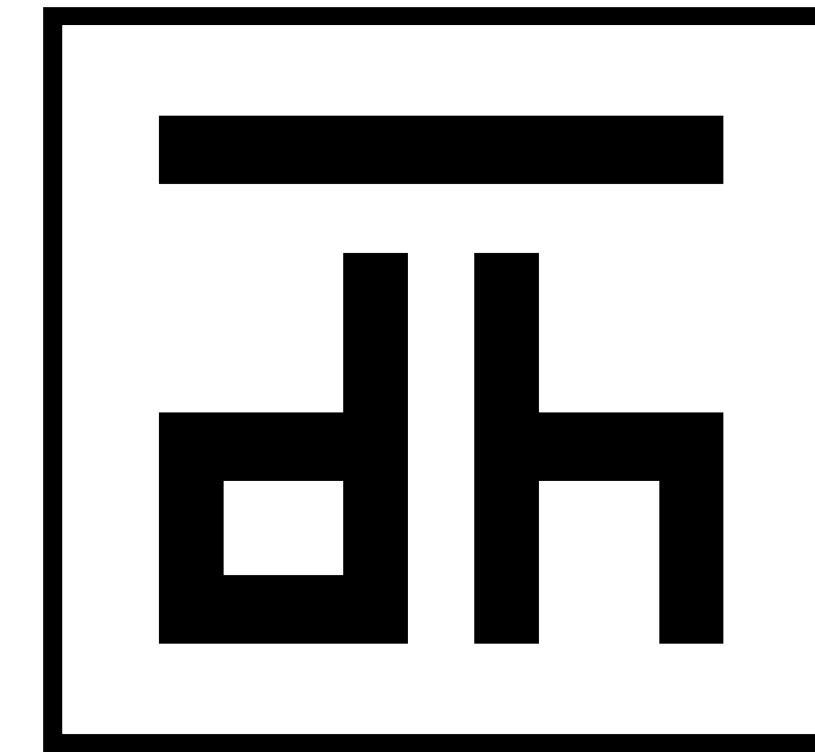


D'VAN HOWARD

INDUSTRIAL DESIGN



TAAJWAR D'VAN HOWARD

Address

7221 Meadow Ridge Drive
Louisville, Kentucky 40218

Website

dvanhoward.com

Contact

dvanhoward@gmail.com
502-298-4418

Education

University of Cincinnati, DAAP

BS in Industrial Design

Class of 2020

University of Kentucky

BS in Mechanical Engineering

Class of 2014

International

Pamplona Learning: Spanish Institute

Renewable Energies Course (Summer 2013)
Pamplona, Navarra, Spain

Employment

Nottingham Spirk

Design Intern (Spring 2017)

Sketching, ideating, prototyping concepts.
Presenting ideas in small meetings. Working with
shop workers to develop prototypes.

NACCO Materials Handling Group

Design Engineer (2014-2015)

Constructing and modifying component models of
forklift trucks for specialty batch orders. Provided
engineering support to manufacturing line.

Wagstaff

U of K: Capstone Project (Fall 2013-Spring 2014)

Worked with a team to design an automated device
to prevent cut aluminum ingots from clamping onto
the blade of the bandsaw.

Toyota Motor Manufacturing Kentucky

Paint Specialist Co-op (Summer '12)

Redesigned a prototype moonroof installation
component to improve productivity on the
manufacturing line. Mapped out HVAC piping
for manufacturing line. Designed and began
development on new dolly to reduce strength
required to push car frame.

Software

Solidworks, Inventor, PTC Creo/Pro Engineer, Alias,
AutoCad, Fusion 360, KeyShot, Microsoft Office (Word,
PowerPoint, Excel), HTML, Photoshop, Illustrator,
InDesign

Skills

Analytical Thinking, Sketching, Rendering, Empathy,
Human Centered Design, Prototyping, 3D Printing,
Laser Cutting, Ideation, Woodshop

Interests

Problem Solving, Futuristic Innovation, 3D Printing,
Ultimate Frisbee, Learning, Podcasts, Food,
Superheroes, Games, Bowling, Pizza Making

Languages

English // Native
Spanish // Beginner Proficiency
Japanese // Beginner Proficiency

ABOUT ME



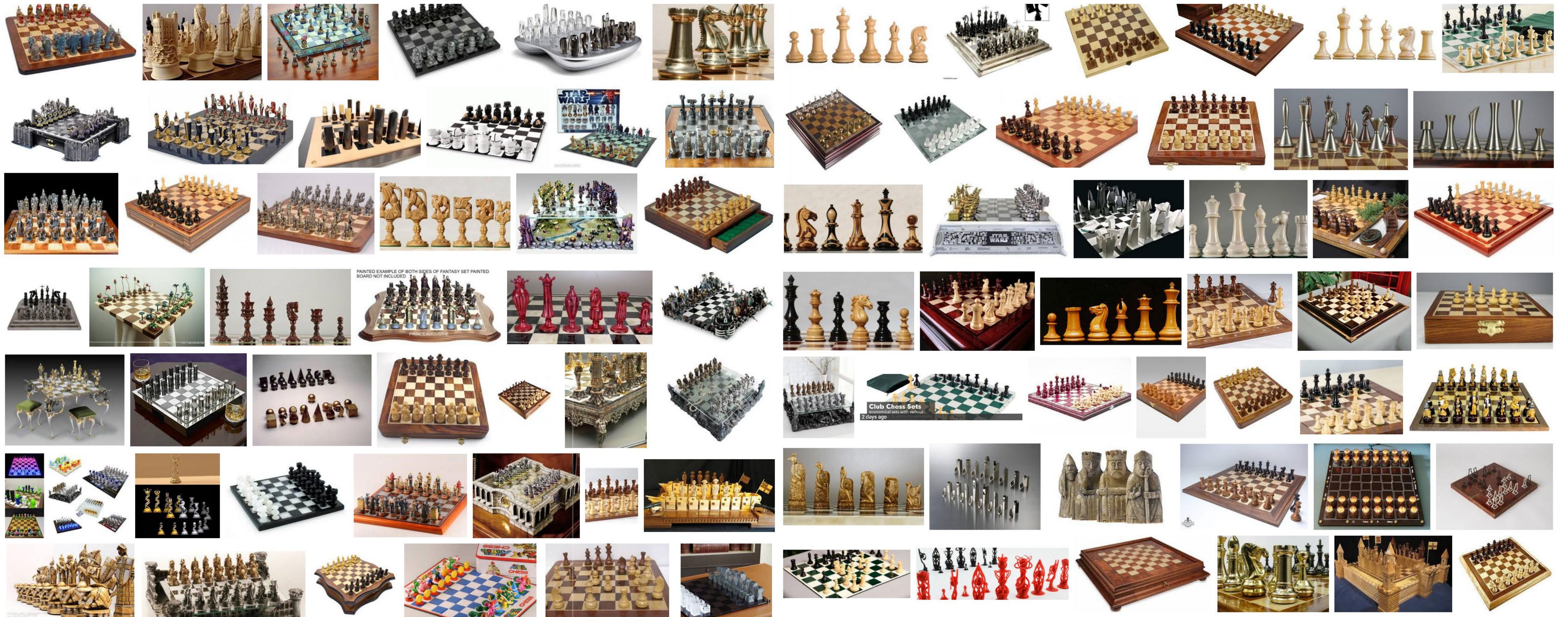
My name is Taajwar D'Van Howard, but you can just call me D'Van. I graduated from the University of Kentucky in 2014 in **Mechanical Engineering**. I then decided one wasn't enough, so to pursue a passion in design I now attend the University of Cincinnati currently pursuing a degree in **Industrial Design** (2020). I'm often curious how things work and am frequently annoyed by poor design. I want to make things that positively impact the world and this is my journey.

