

Mysterious Heart

Table of Contents

Intro: Mysterious heart 2

Step 1: Cut the beam 3

Step 2: Glue the cubes together 4

Step 3: Dismantle the proto-heart part 1 5

Step 4: Dismantle the proto-heart part 2 7

Step 5: The mechanical part 9

Step 6: Raw-sanding 11

Step 7: Assembly 13

Step 8: Plastic surgery 14

Step 9: Oiling 15

Step 10: Enjoy... 15

Intro: Mysterious heart

You're in love.

You like woodworking.

You hate to buy industrial-made junk-jewelry.

You want to give something personal and special.

You don't want to cut your heart out to give it away either.

I'll show you **how to make a wooden 'cartouche' - just a piece of wood - that can be transformed into a beautiful heart .**

Give the cartouche to your love. If after two hours she's still asking you what it's good for: take it back, and change her into another.

All you need:

- a beam of hardwood (square shaped - three inches thick)
- the usual woodworking tools
- a lot of patience

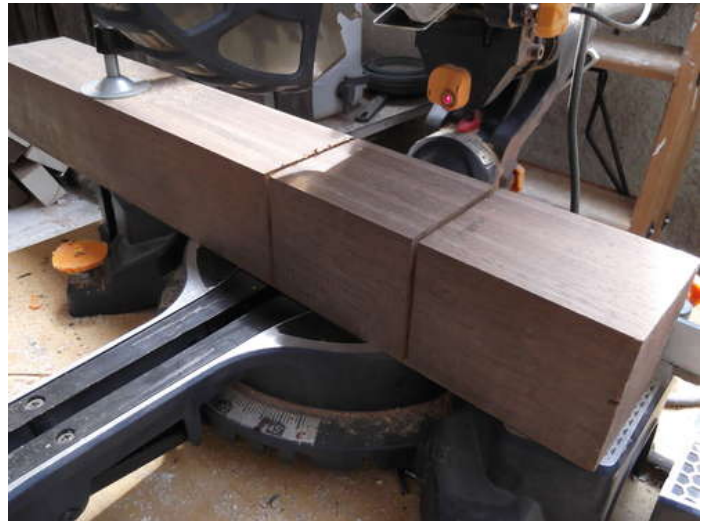


Step 1: Cut the beam

Sand ONE side of the beam to get a smooth surface. No need to sand the other sides.

Cut two cubes out of the beam.

Use a circular saw. Don't forget gloves, goggles & ear plugs.



Step 2: Glue the cubes together

Mark the midpoints of the cubes ON THE SMOOTH SURFACE.

Drill a hole in each cube - I used a drill bit with a diameter of 3mm (0.1 inch) and drilled 1 inch deep.

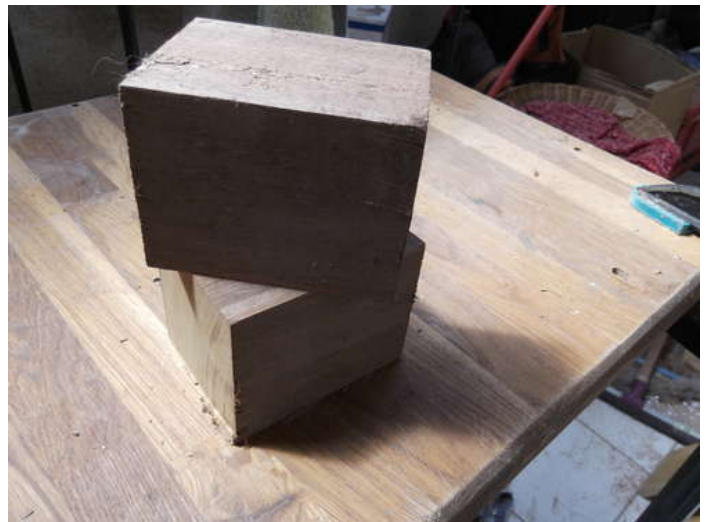
Put the drill bit in one of the holes, the bit will serve you as axis.

Put wood-glue ON THE MARGINS of the smooth surface of one cube.

Put the other cube on the axis.

Glue the two cubes together and press them with a clamp.

Let it dry.



