



HOMEMADE CAMERA No. 1



Introduction

Why do we make our own cameras when so many wonderful ready-made old cameras can still be purchased for a small fraction of what they are actually worth? I think the wide variety of fabulous cameras in this 'Zine provide a variety of compelling answers to this question. Sometimes we build cameras for the sheer fun of constructing something, and sometimes these homemade cameras are beautiful and fascinating objects in themselves. More often the reason for the camera is because we want to make a specific kind of image, and very often these one of a kind cameras produce unique images that the photographer relates to on a personal level.

Sometimes there is an evident relationship between the building style of the camera-maker and the images produced by that camera. The understated elegance of Dominic Silverthornes' cameras is matched by his simple monochrome images. Matt Parry's Legholio makes playful images. Dale Willetts' Fast 5 is based on an old camera, but one with an early 20th century modernist design that seems to perfectly match the cubist images it produces. I can see similar correspondence between the way each of these cameras look and the sort of images they produce, at least

in the hands of their maker. Photography is a craft where the tools do have a certain impact on the product, and it is fascinating to see this relationship run in the other direction, with the style and personality of the photographer influencing the design and look of the camera. Graham Young's 24Squared somehow conveys the feeling of the images the camera produces as well.

Some of the cameras in this collection are of quite unusual design and were made to produce specialized images that simply cannot be made with conventional cameras. The 5-image blender camera by Dale Willetts is one of this sort. Another is Eben Ostby's brilliant Mysterious Camera, which produces very wide swing-lens panoramic images on 135 film. Or BAC-61 and BAC-32v by Jonas Lundstrom, which produce distinctively low-fi images. Tony Kempler's BlenderCam is another of these unique-image-generators, as is Jacob Reynold's Lumen Box. 617 by Matt Bechberger competes very effectively with the few commercially made wide panoramic 120 cameras out there. The Thing by St. John Fuller fits in this group, I would say.

Another approach is to make somewhat more conventional cameras that handle in a way that the user desires, that may be easier to use and/or more affordable than commonly available mainstream cameras. This is the type of camera I tend to make. Ethan Moses' Cameradactyl Homunculus belongs in this category, as does Sandeha Lynch's Garden Camera and Lucas Landers Instant Press Camera.

Then there are the cameras that seem to be works of art in themselves, or represent a tour-de-force of craftsmanship, such as Lucas Landers' Mini View, the Landers B35 and Masumi Yamamuro's Pinoramic.

Some of these cameras of course manage to tick several of the above listed boxes. Others may not easily fit into any of my list of categories, yet nevertheless produce compelling images. I love Corey Canon's pinhole image of his workshop, and the images Nicole Small makes with Beasty are simply wonderful. Neil Piper's Foamy McFoamboard is a camera where the images it produces are its main reason to exist, and it seems the right kind of camera for a photographer who wants to show the passage of time in still images. BigMuff by Alex Purcell manages to be both a work of art and a producer of art. Thad Mathews Polinstax 545 is another that is both great looking and a great picture-taker, as is Blue Box Camera by Manuel Lion.

Finally, there are cameras with ingenious construction details, like the Mendizza G-Pin by John-Michael Mendizza. His use of screw-top coffee-cans to create a sort of bayonet system for an interchangeable "lens" pinhole camera is a very practical and interesting idea.

Nick Lyle
August 3, 2019

CREATOR

Dominic Silverthorn
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CAMERA NAME

4X5 Open Back

CATEGORY

Large Forma

TYPE OF BUILD

Built from Scratch

ABOUT THE BUILD

This is a camera I made a few years ago the idea was to make a simple looking yet well made and easy to use large format pinhole camera.

With most of the wooden cameras I make, I like to take first idea and rework it many times to find the balance between function and aesthetics.

By keeping the design simple I was able to concentrate on the small details of the close fitting joints and light seals.

I used a mixture of Ash and Walnut for the timber in this build and stainless and aluminum for the hardware.

The camera was made in several different focal lengths ranging from 25mm - 80mm.

WHAT IT'S LIKE TO SHOOT

I don't have one particular subject I like to shoot with this camera, It serves many purposes for me. However I particularly enjoy using the wide angle version of the camera as it has an interesting view of the world. Currently I am experimenting quite a bit with paper negatives in a film holder.

ABOUT THE PICTURES

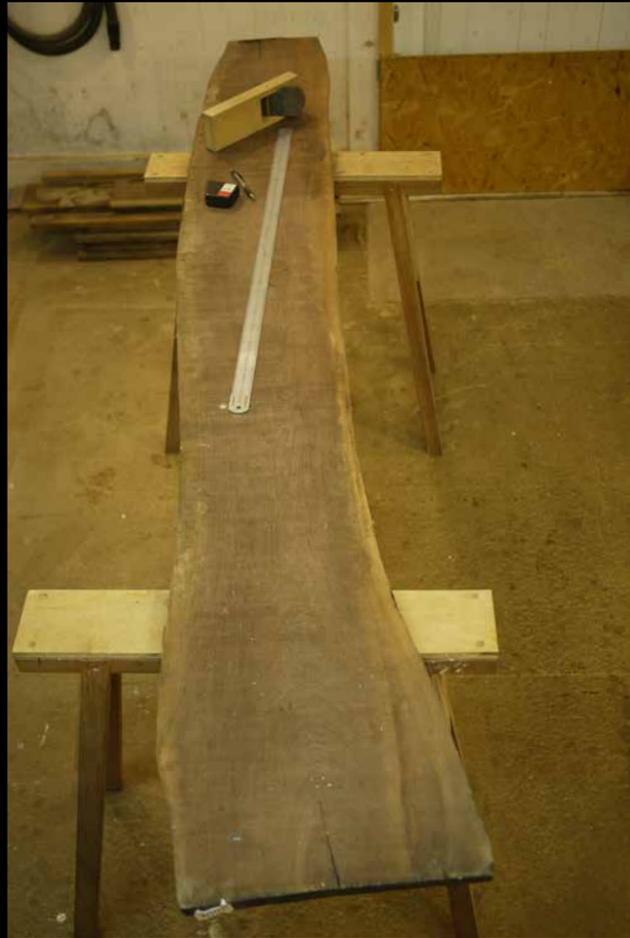
In the first few pictures I am build the camera in the workshop starting with the rough sawn boards, jointing, glueing up, and finishing.

The images from the can be quite varied depending on situation and film holder used I have used a 4x5 film for the 1st image (0018) the next 2 image (019, 020) are both expired instant film In the first set of build pictures are in my workshop, starting with the rough sawn boards, jointing, glueing up, and finishing.

The images:

Image from this camera can be quite varied depending on situation and film holder used I have used a 4x5 film in holder for the 1st image (0018). The next 2 image (019, 020) are both expired instant film FP100c converted to B&W due to colour shifts in the expired film. Image (021) is a paper negative of a garden statue. (022 is done with a roll film back on the camera by rolling the film halfway and double exposing the film.





CREATOR

Matt Parry
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CAMERA NAME

Legholio

CATEGORY

35mm

TYPE OF BUILD

Built from scratch with few already-existing camera parts

ABOUT THE BUILD

The camera is a panoramic 35mm pinhole camera made entirely of Lego (except the metal for the pinhole itself).

Perusing through a box of Lego, elbow deep in colourful cuboids, the idea hit me: a Lego pinhole camera. A good few hours later (sporadically spread over a month or so), I created, shot, improvised, then planned and rebuilt.

This recent rebuild makes it (sort of) easily re-loadable. It is panoramic (roughly 1:3). It is triple layered in most places. Despite the plans and adaptation, It still has some real issues: random leaks and general fogging to say the least.

But, you know, it is almost entirely Lego, so I will let that slide.

WHAT IT'S LIKE TO SHOOT

At about 30cm by 10cm by 10cm, it is cumbersome. But it feels solid and weighty. The knob to advance the film clicks neatly. Put it down. Take off the front clock cap thing and voilà. It once had a sliding shutter mechanism but having realised my fogging problems that is for now sidelined. Scanning the fogged images is...interesting.

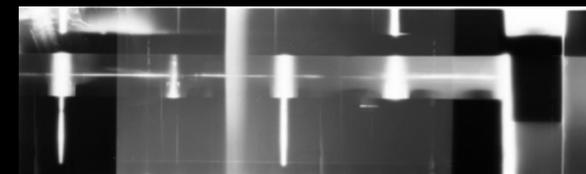
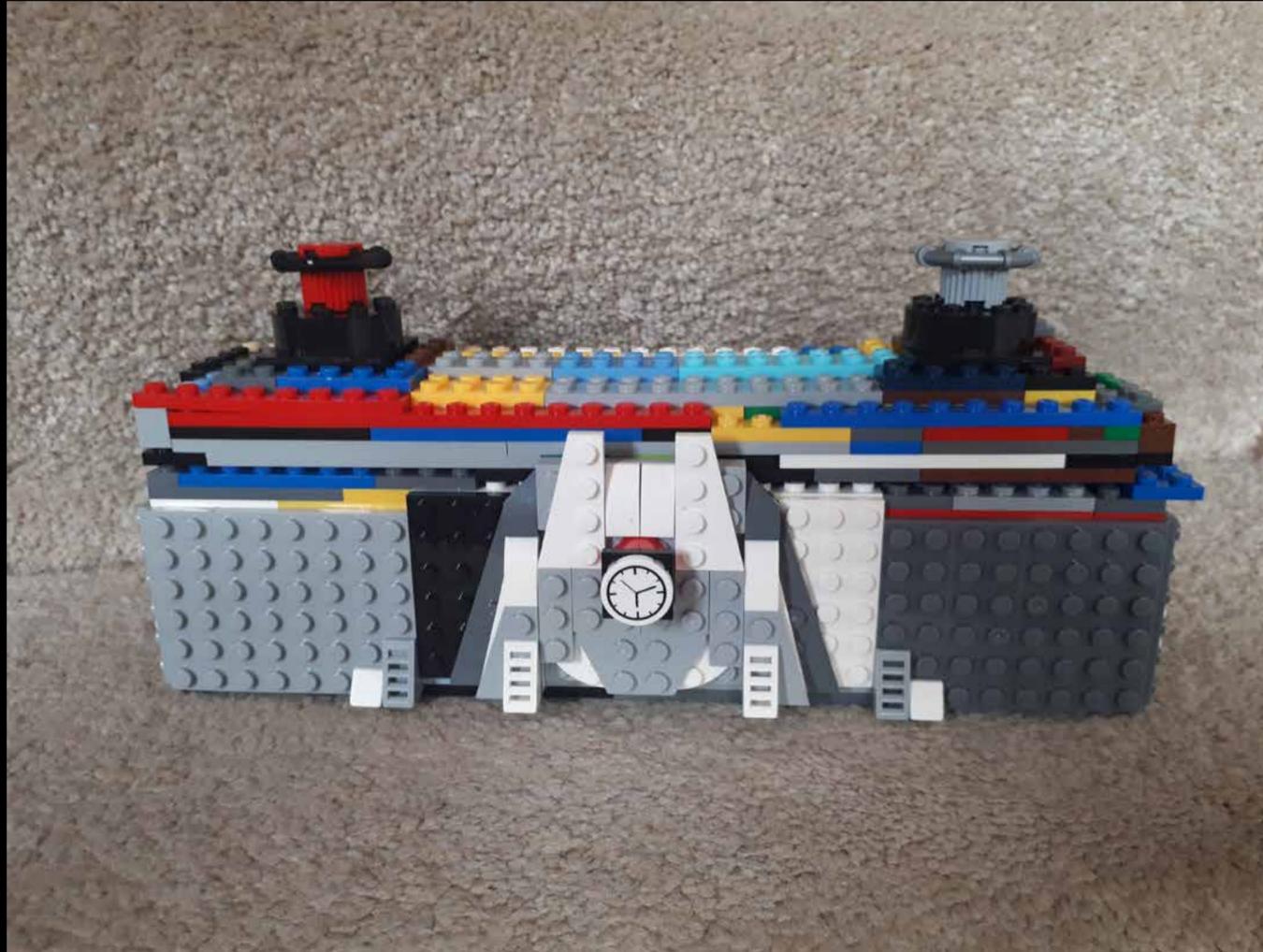
ABOUT THE PICTURES

Three images of the camera itself, including a front on image, the camera front on with the film transport, then the film transport with film in it.