ACTION CHESS

A Unique Chess Set To Enhance The War
Essence Of The Game



MARKET RESEARCH



There are thousands of chess designs out there, but the majority merely change the appearance of the pieces.

OBJECTIVE



FORM



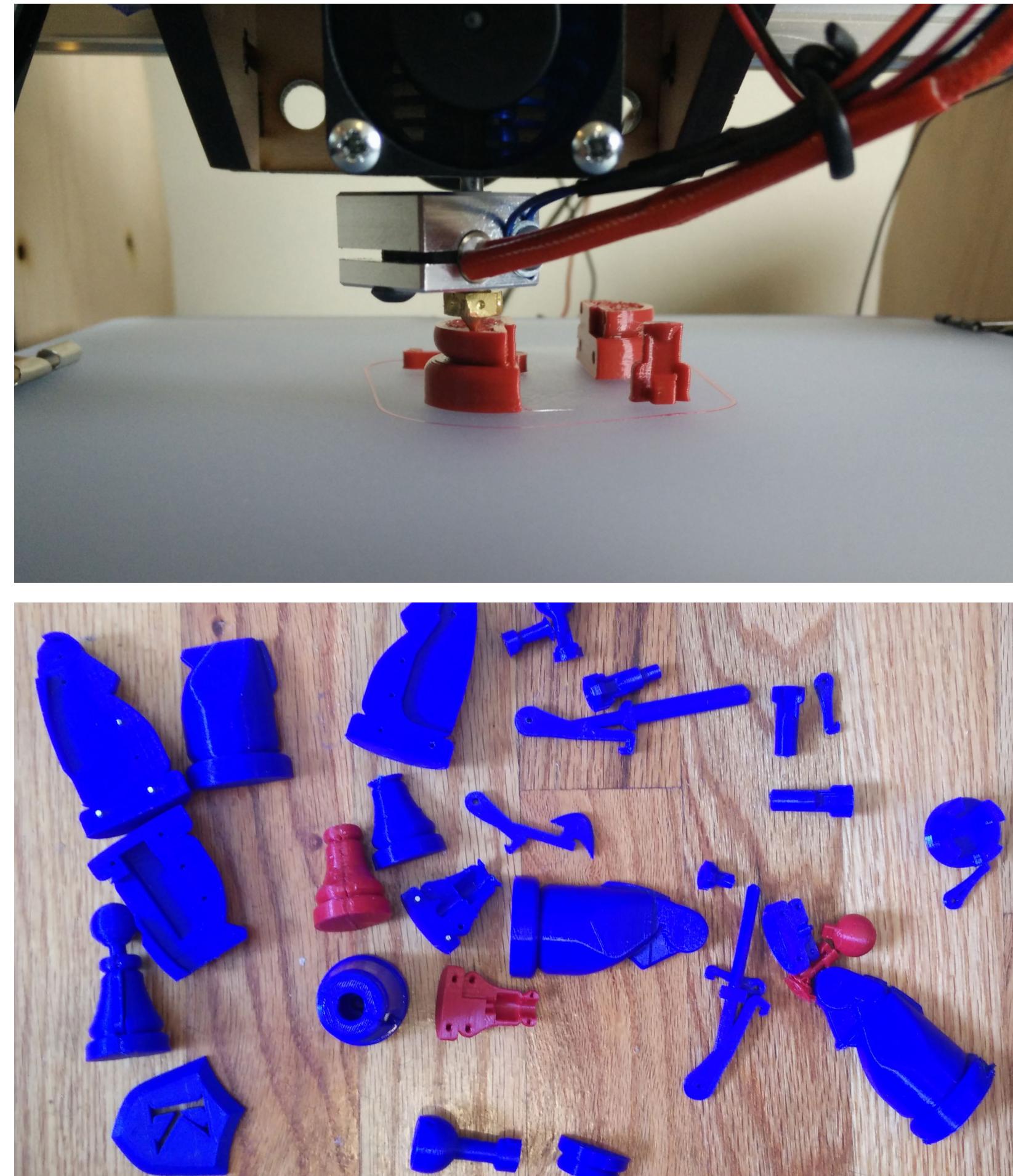
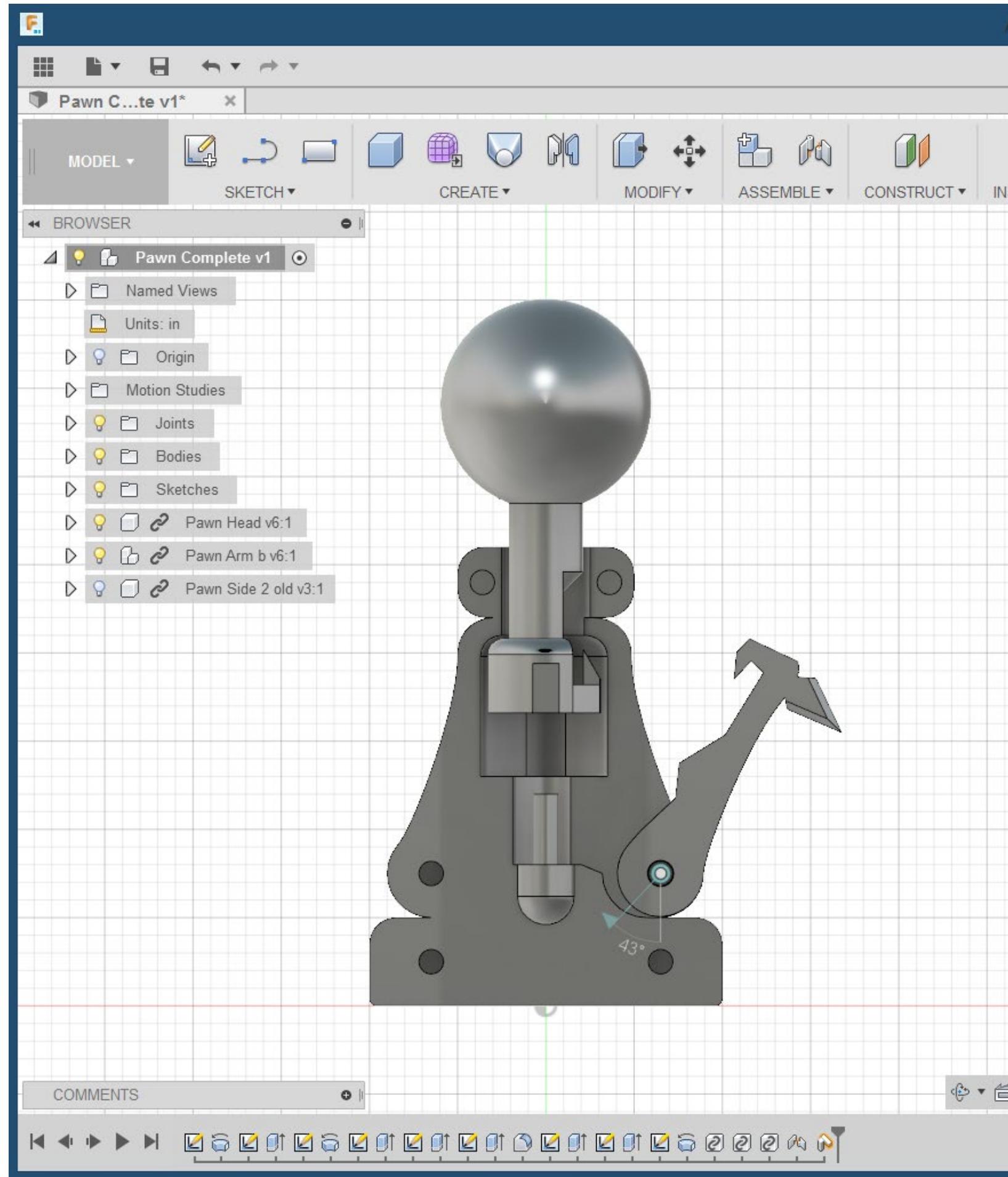
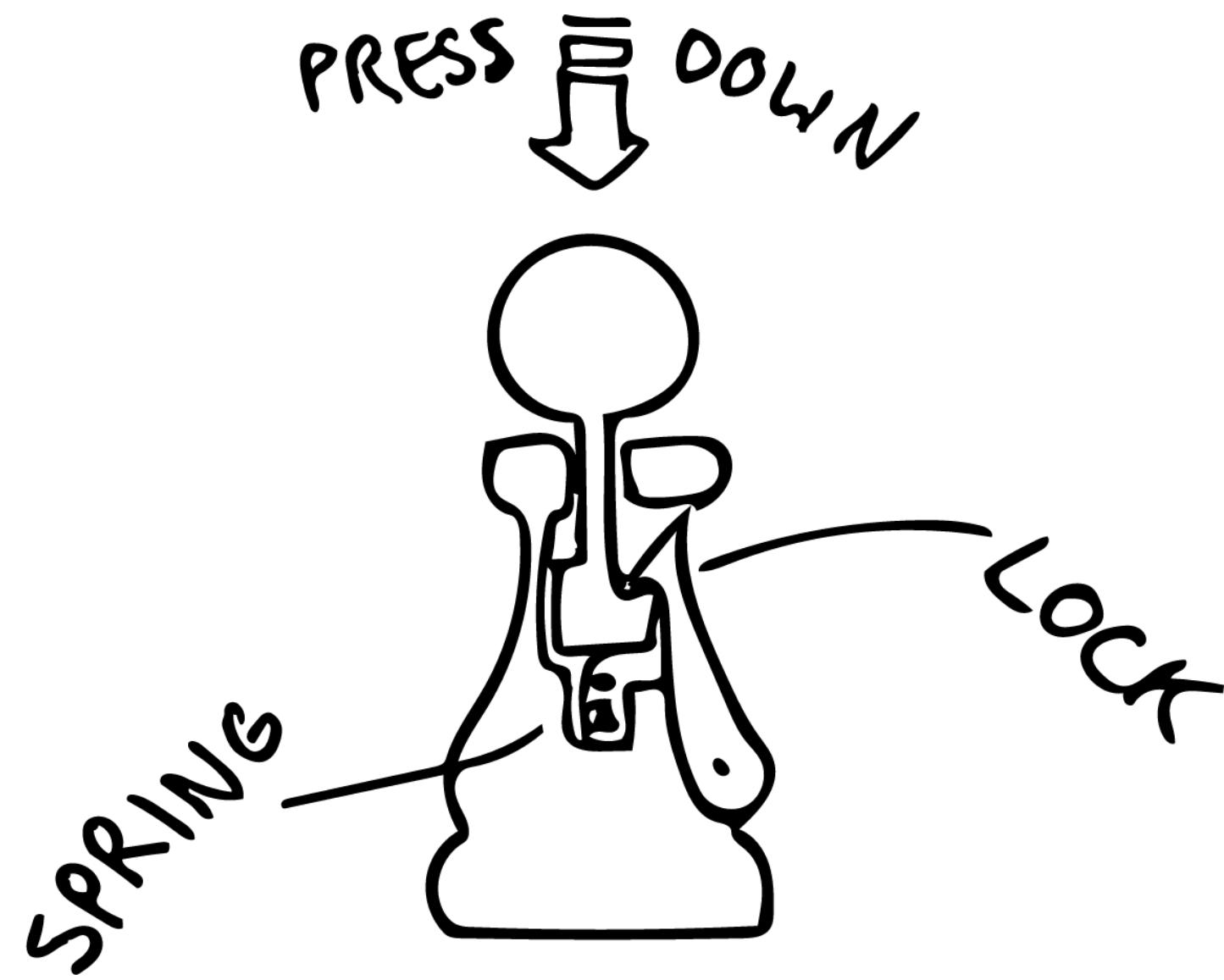
FUNCTION