Step 3: Dismantle the proto-heart part 1

In the following two steps you'll remove all the wood you don't need.

Undo the clamp.

Put the mini-tower on one of its growth rings sides.

Mark the midpoints of the cubes.

Link the midpoints with a line. Exactly under this line lies your axis.

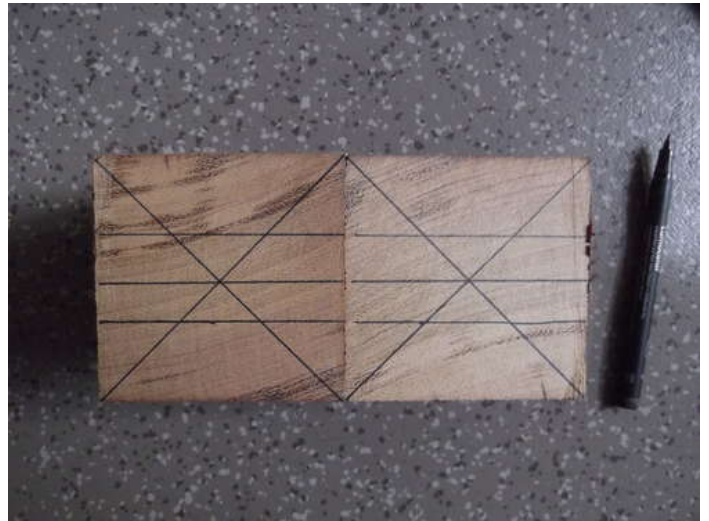
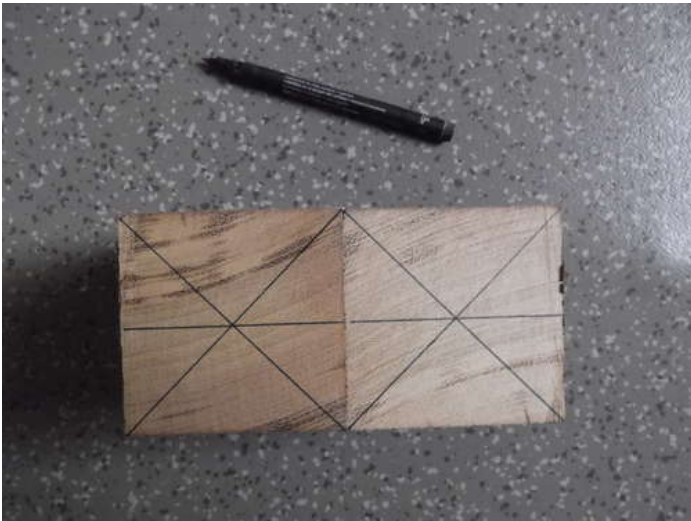
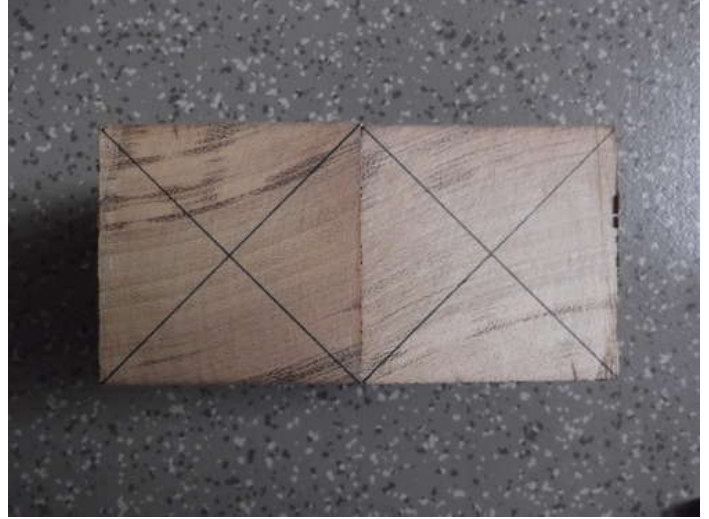
Draw two other lines on a parallel distance of the middle-line.

