## Bruce Viney Free Puzzles



This was brought into being in order to allow the creativity of the late Bruce Viney to remain available to the world of puzzle box enthusiasts. Bruce gained a worldwide reputation as a puzzle box designer extraordinaire and the plans he created managed to breach the divide between the straightforward to the intricate and as Bruce himself might have called it, "the dastardly".
Bruce, like many creative people, had a wide range of interests. He was an enthusiastic amateur photographer and that interest led him into film and later video making. Of course Bruce being Bruce was not satisfied with just being behind the lens; he was also the scriptwriter, sound engineer, editor and even occasional actor.

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Rock and roll music was another consuming passion and he built up quite a following in his native North East England as a sought after DJ when he could be seen in full 'Teddy Boy’ drapes. What Bruce didn’t know about the US and GB rock and roll scene probably wasn't worth knowing. Not that he would think that. To Bruce every bit of information was another mine to explore and it was this inquisitiveness and lateral thinking which resolved itself in his extraordinary ability to create and build the plans and puzzles so beautifully set out in this website.
It is some measure of the man that whilst being gregarious in his interests he was also modest and it is doubtful he was aware of the pleasure the enthusiasm his various interests brought to the lives of others. Never was this more evident than in Bruce's sharing, worldwide, his love of puzzle boxes, their planning and their creation. As anyone interested in puzzle boxes would testify, its one thing to have an idea but quite another to bring it to life. Bruce's puzzle box plans had a worldwide reputation as evidenced by the many tributes paid to him from all corners of the globe following his death.

The descriptions of the puzzles in this document were taken from Bruce's original website, which no longer exists. His son, Rob, now owns the plans and, while there are plans to put a new website up, this will need to suffice in the meantime.

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## Ball In Cage

A solid wooden cube, with a steel ball bearing inside. The holes are obviously too small for the ball to get out. The wood has not been cut and re-glued together, nor has it been steamed.
How do you get the ball out?
How did I get it in?
Not my design: I got this free from the web.
You will kick yourself when you find how to do this simple puzzle!


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## Black Nightmare

A $3^{\prime \prime}$ cube, with a panel on each side. On two sides, this panel is split in two, both pieces moving independently. Whatever moves you do on this side, you must also do on the other side. By moving these four half-panels in unison, you can move the other sides, and eventually remove them altogether.
Not too hard to make, using 4 mm plywood. Very difficult to solve. Minimum 13 moves.


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## Brown Slidey

There are four sliding blocks within a box, two above and two below.
The top layer of the bottom blocks slide into the bottom layer of the top blocks. By moving all the blocks around, they can eventually be removed. Difficult to get the blocks out. A lot harder to put them back in.
The Solution (and you'll need it) is included.
The size of the box is $2-1 / 2^{\prime \prime}$ by $2-1 / 2^{\prime \prime}$ by $2-1 / 4^{\prime \prime}$ if made from 1/4" wood, but the plans are now T-Plans, allowing


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## Burr

Six Piece Burr: Most six piece burrs have one piece which locks the whole thing together. This one is different. Three pieces fit together, then the other three fit together, then both groups fit together. From the book "Puzzle Craft" by Stewart T. Coffin. Easy to make, extremely difficult to solve.

Simple Burr: Another six piece burr, this one has a single piece which locks the whole thing together.
Not my design, I cannot remember where it came from. Still quite hard to solve.


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## Chinese Torture

The red box is $21 / 2^{\prime \prime}$ square, with two green panels on each side. Every outer panel can move, but none of the inner panels can move at first. By moving all of these pairs of panels, you can eventually remove one pair of panels, opening the box.. There is no obvious starting point, and if you move the wrong panels first, the box will lock. Even if you find the correct panels first, you can still lock the box, but you won't know this, because everything seems to be working! 13 moves to open, if you know how. Extremely difficult to solve!

Cutting: easy. Assembly: Not too bad. Size of the box is $3^{\prime \prime}$ by $3^{\prime \prime}$ by $3^{\prime \prime}$, if made from $1 / 8$ ", but the plans are T-Plans, allowing you to make this at any size.


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## Cubey

The smallest and simplest of the puzzle boxes-the box is only 2" x 2" x 2", with a little sliding panel on each side. Only one panel will move, simply find this, then another panel will move, and so on, like "follow my leader", until one side can be removed. But halfway through, you discover that more than one panel can be moved.
Easy to make and easy to open-it takes only seven moves. The little panels are covered with a Celtic pattern; these are included in the plans, which are now T-Plans, allowing you to make this at any size.