The next shot is an 'image' from the first ever roll - not so successful.

Then there are two pictures from the most successful role of HP5 (one propped on the garden fence, one of toys and legs in the sandpit)

The last shot is a vertical colour shot. The massive fogging made the colour correction difficult.



CREATOR

Dale Willetts
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CAMERA NAME

Fast 5

CATEGORY

120

TYPE OF BUILD

Modification (mostly built from one camera)

ABOUT THE BUILD

I found a Coronet Rapide folding camera in a local antique shop. The lens was cracked, the shutter frozen and the bellows had more holes than they had leather..... definitely worth the £3 price sticker. Perfect donor camera for a medium format pinhole camera I thought, right up until I found that it was riveted together not screwed. Careful application of pliers, a small saw and brute force later I had the body ready for pinhole and shutter attachment. It was at this point that I decided to make it into a five hole camera as a kind of blender and big brother to my three hole pinhole camera. The pinhole plate is recycled beer can. The lens board and sliding shutter door are made from two of my favourite building materials, foam core board and electrical tape.

The camera got its name from three things, the donor was a "rapide" it has 5 pinholes and with an effective aperture of F75 it's fast for a pinhole camera, thus the "Fast 5" was born.

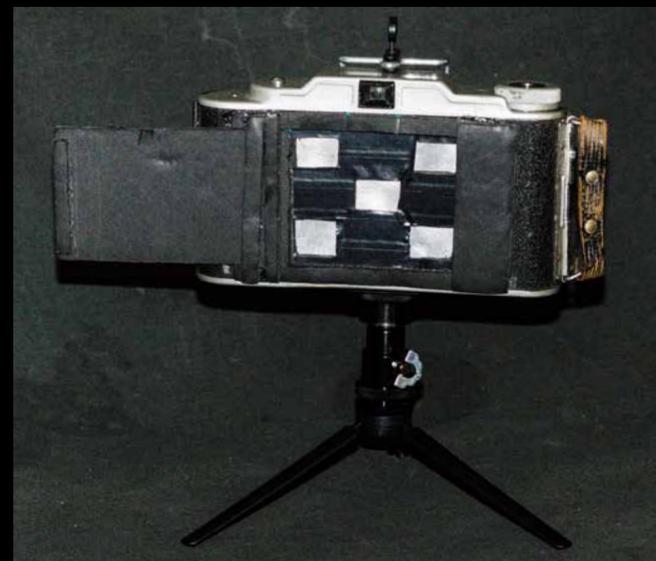
WHAT IT'S LIKE TO SHOOT

The sliding door style shutter makes using it easy when on a tripod. I usually cover the front of the camera with one hand, slide open the shutter with the other was a second to avoid camera shake then move my covering hand to make the exposure. Using it hand held can be done but camera shake is going to be a factor. The holes can easily be covered with tape to allow any combination of one to all five pinholes to be used.

Mounting the camera on a tripod was impossible when I made it as the original tripod socket was on the front fold down door. The problem was solved with the spring loaded phone holder from the end of a cheap selfie stick.

ABOUT THE PICTURES

The pictures here are all from the first "proper" roll of film through the camera after construction and testing. They were taken at a local church (the carved heads). A ruined manor house (the cellar entrance, and the end wall above it with empty windows). The last picture is of a small stone folly built next to a local lake.



CREATOR

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 john-Michael Mendizza (FB)
<http://www.jmm-photos.com>

CAMERA NAME

Mendizza G-Pin

CATEGORY

120

TYPE OF BUILD

Built from scratch with few already-existing camera parts

ABOUT THE BUILD

The idea of using a medium format film back as the foundation of a pinhole camera was the inspiration for this project. Letting the film back keep things light tight, and deal with the film advance seemed like a good starting point. I also like the idea of switching a film back between the proper camera and the pinhole.

This camera is built around a disassembled Bronica GS-1 body that I picked up super cheap on eBay. When visiting my step dad in California, he helped make a wooden housing to hold the metal parts, which is now the main body of the camera. The shutter button and the film back release button were also reused.

The shutter button is connected via a lever to the mechanism that controls the film advancing in the film back. After exposing a frame, pressing the shutter button unlocks the film and allows one to advance to the next frame.

The "lenses" are made from coffee cans that have a screw top, shortened to the needed length. The lid is fixed in the camera body, so the different lenses can be screwed in.

At the moment I have made a 90mm f225 and a 140mm f270 lens. A wider angle lens would be cool, but this would require the pinhole to sit inside the wooden body, and I have not yet come up with a solution I like.

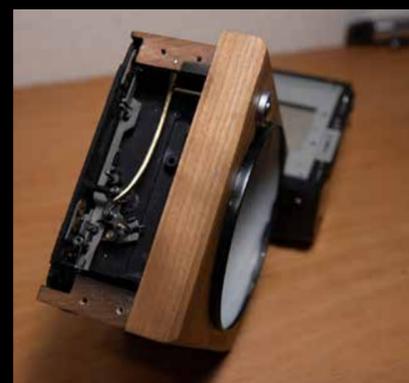
The pinholes are laser "drilled" from Reality So subtle.

WHAT IT'S LIKE TO SHOOT

The first three rolls have been successful! I am always a bit paranoid when walking around so I tend to put in the dark slide for safety. The square sides make it really easy to set the camera on things when not on a tripod, and I have taken a couple shots with it on its side for a vertical shot. Many people give me strange looks, and some come and ask about it. So far everything seems to work as intended.

ABOUT THE PICTURES

The first (120) and third (35mm) rolls I shot near where I live in Germany, a cool fountain near the town square, the electric lines and the tracks for the streetcars, and the train station itself are all included. The color image is from the second roll, I was trying to capture Tango dancers during a night of dancing, but the exposure was much too long, so there is only a vague blur of the people dancing by.





CREATOR

Thad Matthews
@photobrio (IG)

CAMERA NAME

Polinstax 545

CATEGORY

Instant of any sort

TYPE OF BUILD

Started with a lens and built a camera around it.

ABOUT THE BUILD

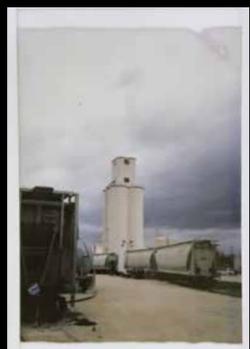
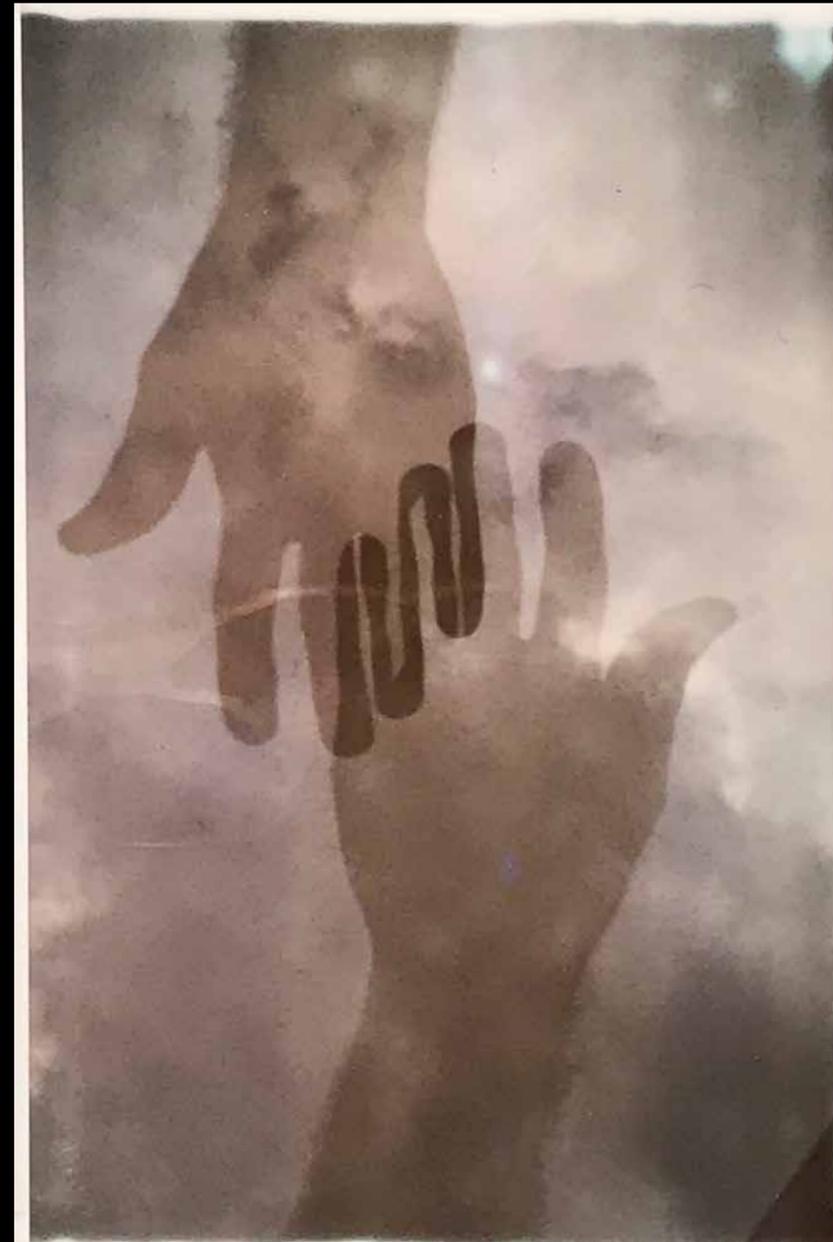
Similar to building a 4x5 hand camera. Started with a lens and a Polaroid 545 back. After watching a video on YouTube describing how Fujifilm Instax Wide film might be used in one of these backs by making a "carrier card" for an individual sheet of film, I knew I had finally seen a way to put this old back to work (I totally and sadly missed my chance to use it with Type 55 and 54 Polaroid films). Turns out, the card as described in the video likely couldn't work. But I figured out how to get the chemistry to spread and not "squeegee" across the image without developing. Lost no fingers. Construction was pretty straightforward. There's no real focusing mechanism. Set to a hyperfocal distance and relying on depth of field made possible by Instax films all having ISO 800. I have added a wood spacer to allow me to focus closer and use the camera for portraiture more reliably while giving me some bokeh options too. Materials include wood, metal, plastic, rubber bands, waxed string, foam, paper, various tapes, elastic, and Velcro. I think all I might be missing is cloth!