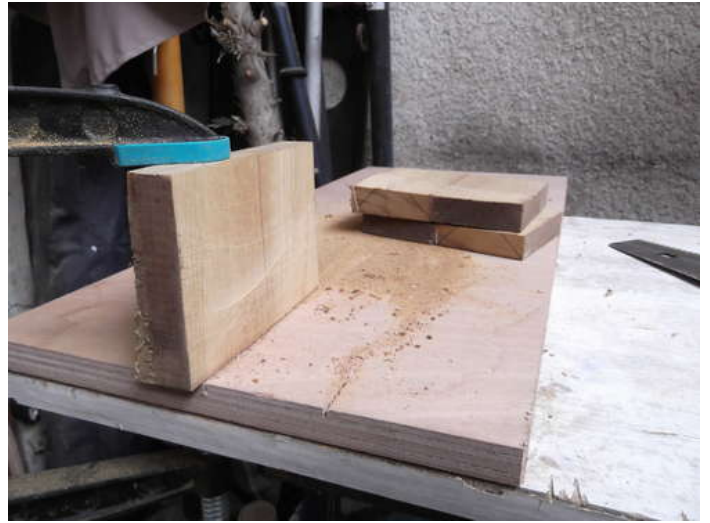
Cut the tower on the two parallel lines.

If the blade of the circular saw doesn't go deep enough - like mine's - finish the job with a regular saw. Or use a band saw.

Sand the two sawed surfaces with a sander.

Pay attention to have a board with equal thickness everywhere (mine's was one inch).





Step 4: Dismantle the proto-heart part 2

Mark the midline of the board. The axis should be exactly under this line.

The two halves remain together because there's still some glue between them, remember?

Mark two points on an equal distance of the suture-zone.

Take a bar of aluminium, or whatever, of about one inch thick and place it diagonally between the two points. Mark the outer-zones.

Take a piece of tube, a coin or whatever round piece with the same diameter of the bar.

Use it to trace the rounded sides of the cartouche aka the heart.

Saw the excess wood.

Saw the rounded-sides first.

Then you saw the others. TAKE CARE FOR THE DRILL BIT that's still inside!

