

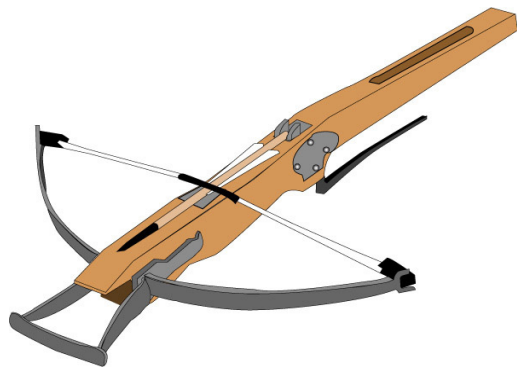
CROSSBOW

This is a device I design for people who has trouble with throwing sticks very far to play with dogs. It can help users to release sticks without much strength.

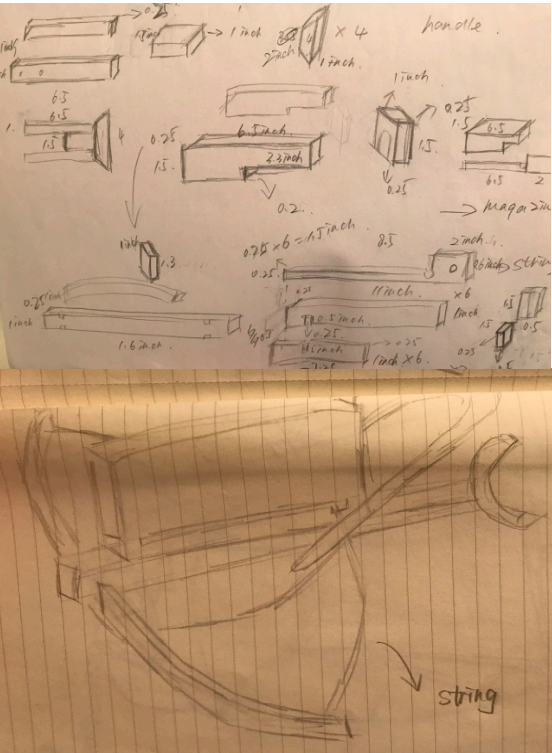
• INSPIRATION

I got my inspiration for this project from crossbow. A crossbow is essentially a bow mounted on an elongated frame with a built-in mechanism that holds the drawn bow string, as well as a trigger mechanism that allows the string to be released. It's as functional as bows but more efficient and powerful than bows.

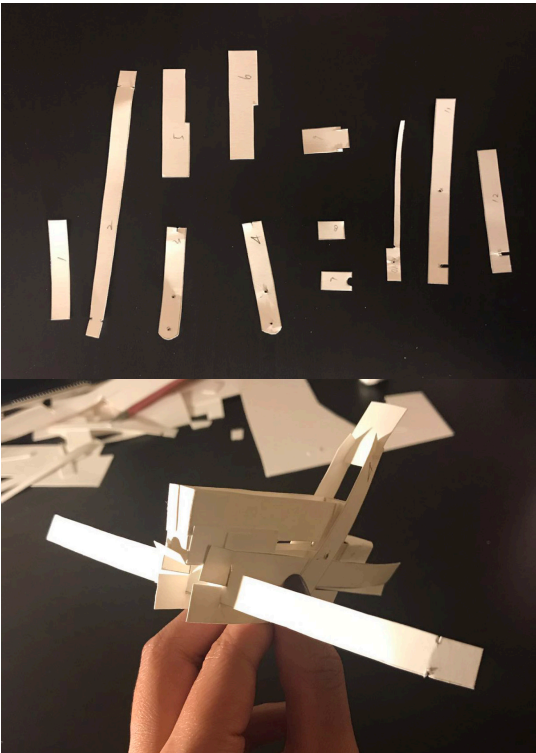
I constructed my device based on the concept and design of crossbow, but use sticks instead of bolts. When string is tensioned, users only need to pull the trigger, the stick will be released.



Sketch



Prototype



• DESIGN PROCESS

I began with a sketch of general shape of a crossbow and designed each pieces on paper.

I made two prototypes out of Bristol board and black cardboard. In making process, I met several problems like how string works and attempted to fix them by researching online to learn about how other crossbows work. When the prototypes are finished, I constructed the wooden crossbow with a built-in trigger mechanism and improved it several times during the process.

Lastly, I designed the digital crossbow in fusion 360 and render it, which you can see on the right.

• DIGITAL RENDERINGS