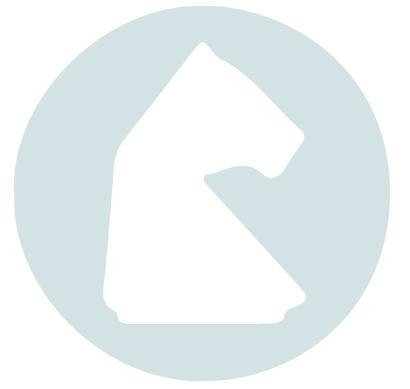
INTERACTION

PROCESS

Starting with a simple sketch, prototyping began immediately to achieve functionality

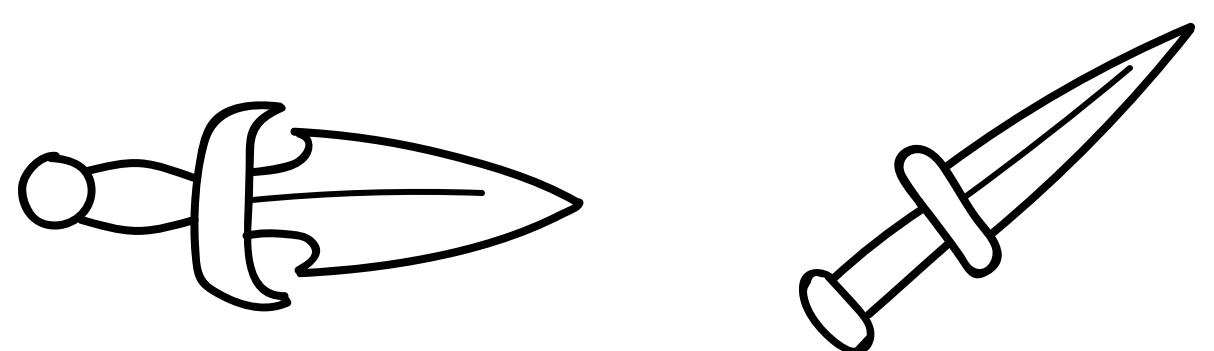


PAWN

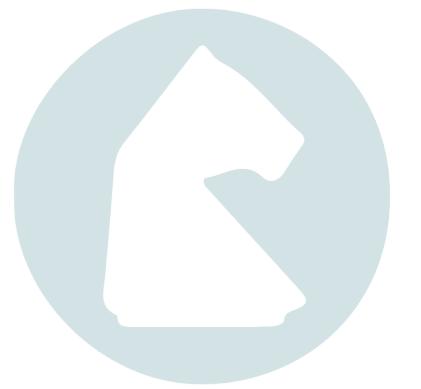


WEAPON: DAGGER

As the weakest piece on the board, the pawn uses a simple dagger

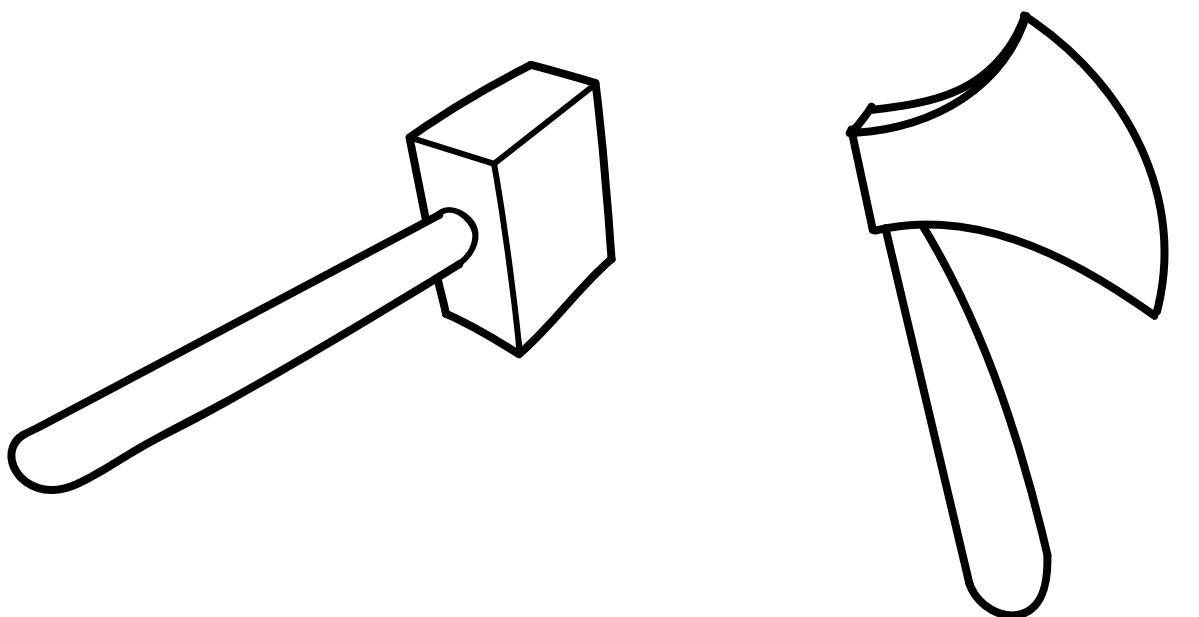


ROOK

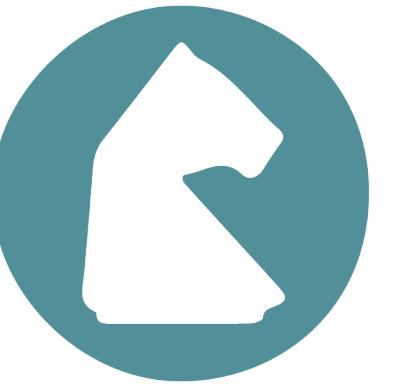


WEAPON: AXE

The rook has such a solid structure that it needs a heavy solid weapon

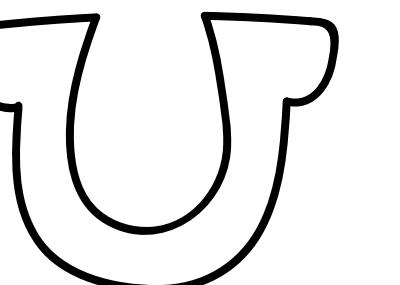
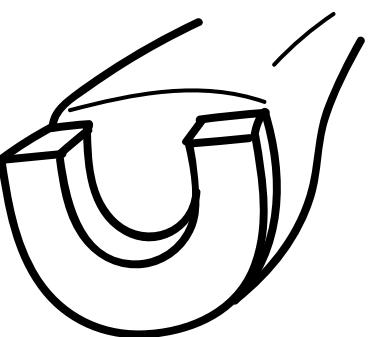


