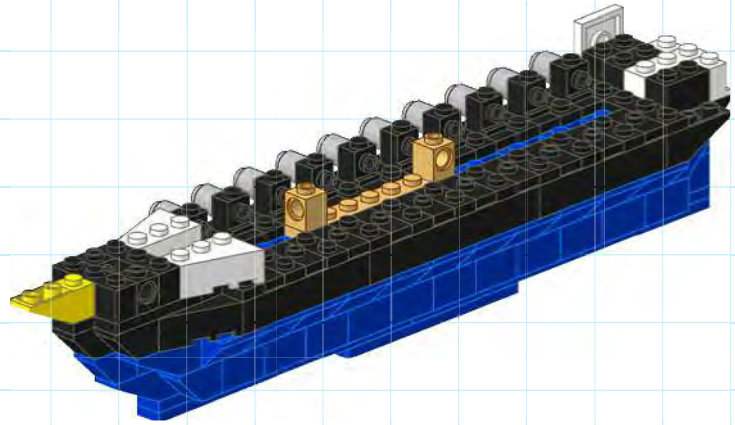
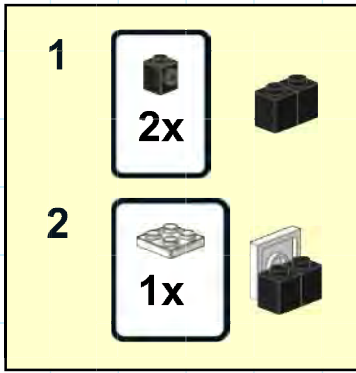
Design by Allan Bedford

This article and model first appeared in Issue 2 of the online version of BrickJournal.

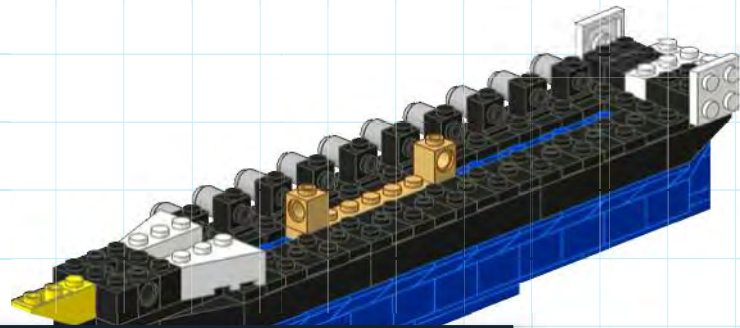
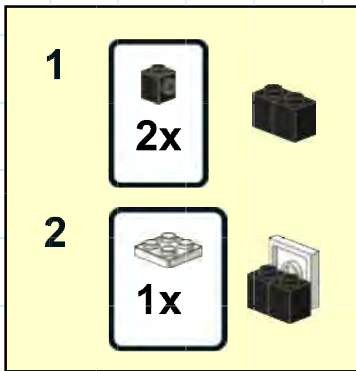
What happens when you take a classic LEGO set, shrink it by half and give it an up-to-date color scheme? You end up with the Mini Constellation, of course! I've always been a fan of the set #398, the *U.S.S. Constellation*, but the official set is much too big to sit on top of my computer monitor. To get around that problem, I built a scaled-down version using colors taken from the actual ship following its restoration in the late 1990s. The result is a mini-version of the ship that easily fits on a computer monitor or a small shelf.



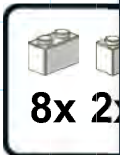
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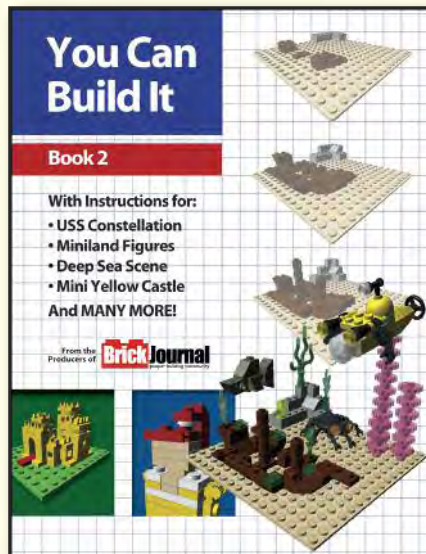


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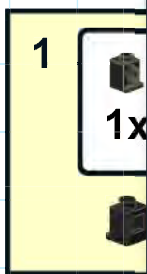


YOU CAN BUILD IT, Book 2

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