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## Cubey 2

Same size as Cubey: 2" each way. Same single panel on each side. So what's different? Look at the edges-just a single line! Every side is joined to its neighbour by a bevel joint, and the grain on each side is 90 ; to the next side, making it impossible to tell which side you're looking at. Is that all? NO. Every panel now has to be moved TWICE in order to open the box. Once you've started, there are two possible panels to move, the one you've just moved, and the next one to be moved, but because you can't tell where you are, you might go backwards instead of forwards. You might never get to open the box, just going backwards and forwards for all time...
The box is made from $1 / 8^{\prime \prime}$ and $1 / 4^{\prime \prime}$ plywood. Easy to cut, assembly is a little tricky. Very hard to open...


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## Diamond Cube

This puzzle was sold years ago, and there can't be many people who haven't bought one. I did, and I've just found it again! Bill decided to make one (having lost the original), and managed to find a picture of the cube and the separate parts. With that, and his memories of it, he's made another Diamond Cube. He's also kindly sent the plans he made.


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## Flat Puzzles

Weird Puzzle: Five pieces of wood in a tray. The big triangle never moves. Two L-shaped pieces are taken out, the two smaller triangles are swapped. When the first two L pieces are put back, there's a hole! Where does the hole come from? Take the L pieces back out, move the two smaller triangles again, and put back the first two pieces. The hole has gone!!! What happened to the hole???

You could make this puzzle in about an hour, using either cardboard or plywood. Not my design: I found this on a Youtube video by Tomlan.
Thanks, Tom, for permission to use this.
Flatpack: Four "L" shaped pieces and a square piece are contained in a frame. The four $L$ pieces form a hole in the middle, and the square piece is positioned outside the
 four. The object of the puzzle is to get the square piece inside the middle hole, surrounded by the L pieces.
You're not allowed to remove the pieces, only slide them around. The five pieces are made from $3 / 16^{\prime \prime}$ ply: the case and lid are made from $1 / 8^{\prime \prime}$ ply.
Solution supplied by Wayne Winders, who made this puzzle, and worked out a solution!

## Glass Maze

Not really glass of course, but made from the transparent parts of old CD cases. The cube is about $21 / 2^{\prime \prime}$ on each side; made up of six pieces on the outside, and six pieces on the inside, making 27 little boxes inside. Each little box has a hole in each side.
The steel ball bearing is 9.5 mm in diameter, and some of the holes inside will allow this to pass through-others holes are smaller, and will not allow the ball through.
The idea is to put the ball in the blue-ringed hole, and get it out the other side, through a red-ringed hole. There are a couple of "dead ends" in the route through the maze, to make it harder....
In case you're wondering, there are 108 holes in this thing. If you decide to make
 this, you'll spend a lot of time drilling holes...
Glued together with plastic model making cement, or super glue.

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## Green Slidey

The green box is $21 / 2^{\prime \prime}$ square and $11 / 2^{\prime \prime}$ deep. There are four blue blocks, each is $1^{\prime \prime} \times 1 / 2^{\prime \prime} \times 21 / 2^{\prime \prime}$. These blocks slide in and out of the green box. The idea is to remove them all, and they are interlocked with pins and grooves.
But they can be removed!
Fairly easy to make, all 1/4" plywood. Difficult to get the blocks out. A lot harder to put them back in.

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## Little Box

This is actually the smaller box that fits inside BboxX (see the paid puzzles), but it's such a neat little box that it deserves a plan of it's own.

This is a "casket type" puzzle box, and is a good introduction to making those type of boxes, which can get quite complicated. This one takes only 11 moves to open, and is fairly easy to make.

The size of this box is $3-3 / 4^{\prime \prime}$ by $2-3 / 4^{\prime \prime}$ by $2-3 / 4$ " if made from $1 / 8^{\prime \prime}$ wood, but the plans are T-Plans, which allow you to make this at any size.


## Matchbox

This must be the smallest puzzle box! Only $1-1 / 4^{\prime \prime}$ square, and 2 " long, yet it takes ten moves to open this box!
Extremely easy to build - every piece is a simple rectangle. No curves, no circles, no holes, no inside cuts, no intricate little tongues and notches to cut. You could even make this with a simple junior hacksaw!
To make this puzzle at this size will require $1 / 8$ " thick wood, but the plans allow you to make this any size you wish.
The inside measures $1^{\prime \prime} \times 1^{\prime \prime} \times 3 / 8$ ", so you could put a couple of rings in, or a few small coins.
So easy to build, you could make this in a single day! This is an ideal puzzle to make as a first attempt.