KNIGHT

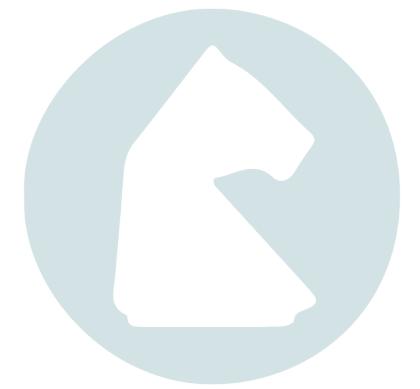


WEAPON: HORSE HOOF

The knight resembles a horse, so its weapon should reflect that

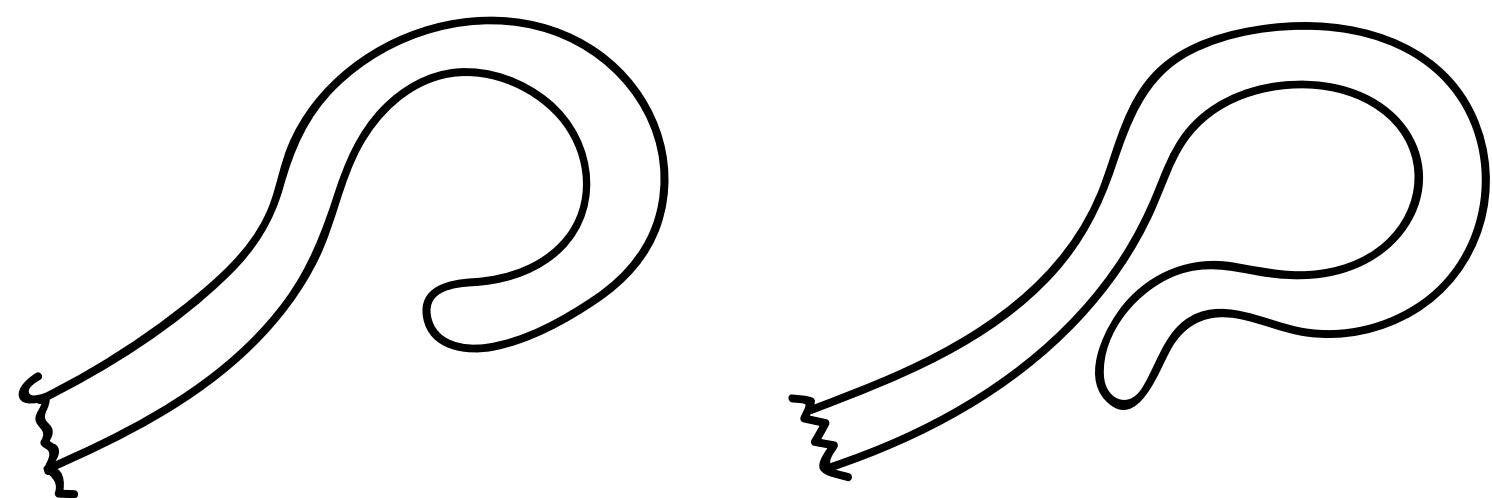


BISHOP

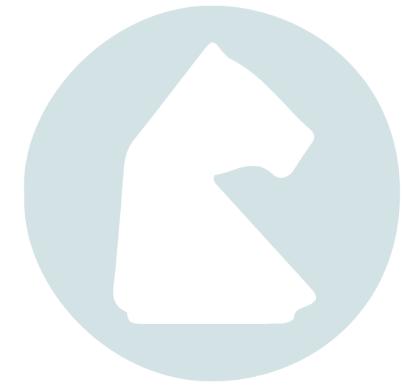


WEAPON: STAFF

The bishop is a religious figure and is known to have a staff

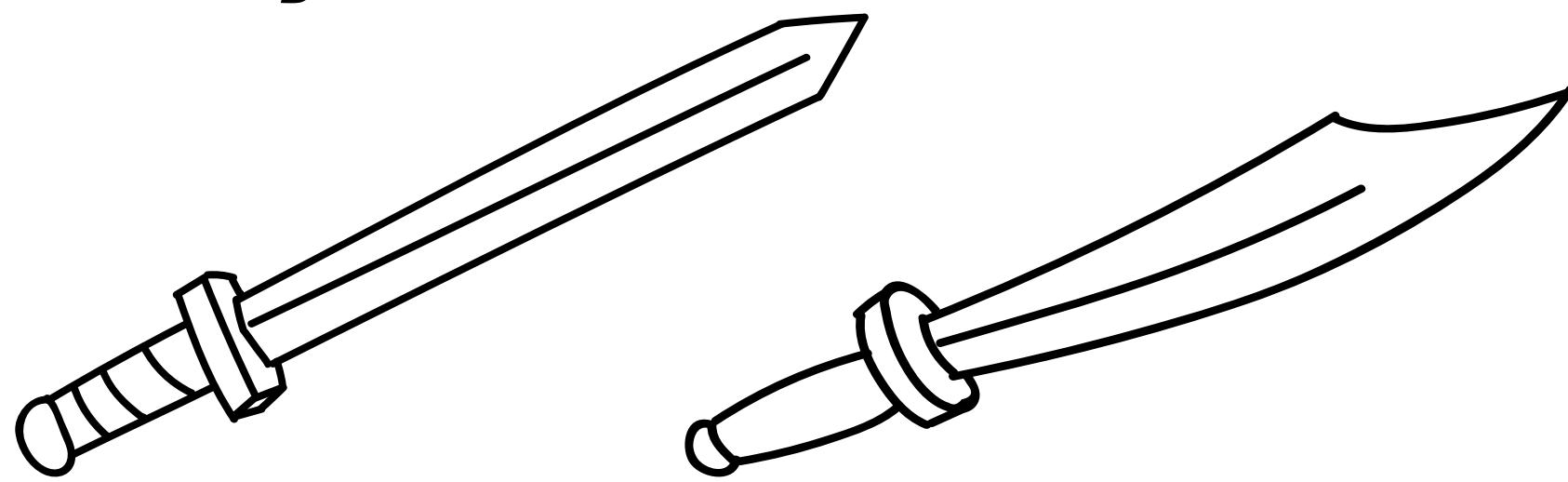


QUEEN



WEAPON: SWORD