WHAT IT'S LIKE TO SHOOT

Awkward for sure, but simultaneously freeing. It's not very well balanced or ergonomically pleasing/satisfying. Yet, using it is thoroughly addictive. Having multiple exposure capability and immediate results are extremely powerful attributes. My street portrait subjects tend to express a lot of interest and excitement as their image appears and we see what we get.

ABOUT THE PICTURES

Results are extremely analog, unpredictable, and low-fi. I find them to be much to my liking after several iterations of tweaking. Fairly consistent but with interesting artifacts and unexpected framing/alignments (no viewfinder!). As I said, using this camera is extremely addictive as the results are so interesting and have many possibilities or gradations of success.



CREATOR

Matt Bechberger
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CAMERA NAME

617

CATEGORY

120

TYPE OF BUILD

Started with a lens and built a camera around it.

ABOUT THE BUILD

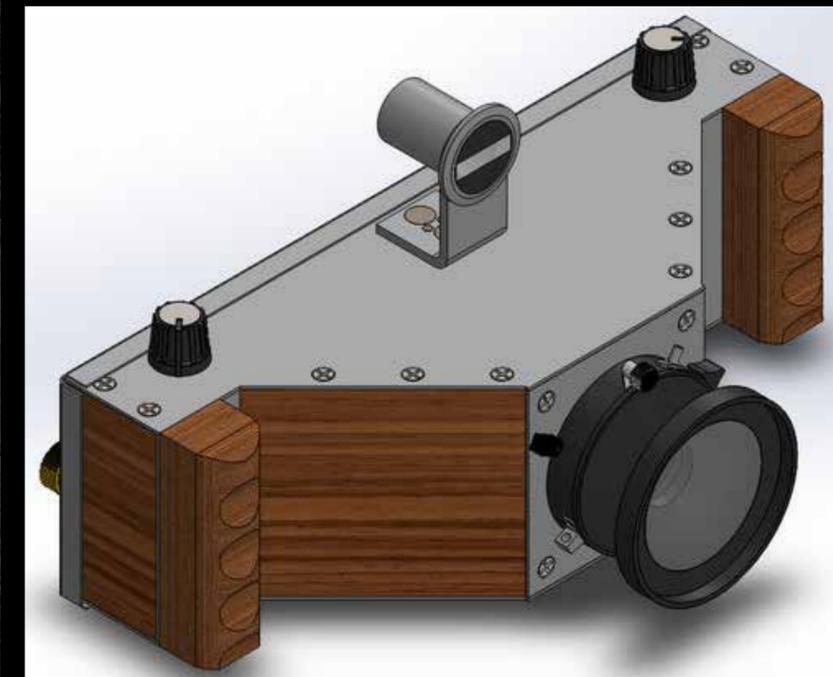
A typical fixed focus 617 camera, 4 shots per roll. Steel and wood body, door peephole viewfinder, designed for the Schneider SA 90mm f8. Double knob film advance. Viewfinder mounts with pins and magnets to make it removable, to fit in the camera bag better.

WHAT IT'S LIKE TO SHOOT

Its clunky and not really hand-holdable in anything but daylight, but takes nice photos. Level is important or else the photos come out badly distorted. Quite a bit of falloff in the corners without a centre filter.

ABOUT THE PICTURES

Fun for city streets, buildings, landscape and architecture. Vertical panos of tall waterfalls are neat.



CREATOR

Matt Bechberger
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CAMERA NAME

4x5 Technical

CATEGORY

Large Format

TYPE OF BUILD

Built from scratch with few already-existing camera parts.

ABOUT THE BUILD

I wanted a lightweight 4x5 camera that could also shoot roll film using a 4x5 graflex roll film back. This camera is specifically designed for a 65mm Schneider f5.6 and no other. I wanted something that was easy to use with or without a ground glass, with or without a tripod, and with or without engaging the available movements. Its made from a mixture of oak and aluminum panels. The back can rotate on pins, a style I borrowed from my Graphic View II. The GG holder is a ground glass installed in an old 4x5 sheet holder. The viewfinder is a masked door peephole that can also rotate if you rotate the back. There is a handle on one side. The focusing mechanism is a heavily modified M42 bellows, keeping only the helical focusing rack and pinion mechanism. There is front rise and fall, tilt, shift and swing, no back movements. PVC bag bellows lined with felt. Total weight is about 4lb and total kit weight with tripod is about 18lb

WHAT IT'S LIKE TO SHOOT

It's interesting, it's a little tricky but once its set up it works pretty well. It may need some modifications as it goes through life to make it a little more user friendly and trust-worthy. The shutter release is a little annoying because it's hard to reach and I'm still working on a nicer solution for that.

ABOUT THE PICTURES

Storefronts, buildings and houses in Toronto. 4x5 on expired Tri-X 320.



CREATOR

Alex Purcell
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<https://www.flickr.com/photos/138013189@N08/> (Flickr)

CAMERA NAME

BIGMUFF

CATEGORY

Large Format

TYPE OF BUILD

Other (elaborate in the description)

ABOUT THE BUILD

BIGMUFF: 4x5, F/256, 0.3mm laser drilled pinhole (from RealitySoSubtle)

Made from a box I've had kicking around for about 20 years and named after the guitar effects pedal that came in it. This was my first homemade 4x5 and feeling adventurous I decided it should have a rise pinhole and figured the simplest way to do this was, by sacrificing a mid position, I could have just one pinhole and shutter on a rotatable disc. By having four notches on the edge of the disc and a sprung locating wedge, it has high and low pinhole positions for both landscape and portrait orientation, with little chance of it turning while opening and closing the shutter. It uses standard 'Fidelity' type 4x5 holders, held in place by a piece of 'shock cord' and a 'clam cleat', technology I borrowed from my neglected other hobby, 'Dinghy Sailing'.

WHAT IT'S LIKE TO SHOOT

Shooting with it is good despite all passing drivers thinking it's a speed camera, but would be better if I'd designed it to sit flat on two of it's sides, so a small tripod is always needed.

One unexpected drawback was with the combination of it's precisely made pinhole, reduced vignetting at 70mm, normal angle of view and the corrected distortion from the rise pinhole position, the shots can look like they were taken with a bloody lens! I don't mind this now though, I just see it as a challenge to work harder to create more interesting images capturing movement and utilising it's depth of field.

My only advice to anyone thinking of making a camera is don't agonise about it too much, one is never going to be enough, so just get on with it and make alterations on your next one.

ABOUT THE PICTURES (clockwise from top middle)

So many drivers slamming the brakes on and giving me evil looks for this one. Ilford Multi-grade paper negative; Swansea city centre. Fomapan 100, pinhole raised; St Davids Cathedral. Extreme west Wales, Britain's smallest city. Shot on Fomapan 100, pinhole raised; Carmarthen foot bridge. Fomapan 100, pinhole lowered; Juvenile swans in my village. Fomapan 100; This tower in my village is of a Victorian holiday resort originally built as a camera obscura! Fomapan 100, pinhole raised; A totally overgrown abandoned fuel station in West Wales. Fomapan 100, pinhole lowered.



CREATOR

Neil Piper
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@sootandwhitewash (IG)

CAMERA NAME

Foamy McFoamboard

CATEGORY

Large Format

TYPE OF BUILD

Built from scratch with few already-existing camera parts

ABOUT THE BUILD

Simple box design that accepts standard 4x5 film holders. Reality So Subtle 0.3mm pinhole set into the front.

Foamboard, gaffas tape, electrical tape, glue. And probably some swearing.

Random light leaks aplenty.

WHAT IT'S LIKE TO SHOOT

On a still day, very nice. I didn't have the foresight to incorporate a tripod mount, and at time of writing still haven't so at the moment, the world (read: walls) is my tripod...!

There is no shutter, so I can be seen lining up the shot, as best I can be bothered, covering the pinhole with my hand or my hat, removing the dark slide and then uncovering the pinhole. This simplicity works for me perfectly.

Taking 4x5, or 5x4, seriously whatever, I find it a nice balance between the 'one shot' type of working and the roll film option. I have 4 film holders, so that's a max of 8 shots at any one time. Perfect.

Its small enough that it fits nicely in most bags along with the film holders. I've never once I think been out with it and thought "hey I need more shots here..."

I use it with cut down paper for paper negatives, and I've used it once with a borrowed polaroid back. This was a beautiful experience, but sadly I dont have the expendable money required nowadays for the type 54/55 route...!

I love it. Its super wide angle which appears to be my thing at the mo...

ABOUT THE PICTURES (clockwise from top middle)

Polaroid type 54 shot made at university; Paper negatives taken around Norwich where I attend university; Another paper negative made during a workshop I was teaching - ironically about digital photography

Dont worry, there's no deep meaning to any of them. Apart from time. Recording time is my thing...



CREATOR

Eben Ostby
<http://www.flickr.com/photos/efo> (Flickr)

CAMERA NAME

Mysterious Camera

CATEGORY

35mm

TYPE OF BUILD

Built from scratch with few already-existing camera parts

ABOUT THE BUILD

Swing-lens panoramic camera. 3D printed at Shapeways from my own plans. Includes a simple meniscus lens (Surplus Shed) and a piece of piano wire (for a spring)

WHAT IT'S LIKE TO SHOOT

It's practically a snapshot camera. Advance the film, wind it up, and press the shutter release. The biggest question is - where is it aimed?

ABOUT THE PICTURES

The goal of the camera was to make pictures that were wide (like with a Kodak Panoram) but a little wonky (like a Holga) and on 35mm film (because it's easy to get and cheap). I think I managed all three. I usually take pictures of wide things, because, well, it's a panoramic.



CREATOR

Filip Lenrick
@lenrick_photo

EMULSION NAME

AmBr-O_L emulsion

CATEGORY

Photographic Emulsion

TYPE OF BUILD

Built from scratch with some already-existing materials

ABOUT THE BUILD

Not a camera, but homemade emulsion. Followed recipe by Denise Ross. It was so much fun. Mixing chemicals, keeping track of time and temperatures, and coating hand cut glass. I felt like a proper pioneering photographer. Tactile and real. Gelatin is melted in water, halide salts are added first, then silver nitrate. The emulsion is washed in cold water and finally melted again for coating.

WHAT IT'S LIKE TO SHOOT

The emulsion is very slow, around 3-6 ISO. Very similar to shooting paper negatives. Development by inspection was done under safe light. Glass is a wonderful material to hold and handle. It is always flat and thus scan easily.

ABOUT THE PICTURES (clockwise from top left)

Me (taken by my wife, Sigrid Lenrick Forss); My neighbors; Some of the chemicals and tools I used; My daughter, Vera; my daughter, Hilda; My house.



CREATOR

Sandeha Lynch
sandehalynch (FB, IG, Flickr)

CAMERA NAME

The Garden Camera

CATEGORY

120

TYPE OF BUILD

Built from scratch with few already-existing camera parts

ABOUT THE BUILD

Folding field-type view camera with 6x7 Beattie screen. It takes individual frames of cut film/paper approx 3"x3" or a Mamiya RB67 roll film back. At different times it's had a Zeiss 135/4.5 Tessar, a 125/6.8 meniscus lens, or a Certo 75/3.5 with a Zeiss Distar filter.

