

Split-flap animation



duration: 30 - 60 minutes
age: from 7 years

Show your own animation using this split-flap display

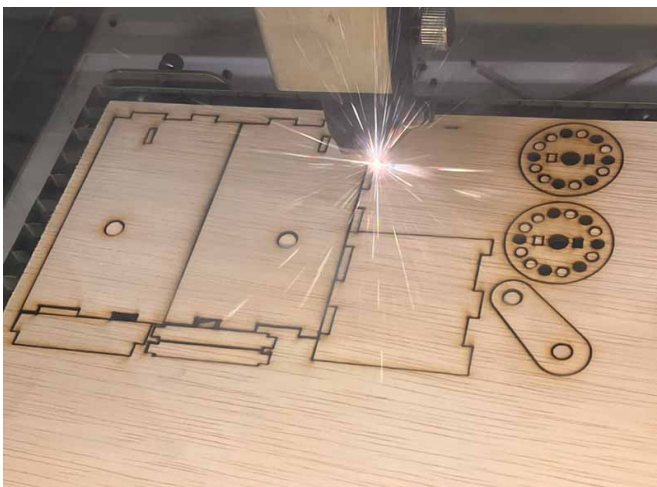
undefined

tools

- ☐ Laser cutter
- ☐ markers
- ☐ small saw

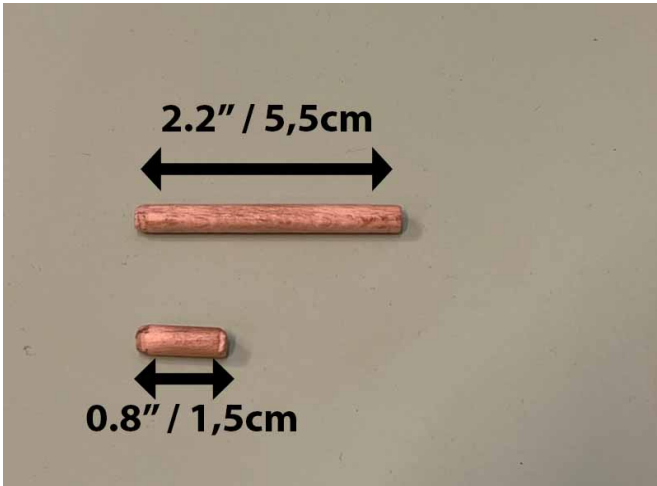
materials

- ☐ Plywood, 1/8" (3mm) thick
- ☐ Woodglue
- ☐ Wooden rod, 6mm diameter
- ☐ Thin card-stock
- ☐ Split pin / brass fastener - (2cm)
- ☐ Paper



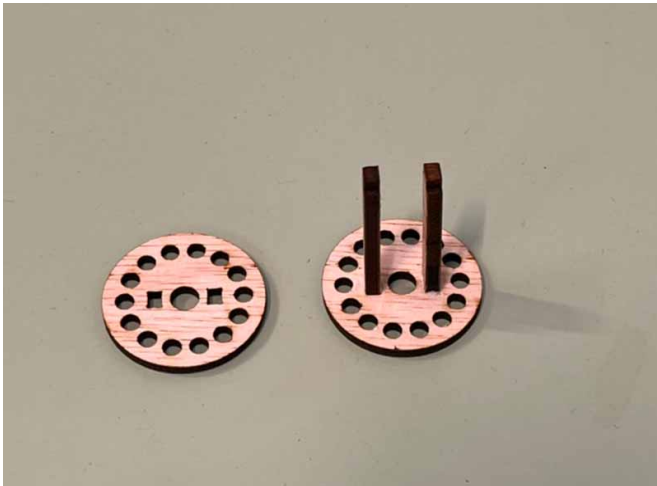
1 Cut out

- Use the laser cutter to cut out the template.



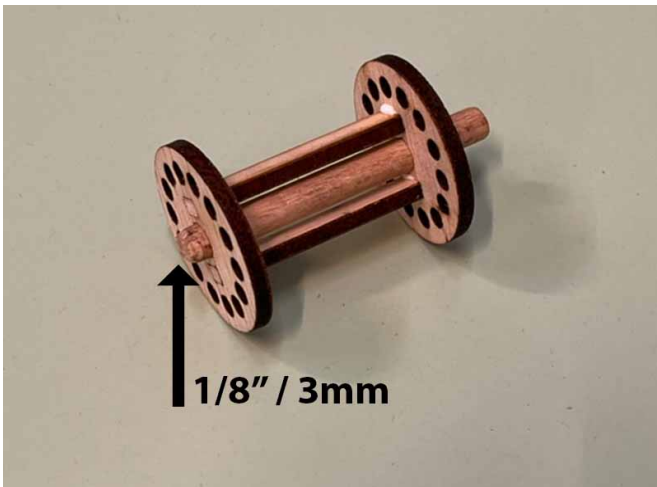
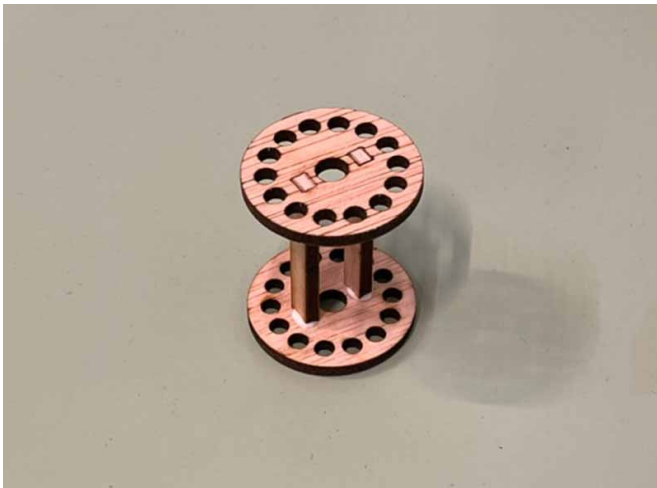
2 Cut the rod