As the most powerful piece on the board, the Queen needs a weapon to reflect that strength

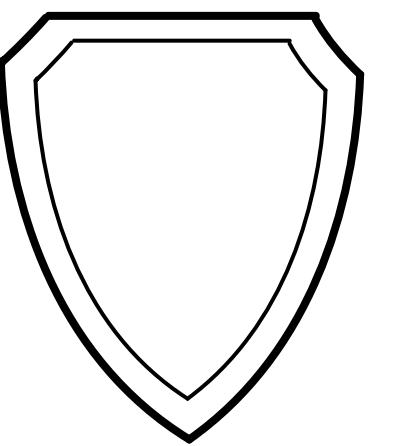
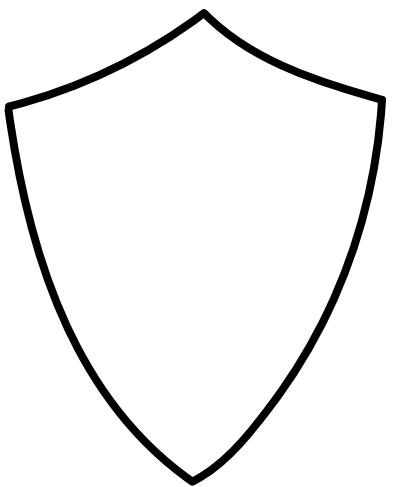
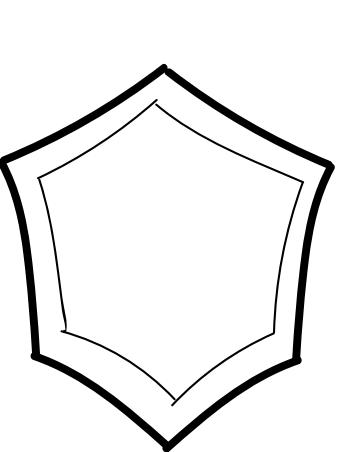


KING

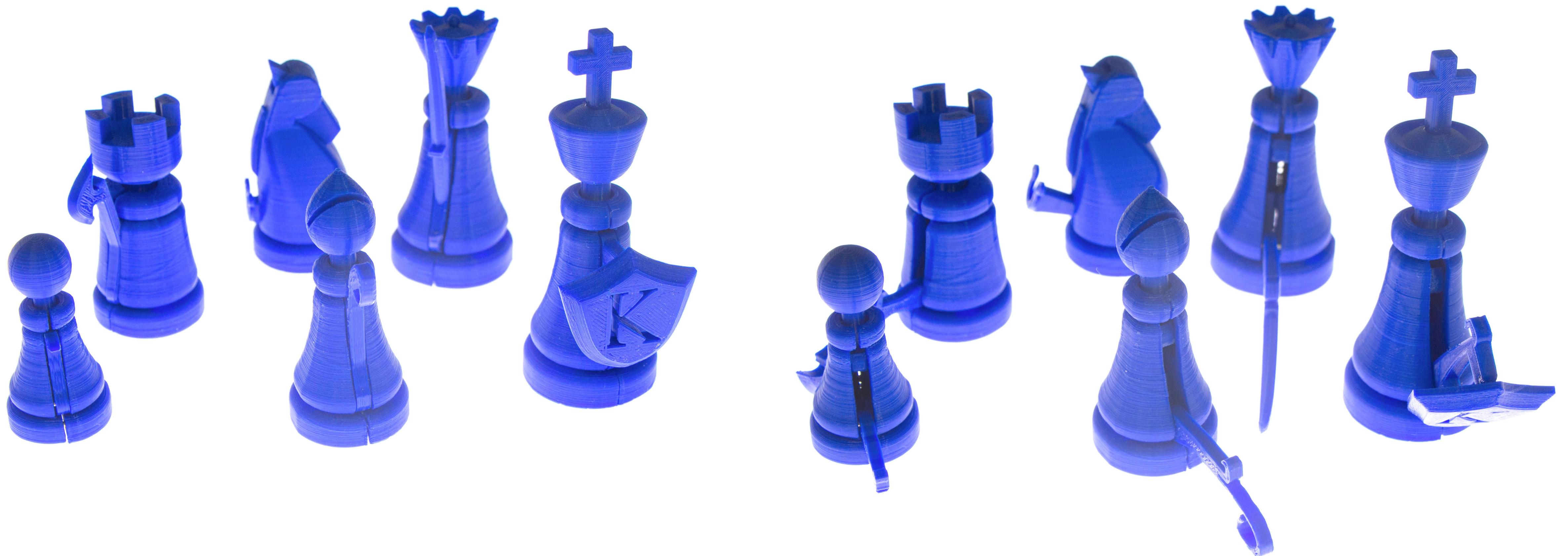


WEAPON: SHIELD

To ensure victory you need to defend your king. What better defense is a shield?