Needless to say it's called The Garden Camera as it's a bit small for a 'field'. I hope that won't need explaining in any greater depth.

It's built out of lime wood (bass wood) and brass strip. The black bellows in one photo was the first bellows I ever made, way back in 2003. I have made a few other bellows since. I redressed it in red in 2016.

Back in 2003 I'd bought a Speed Graphic 4x5 and was disappointed with the movements. The better brands like Ebony were out of my range so I determined to build a 4x5 folding field camera for myself. First though, I had to get my craft skills up to speed and building the Garden Camera was good training. The Surveyor 4x5 was built over the following year.

WHAT IT'S LIKE TO SHOOT

The camera has had a few outings but it's primarily seen use in the studio. It's awkwardly small, and the tiny hand-made brass knobs never go down tightly enough. Really, it's about as good as the lens that's on it, and the patience of the operator. It usually sits open on a shelf, where every time I notice it I say I will shoot it again soon. That also goes for the pinhole shutter I made 3 years ago - I will shoot that soon.

ABOUT THE PICTURES (clockwise from top middle)

Singapore Zoo where there is a small waterfall in the chimpanzee enclosure; A film set portrait. The lad on the left is an aspiring director like his dad, and I was visiting them one weekend. I got to act in the movie as well; One of the first shots I took with the camera was of a small bronze sculpture on cut sheet film. The sculpture is called Dusk, and is part of a pair. No need to mention the name of the other piece, I presume.



CREATOR

Nicole Small
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CAMERA NAME

Beasty

CATEGORY

Other

TYPE OF BUILD

Other

ABOUT THE BUILD

The camera build is a 5x7 pinhole camera made out of black foam core, black gaffers tape, cement glue, and strips of velcro. Velcro is used to help secure the film holder in place and to provide an attachment for filters. I broke the glass off of a large format lens which also can be attached to the camera with velcro and used for self-portraits for further distances away from the camera.

Most dangerous tool used was an X-Acto knife!

WHAT IT'S LIKE TO SHOOT

Its super cool! Built a 5x7 pinhole camera to get a little more out of a contact print than that of the 4x5 pinhole camera that I also use. It is really hard to describe the feeling, but it does not go without feeling pretty darn cool!

ABOUT THE PICTURES

Most of my photos made with Beasty are pinhole self-portraits.



CREATOR

Tony Kemplen
https://www.flickr.com/photos/tony_kemplen/

CAMERA NAME

BlenderCam

CATEGORY

35mm

TYPE OF BUILD

Started with a lens and built a camera around it.

ABOUT THE BUILD

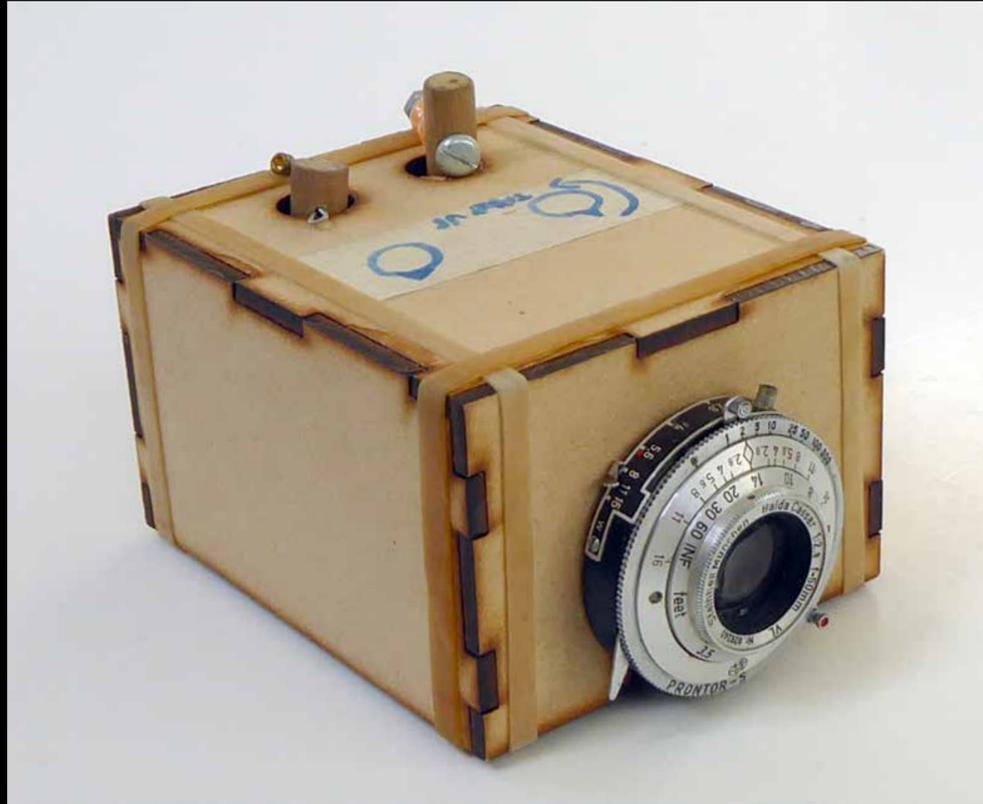
My BlenderCam evolved from my pinhole blender cameras, in which an image is formed on 35mm film which is held in a curved path, such that the effective focal length of the pinhole "lens" gets longer, and the effective aperture gets smaller the further away it is from the centre. By advancing the film to include an overlap, sequential images become blended together. I made the body of BlenderCam at an introductory laser cutting workshop at Access Space, Sheffield. By using a lens and shutter assembly scavenged from an old Bierette camera, I was able to make a blender camera which could be used for hand held exposures, so allowing moving subjects to be captured.

WHAT IT'S LIKE TO SHOOT

There's no viewfinder, so aiming is a bit hit and miss, but that's part of the fun. The degree of image overlapping depends on how much you wind the film between exposures. Until the film is developed, you don't really know what the result will be.

ABOUT THE PICTURES

Two of the photos were taken from a Vaporetto (water bus) travelling down the Grand Canal in Venice, this film was shot as redscale. The other picture is taken in the galleries at Tate Modern in London.



CREATOR

Corey Cannon
@pinholecanon (IG)

CAMERA NAME

iPhonebox5000

CATEGORY

120

TYPE OF BUILD

Other

ABOUT THE BUILD

I used an iPhone box for my pinhole and a predrilled pinhole from James Guerin. I used X-ray film and contact printed the image.

WHAT IT'S LIKE TO SHOOT

It's easy hahaha just find you subject get CLOSER figure out exposure and make said exposure. It's an iPhone so it's cool to look at.

ABOUT THE PICTURES

It's me sitting at my work bench in my garage. There's a drill bit almost touching the pinhole.

(Note: The camera itself was destroyed before an image of it could be recorded.)



CREATOR

Lucus Landers
 @cropped_camera (IG)
<http://www.lucuslanders.com>

CAMERA NAME

Instant Press Camera

CATEGORY

Instant of any sort.

TYPE OF BUILD

Built from scratch with few already-existing camera parts

ABOUT THE BUILD

The camera was built in my last year of school where I had access to a full wood shop and metal shop. Pretty much any tool I needed was there and I wanted to take full advantage of it before I left Pratt. At the time I had a good amount of wood working experience, but I was pretty new to metal working so I wanted an opportunity to combine the two of them.

The build started very similar to that of a standard 4X5 monorail, but I made a few changes to make it handheld. On the top of the camera are two telescoping stabilizers and on the left side is a big steel screw that acts as a focusing screw. This allows the two standards to book back and forth and focus the image. On the opposite side I added a big wooden handle with a shutter button and a flash mount.

Around back is a polaroid back. Technically I have a 4x5 back that I made for it, but I never once used it.

The build went quite smoothly. Having attempted similar builds before with a small fraction of what I had available then makes me realize just how important reliable tools are. The standards are made of oak with mahogany splines. The handle is poplar.

The bellows are replacement bellows for a Toyo. All the steel work was done on either a south bend lathe or a Bridgeport mill.

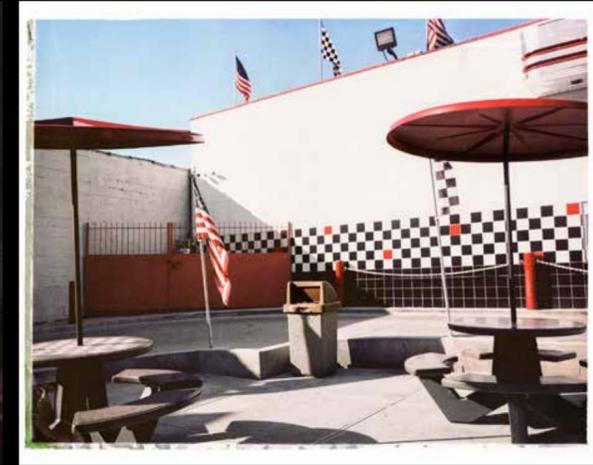
WHAT IT'S LIKE TO SHOOT

I built this camera with a specific shooting style in mind. I wanted a large format camera I could use quickly in close quarters, primarily with a flash. And that's exactly how I used it for the first part of its life.

The focusing is done by the big steel screw on the left. To get the image focused I have to kind of eyeball how far apart the standards are. I made a gauge that I can place on top of the camera to check the focus, but I found that it was better to just get a feel for it. Shooting instant film it wouldn't take long to determine if my focus was off.

I would often shoot with a flash, so what I would do is set the camera up to shoot from 6ft or so and spend the whole night only at that distance. That way there would be no though required to take the photo. The flash, aperture, shutter, and focusing was all set and all I had to do is click the shutter.

At some point, I started taking this camera out street shooting more. There I think it got a second life, as an urban



landscape camera. There's something about the film that adds a unique quality to the landscape it produces.

I created a whole mobile setup to use this camera on the streets. I had two side holsters. After I shot an image I would develop the film in my armpit, because its warm and the film does better when warm, and then when I peeled the film apart, the positive would go in one holster and the negative would go in the other.

But this time I had developed an extraction process for the negatives, so I had no reason to keep the positives. I would often give them to people who asked about the camera on the streets. A good way to make friends.

ABOUT THE PICTURES (continued on next page)

This camera was designed to take photos of people, and I did a lot of that. Mostly friends I met at Pratt or at the various events I took it to. Lots of bands and artist.

But after school, I found it was a great camera for urban landscapes. The film and extraction process I use creates some visually unique images. The color pallet is unique to this film, and the way tonality is held in the highlights and shadows is interesting. Whites can blow out, but when they do instead of being totally white, there will be large black film grains that look almost like sand. The shadows will go crazy in color, often turning green.

On top of these traits, the film extraction process often damages the negatives, sometimes dissolving parts of the image. At first this really bothered me, but I learned to accept it as sometimes it adds an interesting and unexpected quality.

One last unique quality of the film I use in this camera is how the weather effects the image. A hot day leads the images to be far more contrasty. A humid day leads to a flat and desaturated image. And it its cold.... Well I'm lucky if anything will come out when its cold. I always liked that trait of the film, as the film seems to quite literally record the weather of the day along side the frame I captured.