- Cut a 2.2" / 5.5cm piece of the wooden rod.
- Cut a 0.8" / 1.5cm piece of the wooden rod.



3 Assemble the wheel

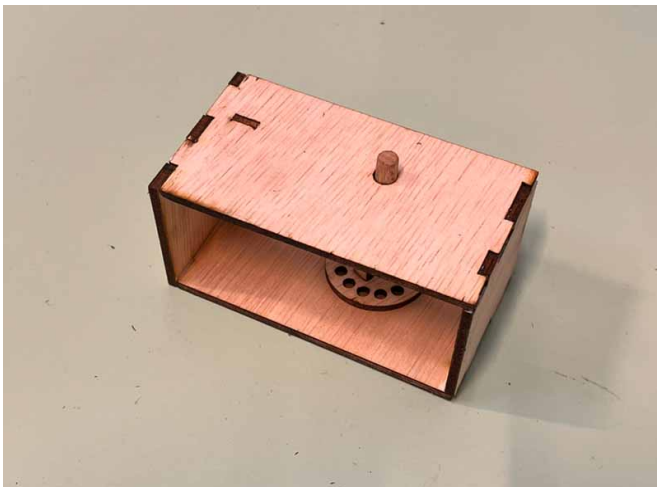
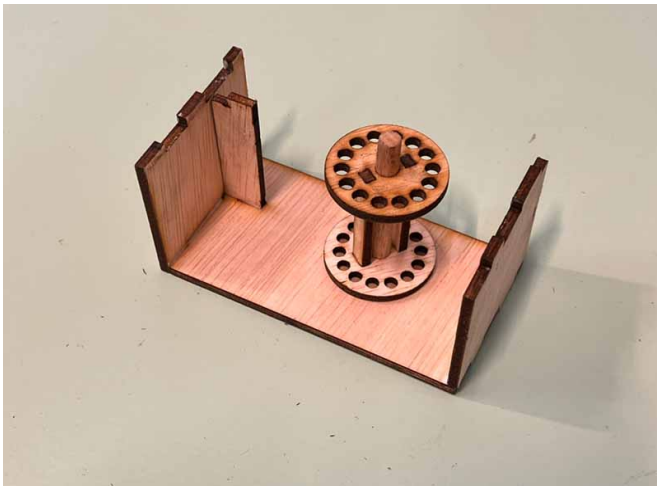
- Glue the offsets in between the 2 wheels.
- Push the long piece of rod trough the wheels. Make it stick out $1/8''$ / 3mm on one side.





4 Assemble the housing

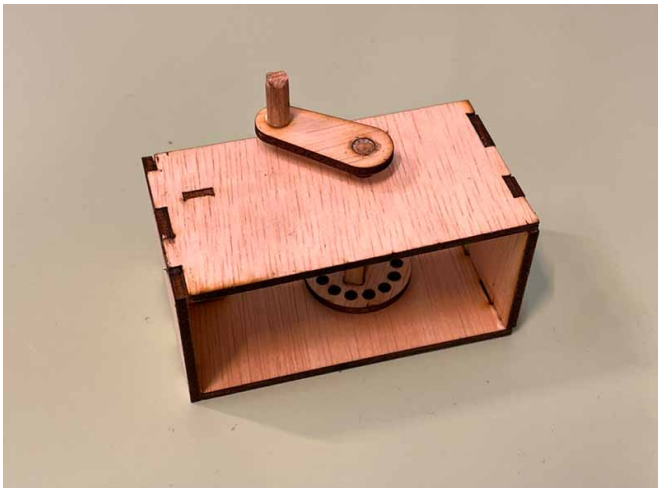
- Use some glue to attach a top, center and bottom pieces to one of the sides.
- Place the wheel inside the housing.
- Glue the other side-piece in place.