FULL SET



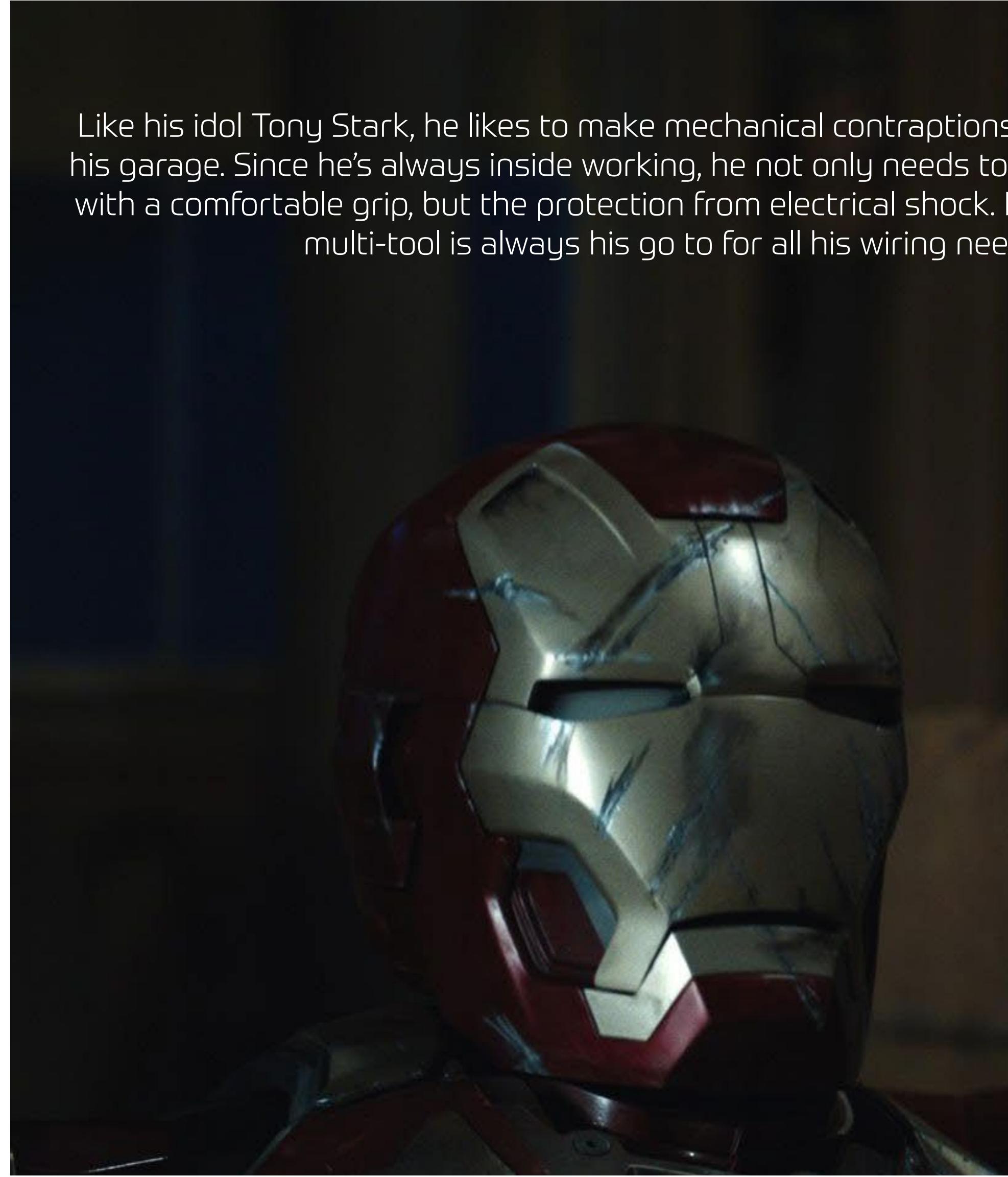
ACTION CHESS



MULTI-TOOL

ERGONOMIC SHEARS FOR SMALL
HANDS AND TOUGH PROJECTS

THIS IS HARLEY



Like his idol Tony Stark, he likes to make mechanical contraptions in his garage. Since he's always inside working, he not only needs tools with a comfortable grip, but the protection from electrical shock. His multi-tool is always his go to for all his wiring needs.



CURRENT TOOL: Multi-tool Wire Cutters



USES

- Stripping
- Cutting
- Crimping
- Pliers

PROBLEMS

- Neutral grip position too wide
- Handle doesn't provide protection
- Uncomfortable for extended use