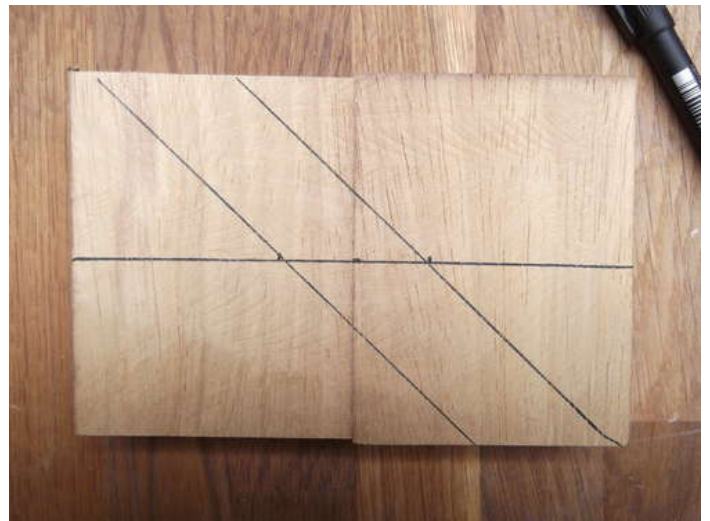
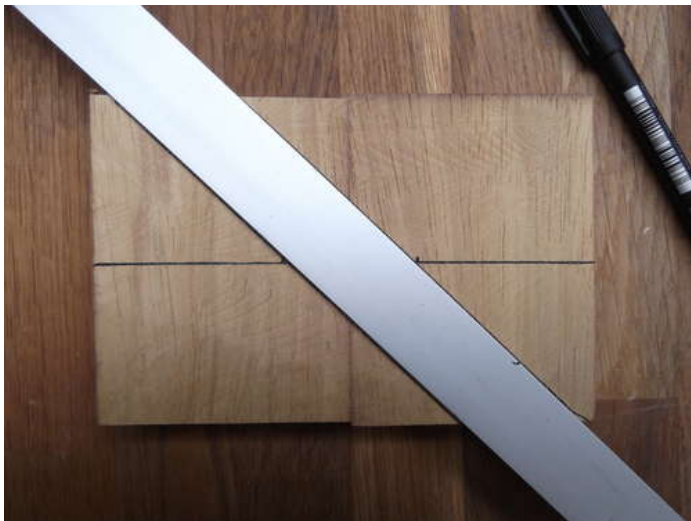
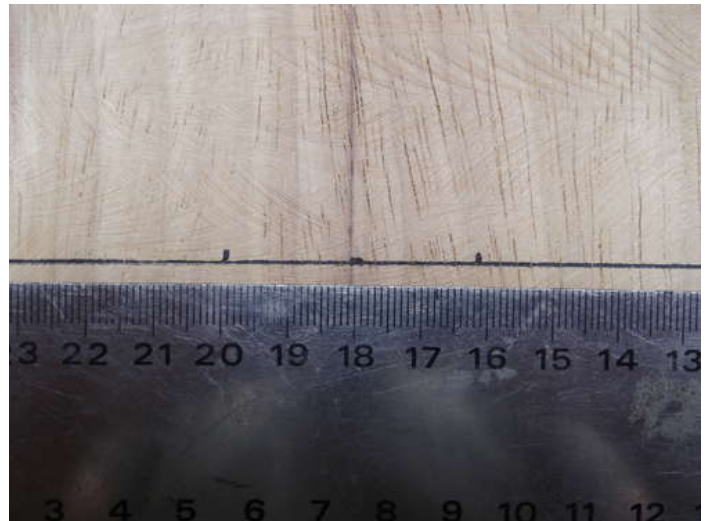
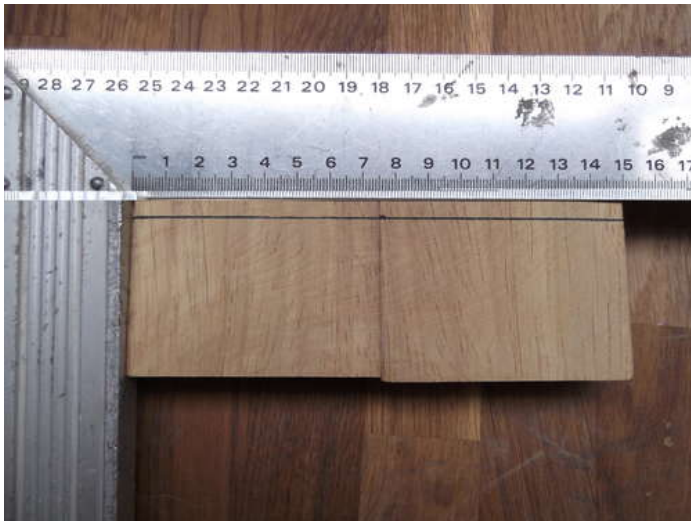
There's no more glue left.