5 Attach the handle

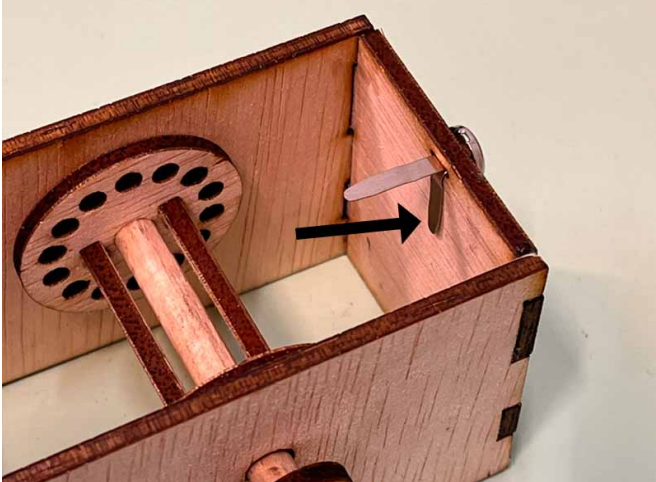
- Glue the short piece of rod into the small end of the handle.
- Glue the handle to the piece of rod sticking out of the housing.

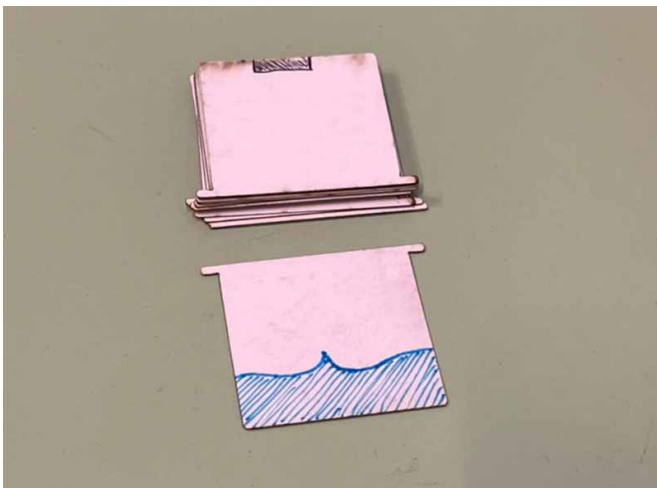
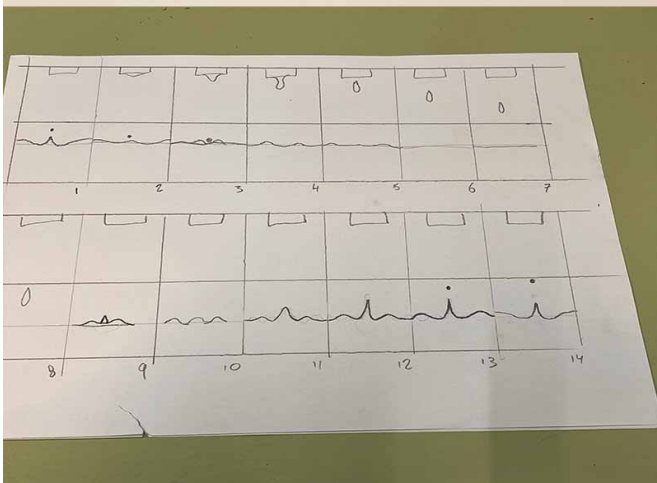




6 Add the split-pin

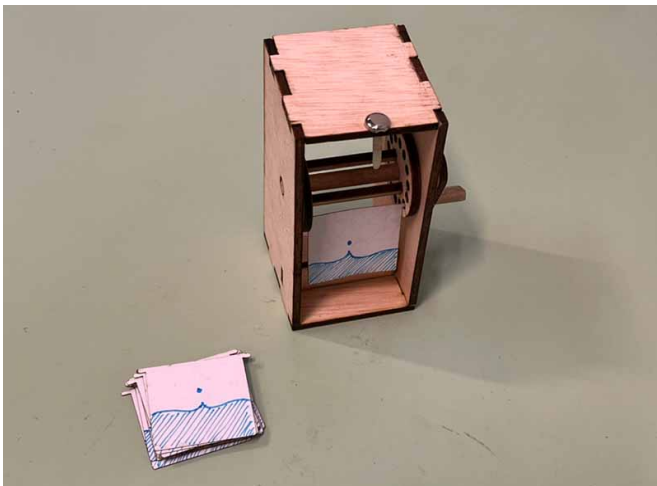
- Place the split pin trough the hole in the top, with the longer lip facing the front.
- Bend the short lip backwards, leave the long lip pointing down.





7 Make your animation

- Plan out your animation on some paper. Make sure the last frame matches up with the first one.
- Stack your 14 flaps on top of each other, and flip the top one down.
- Draw the first frame of your animation across the 2 flaps that are now facing you.
- Flip the top flap on the stack over to draw your second frame. Repeat.
- When you reach the last flap, you can take the bottom flap of the stack and use that for the top half.



8 Place the cards into the wheel

- When bending the cards to place them in the wheel, make sure to bend them in the middle where the cardstock is the strongest.
- Place the housing on the table the split pin on the top and facing you.
- Flip over the stack of cards and place the card that's now on top into the wheel.
- Place the next card above the first one.
- Repeat for all cards.



9 You're done

● Enjoy your animation!