CREATOR

Lucus Landers
 @cropped_camera (IG)
<http://www.lucuslanders.com>

CAMERA NAME

Mini View

CATEGORY

Sub-35mm

TYPE OF BUILD

Built from scratch with few already-existing camera parts

ABOUT THE BUILD

This camera was build for a contest. The rules were simple, make something that fits into a 1 inch cube with a CNC machine and put their rooster logo on it.

Every part was designed in a CAD program and then milled out of brass on a Sherline CNC machine. Because of this it only took about two weeks start to finish, a much shorter time frame than my other projects.

The bellows were actually the most difficult part to make and what I want to most change.

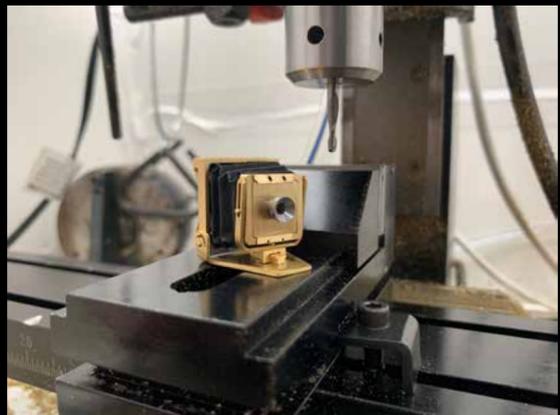
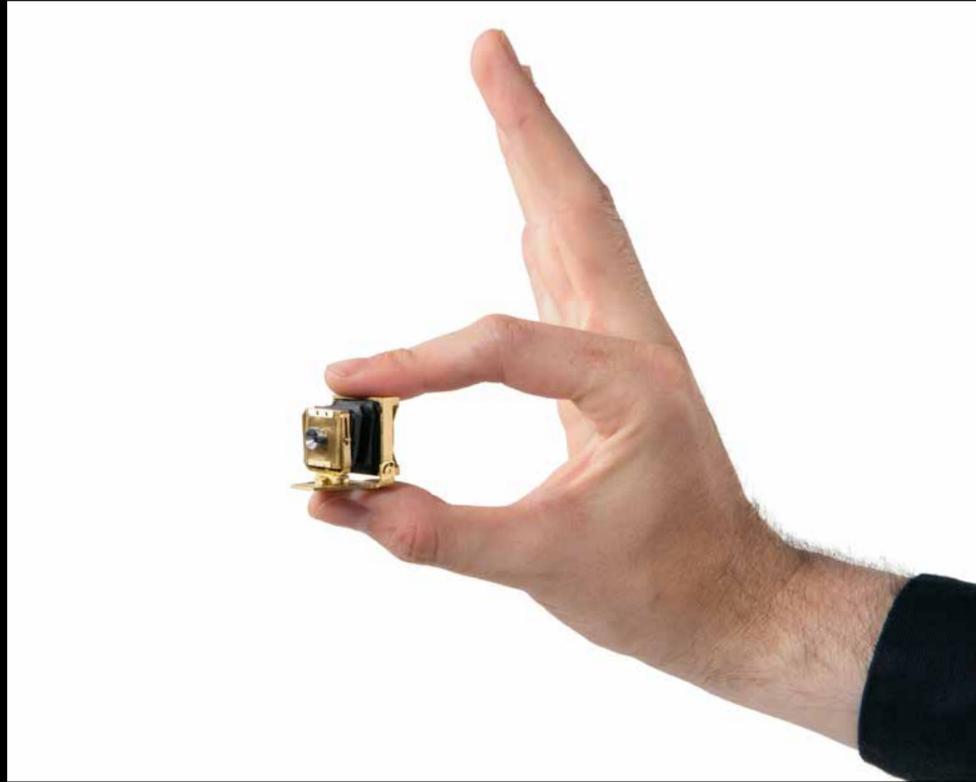
WHAT IT'S LIKE TO SHOOT

Unlike my other cameras that were all designed with a specific shooting style and usability in mind, this camera was designed to be more of a trophy piece than anything. But that does not mean it cannot be used.

The film is cut from a roll of 35mm using a 3D printed Jig and then loaded into the film holder. From there it operates just like a pin hole. The lens is simply uncovered to make the exposure.

ABOUT THE PICTURES

I've only gotten a few successful shots made with this camera. And if i'm honest I think they are surprisingly good considering what is making them. The pin hole is not large enough to cover the whole negative, so what you end up with is a little circle on the smallest piece of film you can imagine.



CREATOR

Lucus Landers
@cropped_camera (IG)
<http://www.lucuslanders.com>

CAMERA NAME

Landers B35

CATEGORY

35mm

TYPE OF BUILD

Started with a lens and built a camera around it.

ABOUT THE BUILD

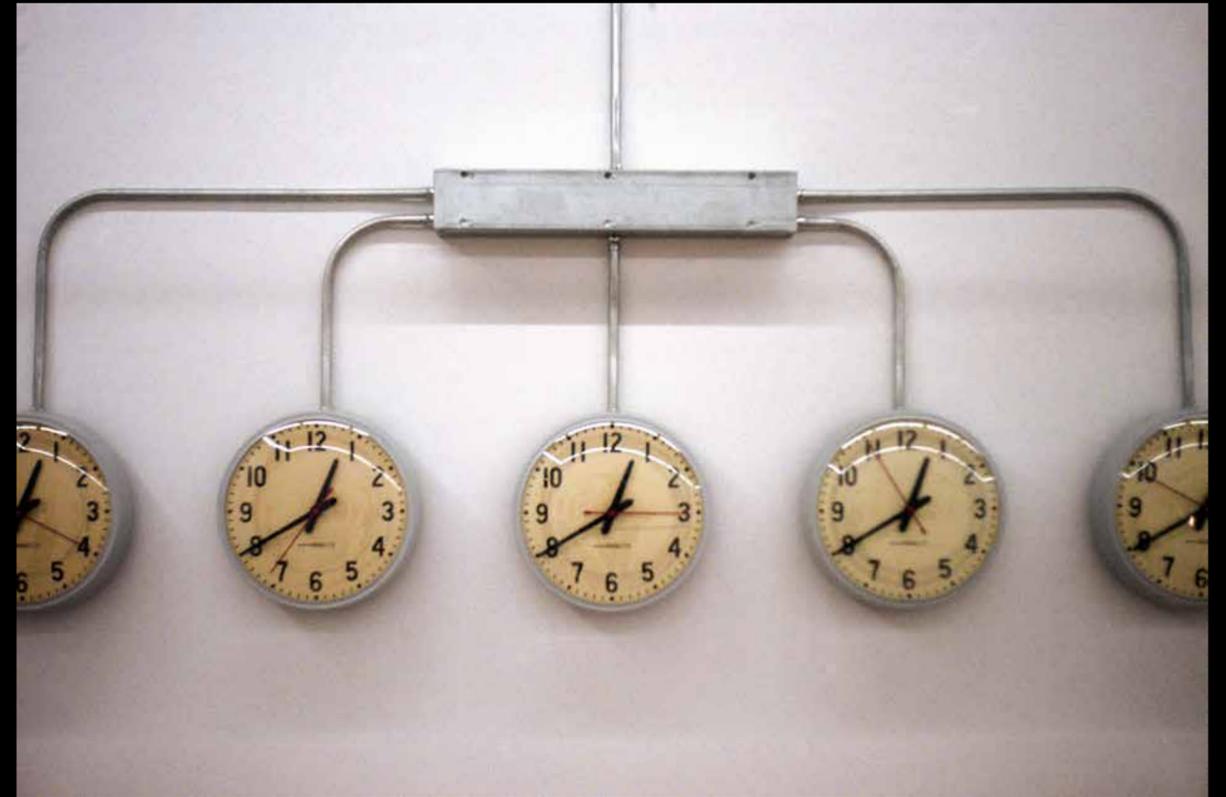
This camera is by far the most complicated I have ever made. It required the crafting of over 100 hand made parts. Some were made with CNC, but most were made on manual machine tools or hand shaped with files and a jeweler's saw. It took over 6 months start to finish to build.

WHAT IT'S LIKE TO SHOOT

This camera was designed for street photography. I mostly shoot with it from the hip. Very fast and stealthy.

ABOUT THE PICTURES

So far I've only shot a dozen or so rolls with it and I'm very happy with how the photos turn out. They are decently harp and the 500th of a second leaf shutter means I can shoot while walking and still get an image that looks good.



CREATOR

Jonas Lundström
@kollimatorn (IG)
jonasfx (Flickr)

CAMERA NAME

BAC-32v

CATEGORY

Other (please explain in description)

TYPE OF BUILD

Started with a lens and built a camera around it.

ABOUT THE BUILD

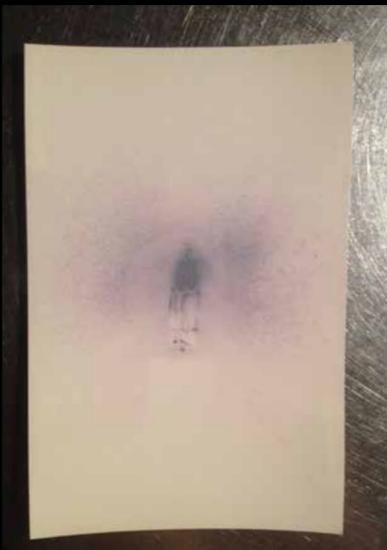
Had a small enlarger lens and wondered how large image circle it could through. I made a hole to stick it into in a cardboard box. Realised I could just lead the thing up and shoot with it so off I went. Sealed the opening with washi tape and covered up the box with a t-shirt.

WHAT IT'S LIKE TO SHOOT

Because I only shot this straight up, I didn't have to secure the paper used as the catching medium. No was to adjust focusing meant I had to build a stand to get it where I wanted it.

ABOUT THE PICTURES

It's the lamp in my kitchen fan with some snazzy gift wrapping paper behind it (yeah, the paper got burnt)



CREATOR

Jonas Lundström
@kollimatorn (IG)
jonasfx (Flickr)

CAMERA NAME

BAC-44

CATEGORY

Other

TYPE OF BUILD

Started with a lens and built a camera around it.

ABOUT THE BUILD

Trying out my proof of concept Fox Talbot inspired camera. Another Cardboard box camera. I sorted out so it would be able to focus a little bit with pushing the part where the lens sits in or drag it from the part with the taking photo paper on.

WHAT IT'S LIKE TO SHOOT

I really liked the use of the focus hole to check focus and frame with. Covered the box up with some clothes against light leaks and let it sit with a decent subject in good sun light through the window. 20 minutes with the lens at 4,5 aperture setting managed to give some sort of image on the photographic paper even without developing.

ABOUT THE PICTURES

It's Pippi Longstocking! I tried fixing the photo but most of it got lost with that. I might try it again with a more gross exposure. Fixing seems to work for people that do photo-grams at least.



CREATOR

Jonas Lundström
@kollimatorn (IG)
jonasfx (Flickr)

CAMERA NAME

BAC-61

CATEGORY

Other

TYPE OF BUILD

Started with a lens and built a camera around it.