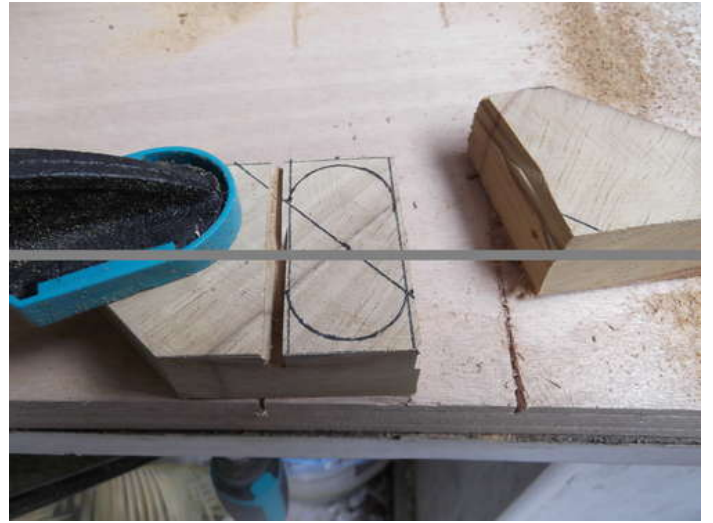
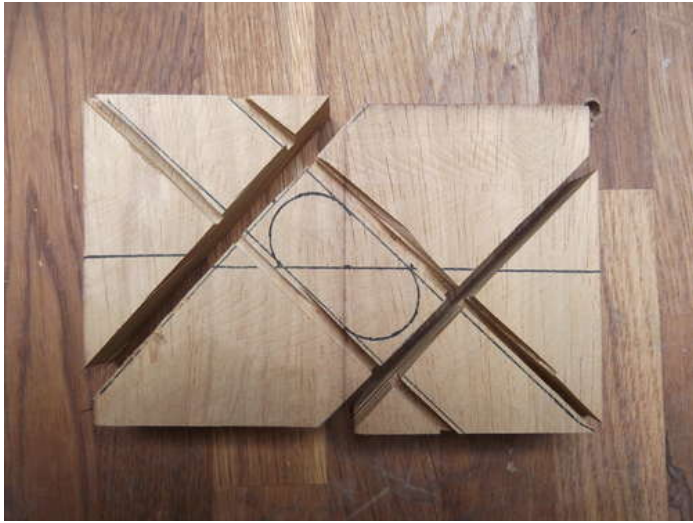
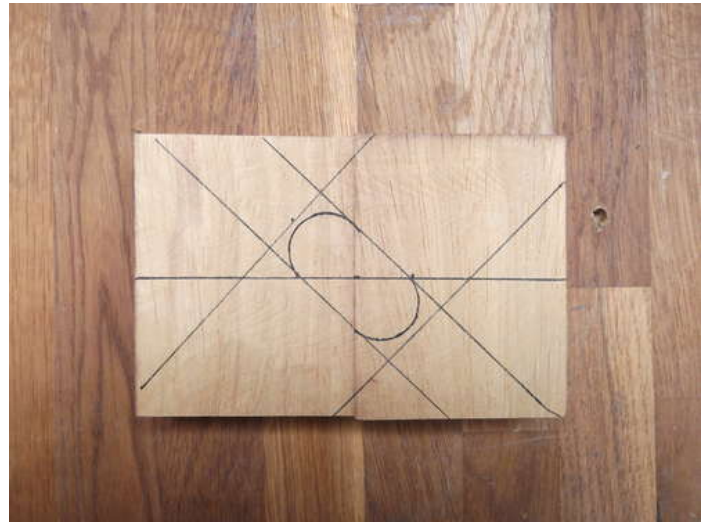
You can separate the halves.

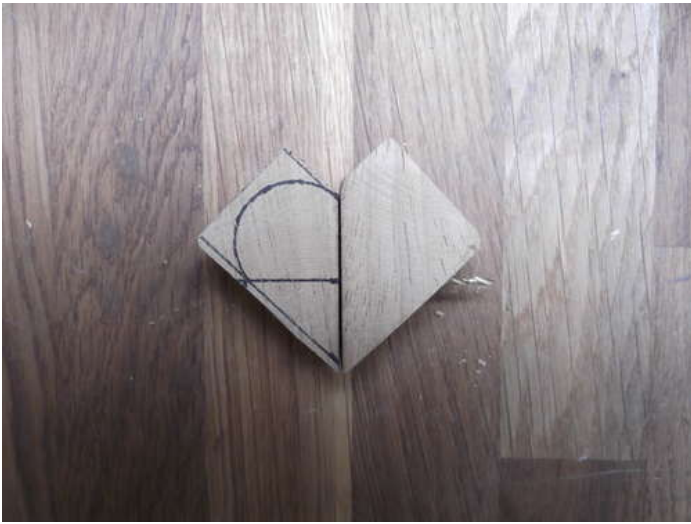
Turn them.

TADAAA, a proto-heart!!!

Well done, all you need is finishing.







Step 5: The mechanical part

In this step you'll fix the two halves together.

Take a screw - I used a stainless.

Fix it on your drill or dremel.

Round the edge of the screw on a file.

Re-drill the holes of the two halves, corresponding to the diameter of the screw.

Enlarge the holes (diameter of the screw-head) ON THE OUTER SIDE OF ONE AND ON THE INNER SIDE OF THE OTHER.

Don't drill to deep, take your time.

Keep in mind that the head of the screw should'nt be deeper than 5mm of the suture line.