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## Matchbox 2

Is this the smallest puzzle box? Even smaller than The Matchbox, measuring only $1-1 / 2^{" 1}$ long, by $7 / 8$ " high by 1-1/8" wide!
Yet it takes 14 moves to open the lid, and a few more to remove every panel.
Very easy to cut, every piece is a simple rectangle (admittedly, very small rectangles...)
No curves, circles, holes, inside cuts, tongues or notches.
Assembly is a little tricky, because this is a fairly precise little box, but not too hard.
That's a 50p coin in the top left picture, and a 5 p coin in the top right picture....and $5 p$ about all that will fit inside..


## Modified Matchbox

This puzzle box is based on The Matchbox, in that all the movements are the same, but the box is bigger.
The size of this box is $2-3 / 4$ " square, and it takes ten moves to open.
Extremely easy to build - every piece is a simple rectangle. You could make this with any kind of handsaw.
To make this puzzle at this size will require $1 / 4$ " thick wood, but the plans allow you to make this any size you wish.
So easy to build, you could make this in a single day! This is an ideal puzzle to make as a first attempt.


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## Nuts and Bolts

On the top, a bolt holding two nuts and two washers. The nuts will go on, but they won't seem to come off!
In the middle, a bolt holding a nut and a lock washer. The nut has been welded onto the bolt, so it obviously won't come off. The lock washer has been bent slightly open, and the bolt head has slots cut in it. The puzzle is to get the washer off the bolt. It looks like it should come off through the slots in the bolt head. But does it? This one sent in by Bobj, from Router Forums.
On the bottom, another nut and bolt puzzle, sent in by Jon from Sweden. The puzzle is to get the nut off the bolt. Which means getting the smaller bolt out first. Which is a bit of a problem, because it doesn't want to come out...

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## Put Me Together

Twenty-seven cubes, glued together in various ways to form five pieces. Simply take them apart, then reassemble! Very tricky.
This is not my design, comes from a book called "Puzzle Craft" by Stewart T. Coffin.
Very easy to make-needs only a tenon or mitre saw, and glue.

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## Shield

A rather plain, metallic looking box, with an embossed shield on the top, without any visible moving parts. Yet this is another 'sliding panel' puzzle box. The shield itself has to be manipulated in order to get the lid off. The only moving parts are in the lid.

This is quite a precise little puzzle to make, and there are only 9 moves to get the lid off. However, it's quite tricky to get off, because the shield seems to jam up now and again. That's because the shield is in three parts, and the inside layers are interlocked.

The box measures $3^{\prime \prime} \times 3$ " $\times 4$ ": the lid is made of $1 / 8$ " plywood: the box made of 3/16" ply, with bevelled corners.


## Take Me Apart

Actually two puzzles in one-the smaller box is really inside the bigger box. Simple idea, just remove the sides, to reveal the inner box, then take that apart as well. Easy. Now just put them back together. Do the same with the smaller box. But it's not so easy when they are in bits, when the edge of one piece can fit eight different ways to the edge of another piece, which can also go eight different ways!
Very easy to make, using $1 / 2^{\prime \prime}$ and $1 / 4$ " MDF or plywood. No special tools needed. Fairly hard to solve.

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## Trick Box

This is more of a "Trick Box" rather than a proper puzzle box, but it's just as hard to open, even though there's only ONE move to open the box!
Looking like a small crate with a drawer inside, the trick is to open the drawer. If you know the move, then it's dead easy to open, but if you don't, you could be on for quite a while...
Very easy to make-you could make this in a single day.
The size of this box is $4^{\prime \prime}$ by $2-3 / 4^{\prime \prime}$ by $1-1 / 4$ ", if made from $1 / 8$ " wood, but the plans are T-Plans, which allow you to make this box at any size.


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## Trinket Box

A rather nice little box, $4 \times 2-1 / 2^{\prime \prime} \times 2^{\prime \prime}$, where the lid pattern is actually a "secret lock". There are no parts that can be seen or stick out, so you could keep trinkets in the box. You could even keep, gasp, cigarettes in it!

Help your friends to stop smoking-give them one of these boxes.

Easy to make with 1/8" and 1/4" plywood. Easy to open.