ABOUT THE BUILD

I saw this Chinese knock off antique cup with box in the second hand shop. Bought it and gave away the cup. Time to build a camera! Bought the cheapest magnifier I could find and took care of a discarded inner roll from the loo at work. Cut a hole, magnifier lens in tube and PRESTO a camera is born!

WHAT IT'S LIKE TO SHOOT

The tube focuses well enough and the magnifier lens throws a bright image so it's easy to compose and check focus when opening the lid on the box. I've attached photographic paper in the back of the camera as catching medium. I was gonna do a magnetic solution but this worked so well so I haven't bothered. Big plus that the cup box came with a carrying strap!

ABOUT THE PICTURES

At first I tried a over head shot of my living room as the sun was coming in there but I had trouble checking focus on the top of the shelf and winged it a bit. The photographic paper managed to react enough to make something out without developing with enough light but was a bit fuzzy. I decided to try again with the evening light with an angle that was easier to focus. This time I focused with the paper already in place as I noticed not much happened to the paper with handling it in the middle of the room. With that the resulting window shot came out much better.



CREATOR

Jacob Reynolds
@the_lofi_guy_ (IG)
<http://www.thelofiguy.com>

CAMERA NAME

Lumen Box

CATEGORY

Other

TYPE OF BUILD

Built from scratch with few already-existing camera parts

ABOUT THE BUILD

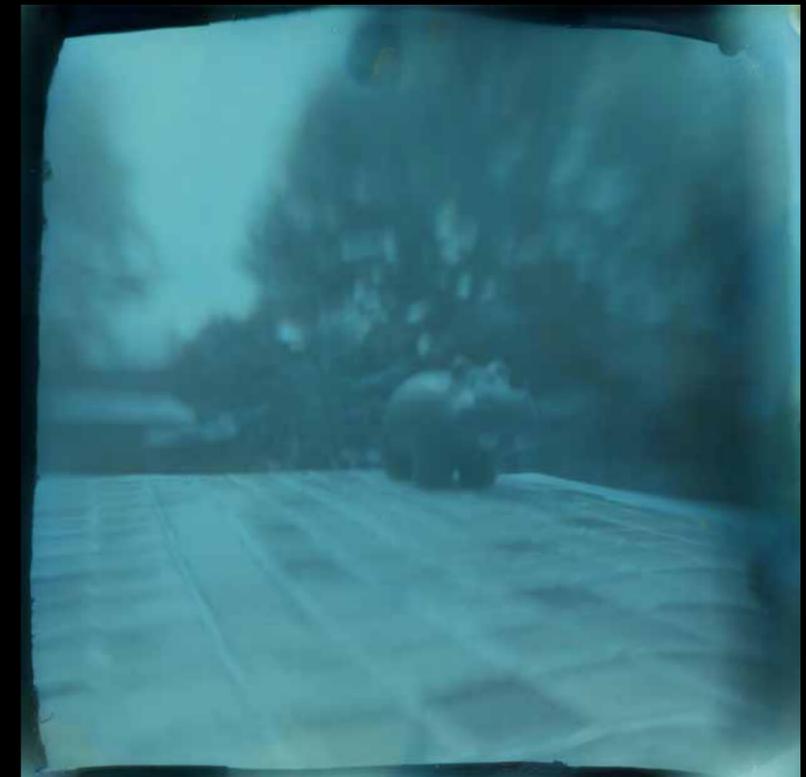
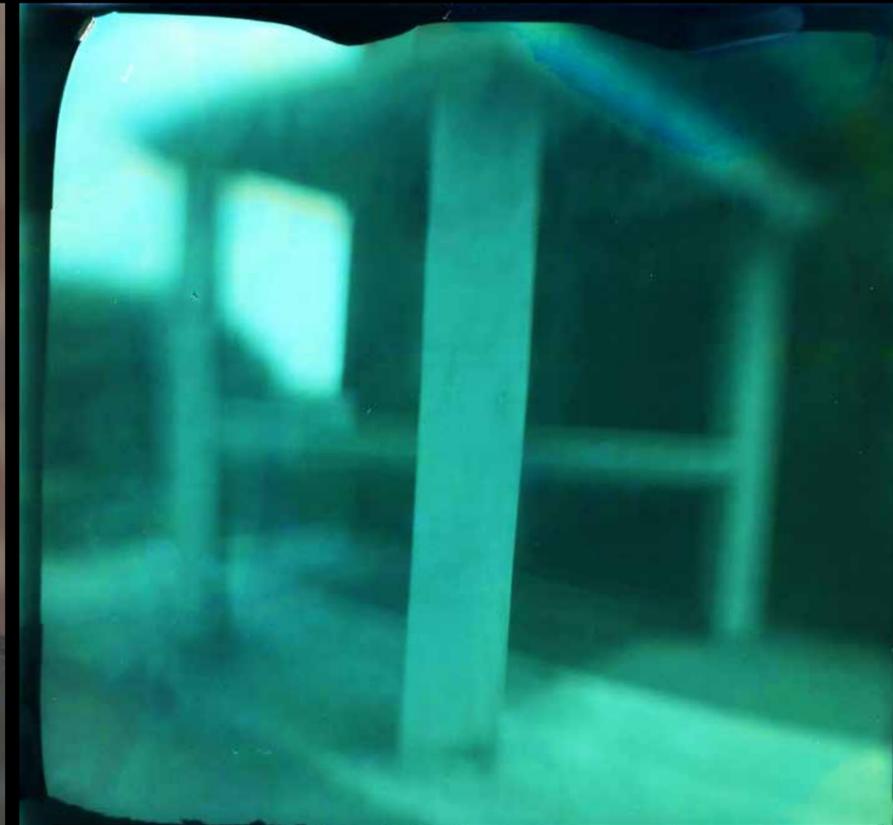
This camera is built for lumen photography. It is a wooden box constructed from 1/4 inch plywood. I made a lens board from foam core, and the lens is from the inside of an old slide projector. The back is made from foam core and pressure fits onto the back. This is what holds the paper negative in place.

WHAT IT'S LIKE TO SHOOT

It involves lots of trial and error. Focusing is mostly guesswork, however when it is successful the images are beautifully abstracted. If I really want to make sure something is in focus, I use a piece of parchment paper as a makeshift ground glass to make certain the focus is how I like. It is nice because all you have to do is set it outside and come back in an hour or so to a photo. Shooting the image is only half the battle. After I get the paper negative, I scan it on my flatbed and invert it and make adjustments in photoshop. This is a hybrid process after all.

ABOUT THE PICTURES

These pictures are shot on my back patio. Featuring my famous foam hippo.



CREATOR

Manuel Lion
@manuel4x5 (IG)

CAMERA NAME

Blue Box Camera (BBC)

CATEGORY

Large Format

TYPE OF BUILD

Started with a lens and built a camera around it.

ABOUT THE BUILD

I love pinhole photography and have been using commercial pinhole cameras for some time. However, sometimes I would have liked to take pictures with a sharp, wide angle lens in addition to the pinhole. I built this camera with an interchangeable lens board to accommodate both, a wide-angle lens as well as a pinhole plate. The camera is built of several layers of laser cut plywood. I still had to do quite a bit of sanding and make some adjustments and rebuild two lens boards as it turned out my initial measurements were not all that precise. Before the final wooden camera, I built some of the more complicated parts, like the back, out of foam board the same thickness as the plywood to test if my concept was working. Some metal parts are from a pinhole company, but I got most from the local hardware store. I decided to paint the camera TARDIS blue, mostly because the burnt edges from the laser cutter didn't look all that pretty.

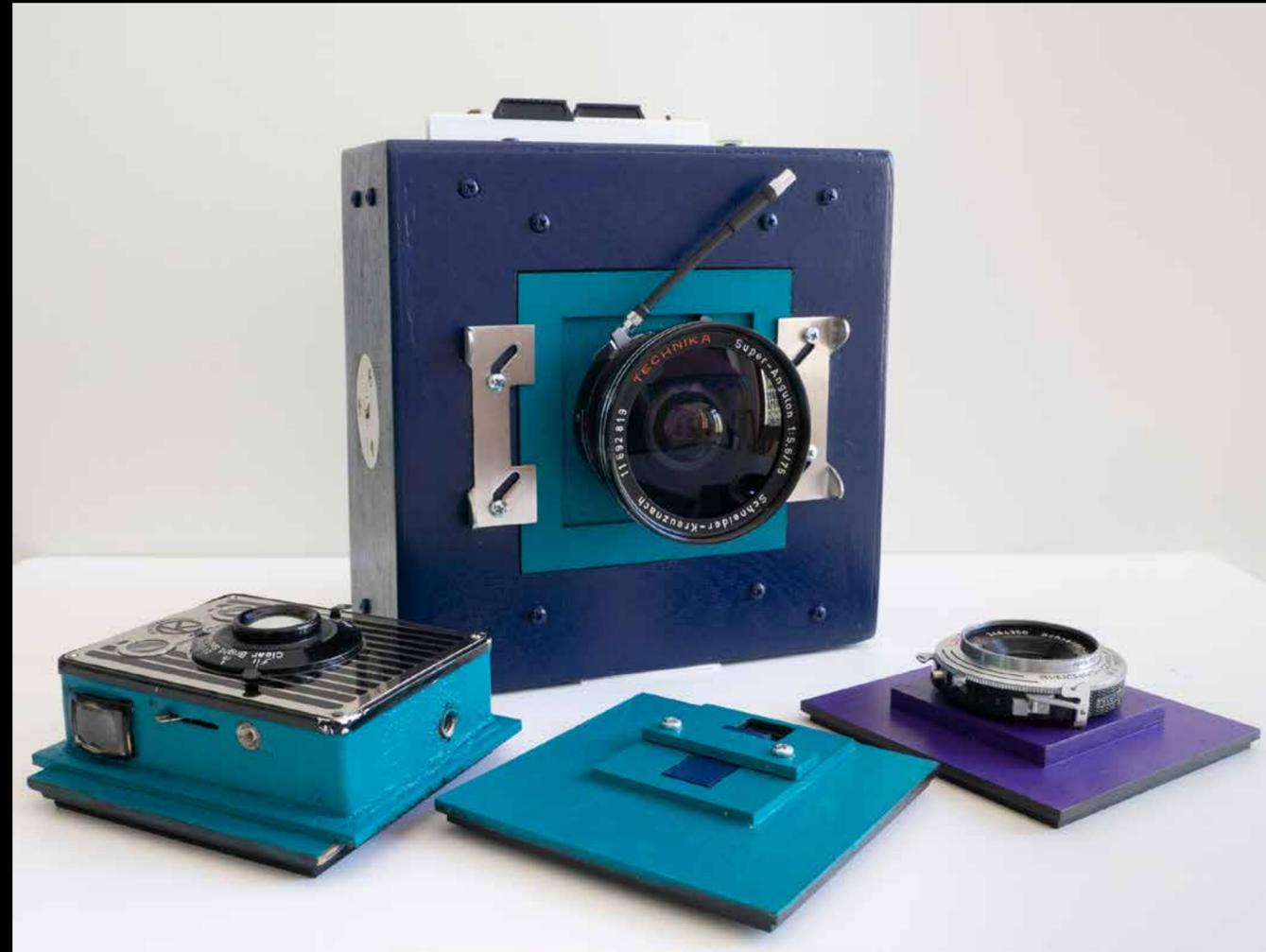
WHAT IT'S LIKE TO SHOOT

The camera is very robust with the 9mm thick plywood body and can easily take a fall. I love using it with the 75mm Super Angulon and pinhole. As I am used to this focal length from my other pinhole cameras, I find it easy to compose a shot without ground glass. Still I use a ground glass sometimes for the 6x12 back or when I am using graduated filters. As the camera does not require focusing, but uses stopped down lenses at hyperfocal distance, it is very quick to shoot for a large format. This allows me to take it out on family trips.