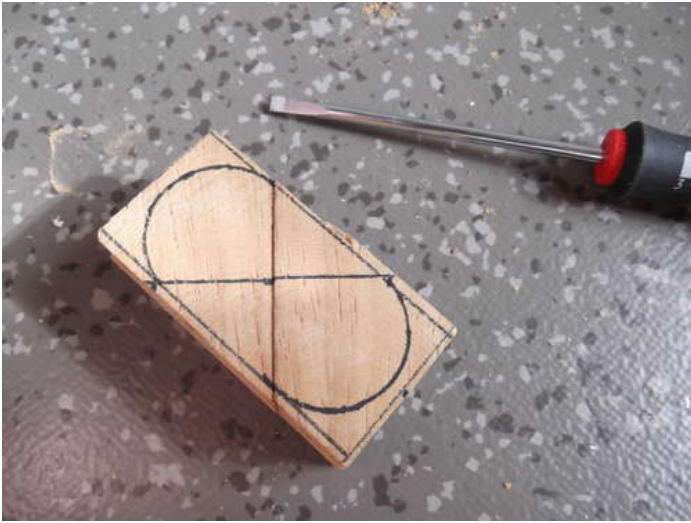
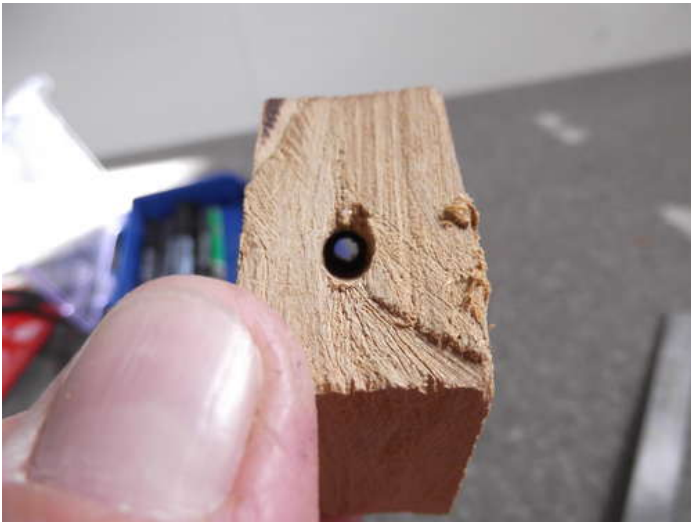
The bigger hole on the inner side of the other half shouldn't be deeper than 2 mm. The reason for this hole is that in the final stages you'll put some sealant in it WITHOUT SEALING FOREVER THE TWO HALVES.

Put the screw in place.

Screw it very solid to prevent any movement of the two halves.







Step 6: Raw-sanding

In this step you'll sand the 'cartouche' into its final shape.

Round the curves of the heart first.

Then sand it to the thickness you want - mine is almost 1 cm (0.3 inch).

This step is boring repetitive: sanding, releasing the pressure of the screw, verifying if the two halves correspond exactly, re-pressing the screw, resanding etc.

When the thickness is ok, you'll sand the edges.

Keep on sanding, verifying, re-sanding etc.

Start with heavy grain and go finer and finer.

Be patient, take your time.







Step 7: Assembly

You're ready to put the screw definitively on its place.

Put some sealant or glue in the enlarged hole in the inner side of one of the halves.

Put some oil in the enlarged hole in the outer side of the other half.

The glue will hold the screw in place on one side, the oil will lubricate it on the other.

Put the screw in place. Not too heavy, not too soft.

Let it dry.





Step 8: Plastic surgery

Put some wood-pulp in the remaining holes. Take care to use the right tint. Test it first (I didn't, big mistake!!!).

Let it dry.

Sand the excess with fine paper.

Sand it all with the finest grain.

Ready for the last step!





Step 9: Oiling

I used natural oil - as always.

You know the smell? It's the smell of victory!!!



Step 10: Enjoy...

One of the most nerve-breaking projects I ever did. This needs precision, time and patience.

I'm really satisfied with it, nice feeling ;-)

My wife loved it, she had it right immediately ;-)

Enjoy, and good luck if you'll try this yourself!

Note: you can turn this into a pendant. I didn't because I didn't want to drill this prototype...