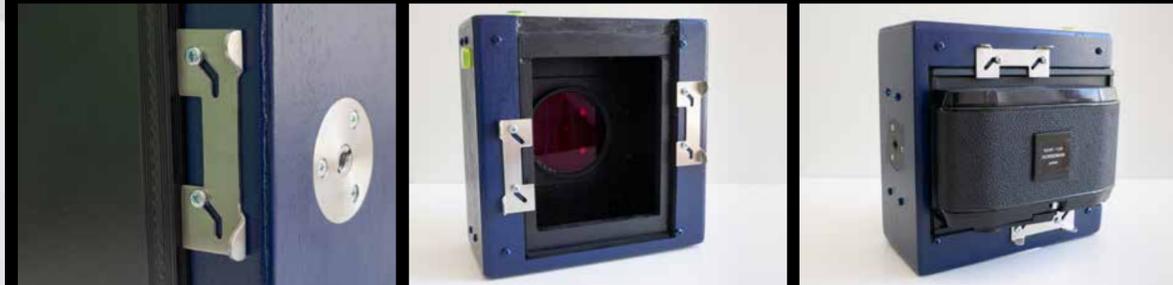
On the downside, the camera is a bit bulky. If I rebuilt it, I would try to make it a little smaller. The half Brownie mounted on a lens board is a recent addition and a bit experimental. I am not overly thrilled about how this performs as it does not focus to infinity. Still, I like the swirly effect it gives at the edge of the image.

ABOUT THE PICTURES (Clockwise from upper left)

Blue Box Camera along with the different boards I am currently using: Super Angulon 75mm, Angulon 90mm, Pinhole, Half Brownie; Picture taken with the camera, 75mm Super Angulon lens and 6x12 back at Stanage Edge in the Peak District. I used Fuji Velvia as film and a graduated filter to reduce the brightness of the sky; Three images from the back of the camera: The sliders on the back can be pushed



out to hold roll film backs, view through the back of the camera with the pinhole plate mounted. The pinhole board has a 77mm filter ring on the inside to attached regular filters. At the bottom the rubber light seal is visible, The slides on the back fit into the groves of the 4x5 holders and hold them tightly. The back has rubber strips around as light seals. The outer layer of the camera body has a cut-out, so the tripod mount is flush to the surface; One of the first test pictures taken with the camera and Angulon 90mm lens and 4x5 sheet film at the local forest (Odenwald / Forest of Odes); Recent test shot with the new pinhole plate and 4x5 sheet film in my parents' garden. The first pinhole board I had built for the camera had some issues with light leaks, so I had to change the design slightly.



CREATOR

Masumi Yamamuro
@ surgeon24hrs (IG)
surgeon24hrs (Flickr)

CAMERA NAME

Pinoramic

CATEGORY

120

TYPE OF BUILD

Built from scratch with few already-existing camera parts

ABOUT THE BUILD

This is a 6x12 panoramic wooden pinhole camera. It takes 120 roll film. Film surface is curved. Viewfinder is a 120 degrees door peep hole. Film holder is made of four caps of plastic bottles.

WHAT IT'S LIKE TO SHOOT

I love shooting pinhole at night.

ABOUT THE PICTURES (Clockwise from upper left)

Front view of the camera; Statue in San Diego, CA; Inner unit of the camera; Radio City Music Hall in New York



CREATOR

St.John Fuller
@st.johnfuller (IG)

CAMERA NAME

The Thing - this is the name given by the family

CATEGORY

Other

TYPE OF BUILD

Built from scratch with few already-existing camera parts

ABOUT THE BUILD

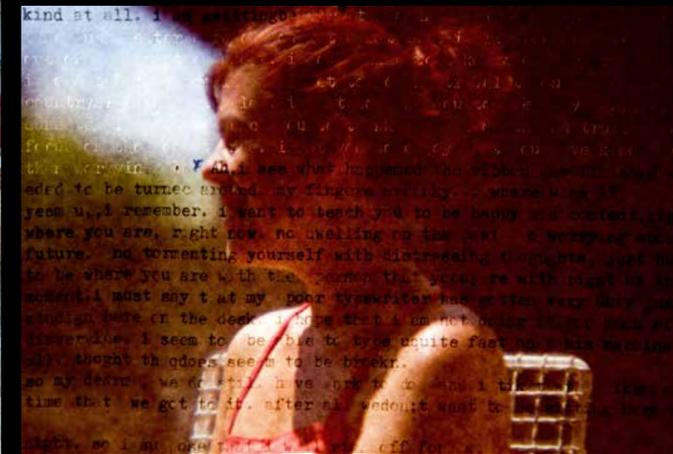
This camera started life as a commission. An artist wanted to have a camera obscura that could be used with their regular SLR. Everything went fine up until the point I decided to make one for myself. Despite me designing the whole apparatus, including adding features that he hadn't even considered, suddenly I was persona non grata, the devil in human form. So what was a good friendship ended there and then.

WHAT IT'S LIKE TO SHOOT

The lens is a regular optical lens, much like one that you would find in a pair of specs. To focus you slide the front of the camera in an out. Inside the camera there is slot into which you can slide a piece of ground glass. It is onto here that an image is projected. Through a hole in the back of the camera you can see the projection. It is this projection that you take a photograph of. Other material besides ground glass can be used. I used a technical drawing for one of my test shots. Sheets for lamination work well as well. The camera is a little clumsy but is a great teaching aid to show kids as the depth of field is quite shallow. My arm is a bit short to operate the manual focus, but I couldn't make the camera shorter because then then nothing would focus IE the lens onto the ground glass or the camera onto the ground glass, but it works. The legs are a bit tricky to manage but they are stable and allow you to level out the camera obscura. You are just quite limited in the angle you can look up or down.

ABOUT THE PICTURES

The pictures are mainly test shots. The one image was of a view projected onto a technical drawing. The other shots are of views projected onto laminating material. Before inserting the laminating material into the camera we played around and used an old typewriter to write onto the material.



CREATOR

Ethan Moses
 @cameradactyl
<http://www.cameradactyl.com>

CAMERA NAME

CAMERADACTYL HOMONCULUS 69

CATEGORY

120

TYPE OF BUILD

Started with a lens and built a camera around it.

ABOUT THE BUILD

Ethan Moses designed and built this camera so that Nick Lyle would stop nagging him about how great it would be to have a camera built like the Cameradactyl OG, but with the smaller 2x3 Graflok back and a bayonet mount for Mamiya-Press lenses. Nick helped test the prototypes and refine a few details so that the camera would mesh better with the somewhat eccentric Mamiya-Press system. This process involved quite a few FaceTime exchanges and various lenses and parts were sent back and forth through the mail. The body is 3D printed plastic with steel screws allowing moving parts some ability to adjust. It takes 2x3 Graflok film backs, including RB67 backs and Ethan designed a breech-lock mount for the Mamiya-Press lenses, which come with their own shutter, aperture and focusing helical.

WHAT IT'S LIKE TO SHOOT

Shooting this camera is most reminiscent of shooting the classic press cameras, but it is handier and probably a lot more sturdy. It does not have the coupled range finder found on Graphic and Mamiya-Press cameras, so focusing is either by scale (I use a cold-shoe mounted uncoupled range finder) or using a ground glass back. Composing the shot is either done with the ground glass, or with accessory finders. When you want a lot of control, use the ground glass. When you want to shoot fast, or when you don't want to see the world upside down and backwards from under a cape, use scale focus and an accessory finder. That is most people's favorite way to use this type of camera. After setting the exposure and focus you are free to forget about everything except for composing and timing the shot. Mamiya-Press lenses are also a lot of fun, with a variety of interesting lenses that have varied characters and function more like large-format lenses than like the lenses found on more "modern" cameras. The various focal lengths include several Tessar designs, a wonderful ultra-wide Biogon (50mm), a Super-Angulon type (75mm), a Planar (the 100mm/2.8) and a Sonar-type (250mm/2.5). These lenses make the kind of images on film that Nick likes to work with, and the homunculus is the ideal light but very strong body to take them on adventures where more delicate cameras fear to tread. It is often worth using a tripod, especially with medium format cameras, even though the Homunculus is easily hand-held, because of the narrower plane of focus typical with medium format lenses. Using a tripod results in better image



sharpness overall with any camera. For close-up hand-held work stop down enough to make small variations in focus distance less problematic. The Homunculus with a typical lens, loaded film back and accessory finders weighs around 3 pounds.

ABOUT THE PICTURES

The photo of the Homunculus from straight-on shows the 100mm/3.5 mounted. The image from an oblique angle shows the 50mm/6.3, and you can see an RB67 film holder mounted on the back. The hand grip can be mounted on either side of the camera. One image, made with the 50mm shows tall Red Alder trees looming high above the camera. That shot was taken on a tripod at 1/8 second and f/16. The other image is monochrome and was made with the 65mm lens at 1/125 and f/8. An RB67 film back was used for both of these images.



CREATOR

Nick Lyle
 @avynick (IG)
<https://www.flickr.com/photos/51834204@N07> (Flickr)

CAMERA NAME

Crown-Field

CATEGORY

Large Format

TYPE OF BUILD

Modification (mostly built from one camera)

ABOUT THE BUILD

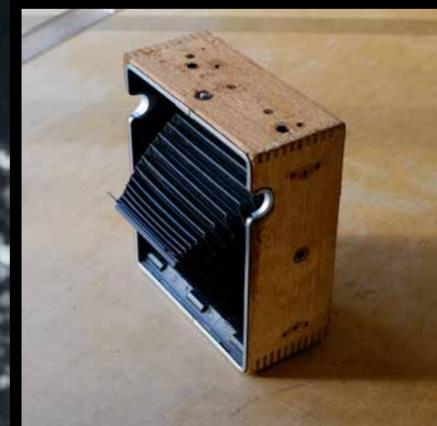
I was given a hopelessly mildewed Crown Graphic, so I stripped off the leather, removed the whole front door, focusing track, all the accessory parts and the front standard, leaving just a box with a 4x5 Graflok back, bellows and the lens-board mounting unit. I then mounted the box (essentially the rear standard) on a cheap off-the-shelf focusing rail and added more cheap sliding rails home-made connectors, knobs, bolts and arca-swiss style connectors to create expansive adjustable movements for the front standard. This camera takes 4x5 sheet film and 45 mount Graflok roll film backs and any lens that can be mounted in a Pacemaker Graphic lens board (within the limits of the bellows draw).

WHAT IT'S LIKE TO SHOOT

This camera is fun to use. It is still a bit rickety, and the movements are not exactly machine-perfect in operation, but you can make it do all sorts of fun things, it is very light and portable, quick to set up and very versatile. Since I also shoot with my dad's old Crown Graphic and my Mercury Cameras also can mount Pacemaker Graphic lens boards this camera is convenient to use with a few lenses that I keep mounted in Pacemaker Graphic lens boards. These are mostly old-school press lenses, so movements may be limited at 4x5, but they are generous with roll film backs mounted, and I also have a few 4x5 lenses with large image circles that will mount on these lens boards. The old lenses are relatively fast, so the Graphic ground glass, with it's Fresnel screen and pop-up shade is quite easy to use for focusing outdoors, even in bright light. Focusing is accomplished by adjusting the rear standard, so there is no need to re-set the movements after making final focus adjustments; this feature is a big plus, especially with the somewhat wonky nature of the adjustments on this particular camera.

ABOUT THE PICTURES

The color picture of a garden shed was made with Ektar 100 and a Rodenstock 127mm Ysarex lens off an old Polaroid Pathfinder. The black and white shot of the same shed, as well as the close-up of thistles, was made with Ektar, converted to monochrome after digitizing with a Fujifilm X-T2 and adapted macro lens. The two monochromes were shot with the old 135mm Optar lens from my dad's old Crown Graphic.



CREATOR

Nick Lyle
 @avynick (IG)
<https://www.flickr.com/photos/51834204@N07> (Flickr)

CAMERA NAME

Lomoigtlander

CATEGORY

Other

TYPE OF BUILD

Modification (mostly built from one camera)

ABOUT THE BUILD

I have this Lomography Belair with a super-wide 135mm film panorama back on it. All I did was make a cardboard lens board so I could mount a 105mm lens and shutter from a broken Voiglander Bessa 6x9 camera from the 1930s. Gaffer tape and scissors were the only tools required for the build, but I needed a lens spanner to get the lens off the old camera. It took a bit of futzing around to get the camera to focus at infinity; I used scotch tape to make a temporary focusing screen (the tape is the screen) for this process. The shutter on the old Voigtar lens has a "T" setting, and the automatic exposure shutter on the Belair has a "B" setting, so I can use either shutter with this setup. The lens has no problem covering the very wide panorama, and makes a decent image.

WHAT IT'S LIKE TO SHOOT

This camera is easy to shoot, though the Belair's optical viewfinder provides a small and distorted view. It can be shot in auto-exposure mode, but for whatever reason I had better luck using the shutter on the old Voigtar lens and setting exposure manually. The Voigtar lens has its own focusing ring, but I simply set it to infinity and stop the lens down.

ABOUT THE PICTURES

The picture is of morning light spilling through a gap in a hedge. It was taken with Fujifilm Superia 400, converted to monochrome after being digitized with a Fujifilm X-Pro1 and adapted macro lens. The old Voigtar lens isn't a great color-film optic.



CREATOR

Nick Lyle
 @avynick (IG)
<https://www.flickr.com/photos/51834204@N07> (Flickr)

CAMERA NAME

Pinblad Deluxe

CATEGORY

120

TYPE OF BUILD

Frankencamera (heavy modification combining two or more cameras into one)

ABOUT THE BUILD

A friend sent me a broken Hasselblad. I figured out how to flip through the various configurations that leave both the back and front light doors open, turning the camera into a simple box. The film holder is no longer tied into the complex Hasselblad interlock system, fortunately these old film backs still have a window that lets you use the backing paper to advance the film, simply by turning the crank. I took the bayonet mount off the old lens (beyond repair) and used "Sugru" workable putty to mount an old Ilex #3 shutter on this Hasselblad bayonet mount. I then used gaffer tape to mount a "Reality So Subtle" 0.4mm pinhole on the opening in the shutter. I like using a cable release with pinhole cameras, to reduce camera movement, and this old shutter provides some slow shutter speeds that might be handy with fast film in bright light. I also have some old Hasselblad extension tubes, allowing me to vary the focal length of the camera, as well as a helical that I can connect to a Hasselblad bayonet adapter . . .

WHAT IT'S LIKE TO SHOOT

This is by far the best-performing of all my pinhole camera building attempts. I don't have much practice with pinhole, and don't like most of my attempts to work with my own pinhole cameras, but I did really enjoy shooting the Pinblad Deluxe. You just advance the film using the window and crank, point it at something, figure out the exposure by multiplying the shutter speed reading at $f/16 \times 272$, press the plunger with the shutter on "B" and use a clock to time the shot. The table-top tripod is very handy, and I have a little viewfinder mounted on top of the camera that allows me to compose the shot.

ABOUT THE PICTURES

The photo here was taken at sunset at the beach. It is a 3 minute exposure of a passing cruise ship, with the Olympic Mountain range and Admiralty Inlet in the background. The cruise ships move fast here, so all you see is that white glowing line. That is great because those are some dog-ugly ships. I shot this on Portra 400. Photoshop was unable or unwilling to stitch together the two macro shots I made of the negative; perhaps the details are too vague for the Adobe Algorithm to handle. The negative was digitized with a Fujifilm X-T2 and a Minolta Celtic 50mm/3.5 macro lens.



CREATOR

Nick Lyle
 @avynick (IG)
<https://www.flickr.com/photos/51834204@N07> (Flickr)

CAMERA NAME

Mercury Universal Cameras

CATEGORY

Multiple Formats

TYPE OF BUILD

Other

ABOUT THE BUILD

When I started getting interested in building cameras for myself I discovered the Mercury System, then still in a Kick-starter phase. The Mercury system is the closest thing to a universal kit-camera yet devised. Using combinations of the myriad 3D printed components available from Mercury Works it is possible to join up a huge variety of lenses, shutters and film backs to create a wide array of camera configurations. It is kind of like working with camera legos to build all sorts of interesting cameras. I put together a kit of basic parts to work with 4x5 and medium format film and started shooting with Mercury cameras a couple of years ago. These cameras work best with old school lightweight lenses, such as the classic Schneider Kreuznach 90mm Angulon and similar lenses. Based on helical focusing mechanisms, these cameras are not able to provide movements, so there is no need for the large lenses that provide large image circles. The components, 3D printed in ABS plastics are strong and very light, but the designs are oriented to near infinite flexibility, so they tend to be made up of a lot of parts, held together by slender bolts. These cameras are strong, but not beefy. They handle best with lenses of moderate size. Most configurations are, like the Press cameras I favor, set up to offer a choice between ground glass or viewfinder shooting. Working with Mercury components taught me the basics of camera building and got me started on my obsession with simple but very versatile cameras of the Press Camera type. The components are designed to be easily joined, and could easily be adapted as components of homemade cameras. The Mercury system is also open-source, so contact the inventor, Zach Horton, through the Mercury Web site if you are interested in developing new Mercury components, or if you want to order Mercury components. The Mercury web site is a gold mine of information on classic camera components, lenses, film backs and accessories that work great for building DIY cameras: <http://mercurycamera.com/cameras/>

WHAT IT'S LIKE TO SHOOT

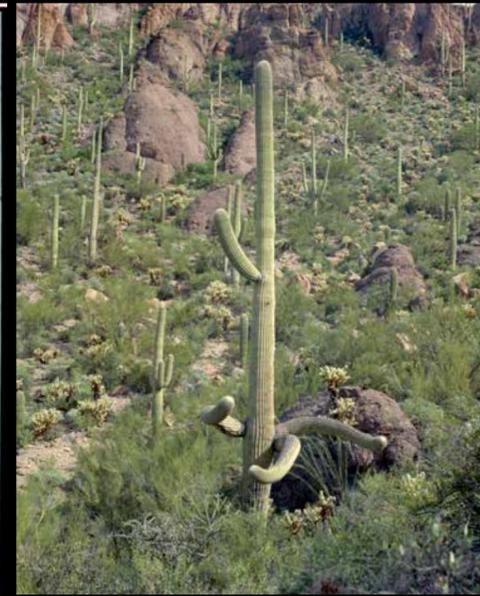
These cameras are very light weight, easy to use hand-held if your lens provides a fast enough shutter speed. They are excellent both for hand held use with a viewfinder and for ground-glass shooting on a tripod. Their main drawback is that, since they are designed for near-infinite flexibility, they are never perfect for just one use. On the other hand, the



medium format Mercury with the 90mm Angulon mounted is one of my all-time favorite cameras.

ABOUT THE PICTURES

I have included some shots of various camera configurations, including some with the 4x5 Graflok back and some with the 2-1/4 x 3-1/4 Graflok back, as well as a number of photos taken with these different configurations of Mercury components and various 120 roll film backs, all the images shown were made with the Schneider Kreuznach 90mm Angulon, which is my favorite lens to use on Mercury bodies. There is also a photo showing an RB67 roll film back that I converted to a 24mm x 65mm panorama back that takes 35mm film using a DIY kit provided by Mercury Works. There is also an example of a photo taken with this excellent back on color print film. The final shot is a black and white panoramic double exposure, with the first shot made on this Mercury RB67 pano roll film back (in a Mamiya-Press camera with the 50mm lens) and the second exposure made by Graham Young in his homemade FrankenBessa camera. This Mercury kit provides very good film flatness and ease of use. You get 15 X-Pan sized shots from a 36-shot roll. The only hitch is that you need to rewind the film in a dark-bag or dark room. The examples shown here are just the tip of the Mercury iceberg.



CREATOR

Graham Young
@GrahamHomemadeCamera (IG)
FreezerOfPhotons (Flickr)

CAMERA NAME

24Squared

CATEGORY

35mm

TYPE OF BUILD

Built from scratch with few already-existing camera parts

ABOUT THE BUILD

This camera was inspired by an offhand comment from Corey Cannon on The Lensless Podcast about wanting to shoot a pinhole camera with a square image on 35mm. I decided I could make one.

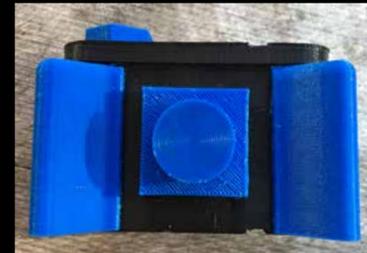
I designed it using Autodesk Fusion360 and printed the early prototypes on a Makerbot 5th Gen. I had three batches of cameras printed by Ethan Moses and offered them for sale on my etsy shop. I still have a few left if anyone's intersted.

WHAT IT'S LIKE TO SHOOT

The camera is small enough to keep in a pocket without the accessory grip (the blue item around the body). The lens cover is attached via magnets and stays in place very well. It is easy to use hand-held.

ABOUT THE PICTURES

This is the first paragraph.



Thank you!

We would like to, of course, thank the contributors to this zine. Without your work, this would be a very short work.

Thank you to those of you who listen to our podcast, The Homemade Camera Podcast. If you are not a listener and are inclined to listen to podcasts, you can find us anywhere you find your other podcasts. We also have a website, homemadecamera.com where all of the episodes are archived.

This zine is a document of a community that has improbably held onto the analog production of imagery in a world that is increasingly dominated by the movement of digital information. This document itself is a work of digital reproduction and in that we recognize our debt to the digital world. If it wasn't for the information age, it would be doubtful that many of us would have found each other. We are not Luddites, we are people who recognize the value in methods of the past.

The film photography community is important to us and, I think, we are important to the community. Some find the film-centered podcasts as center for the community. Others find social media outlets as powerful connectors of like-minded artists, engineers, hobbyists, and tinkerers.

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