DESIGN GOALS



ERGONOMIC TILTED
HANDLE

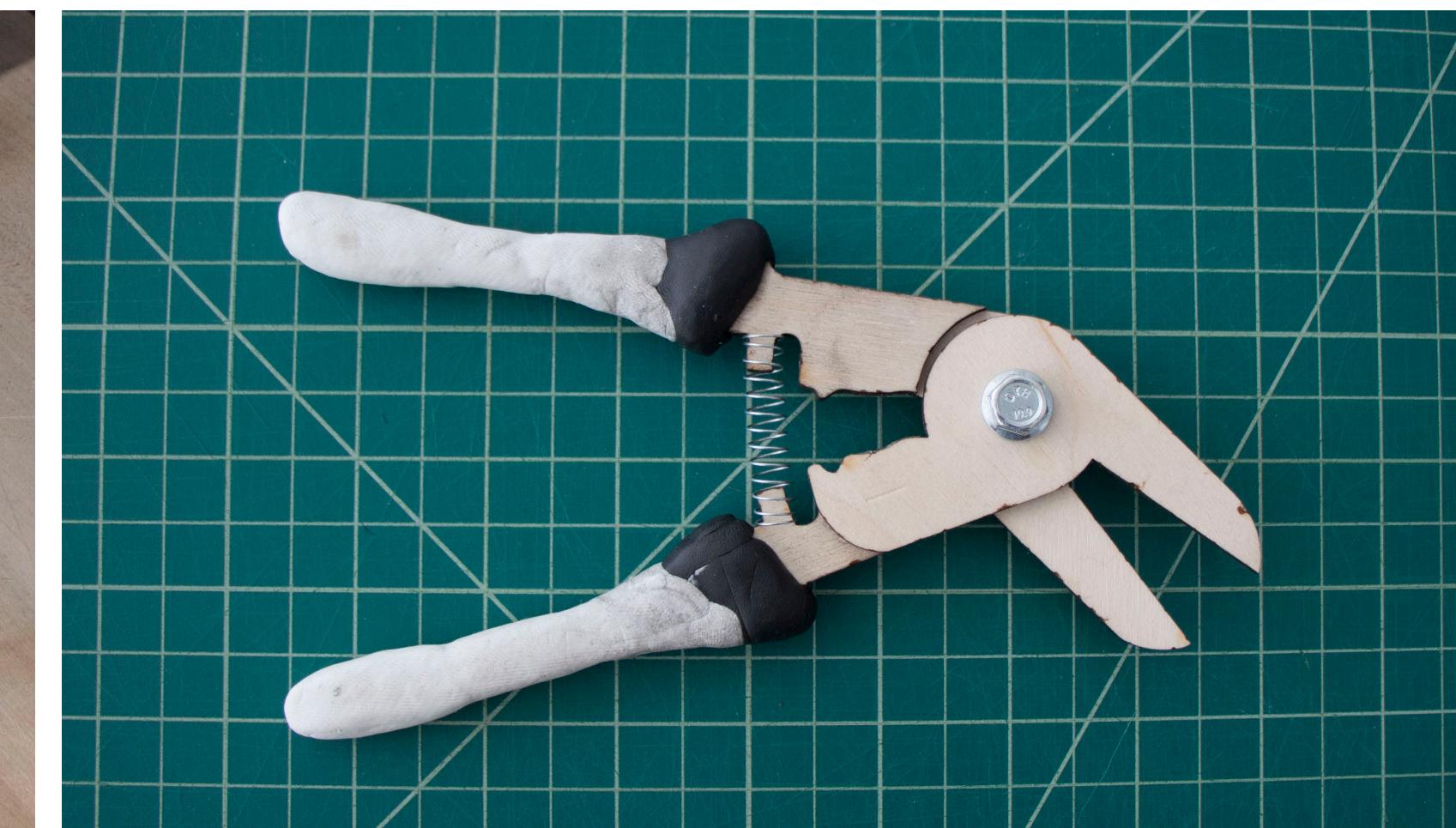
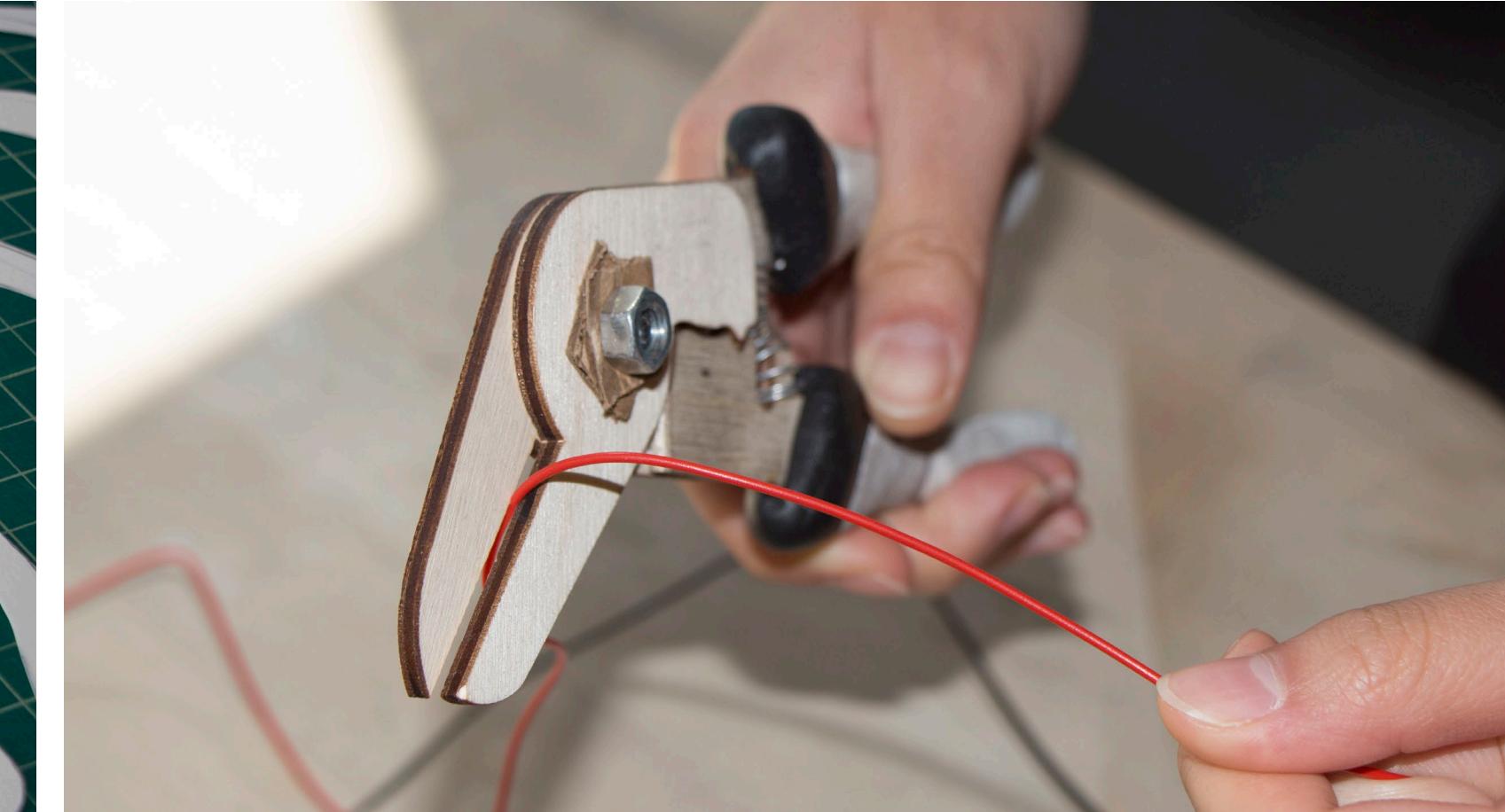
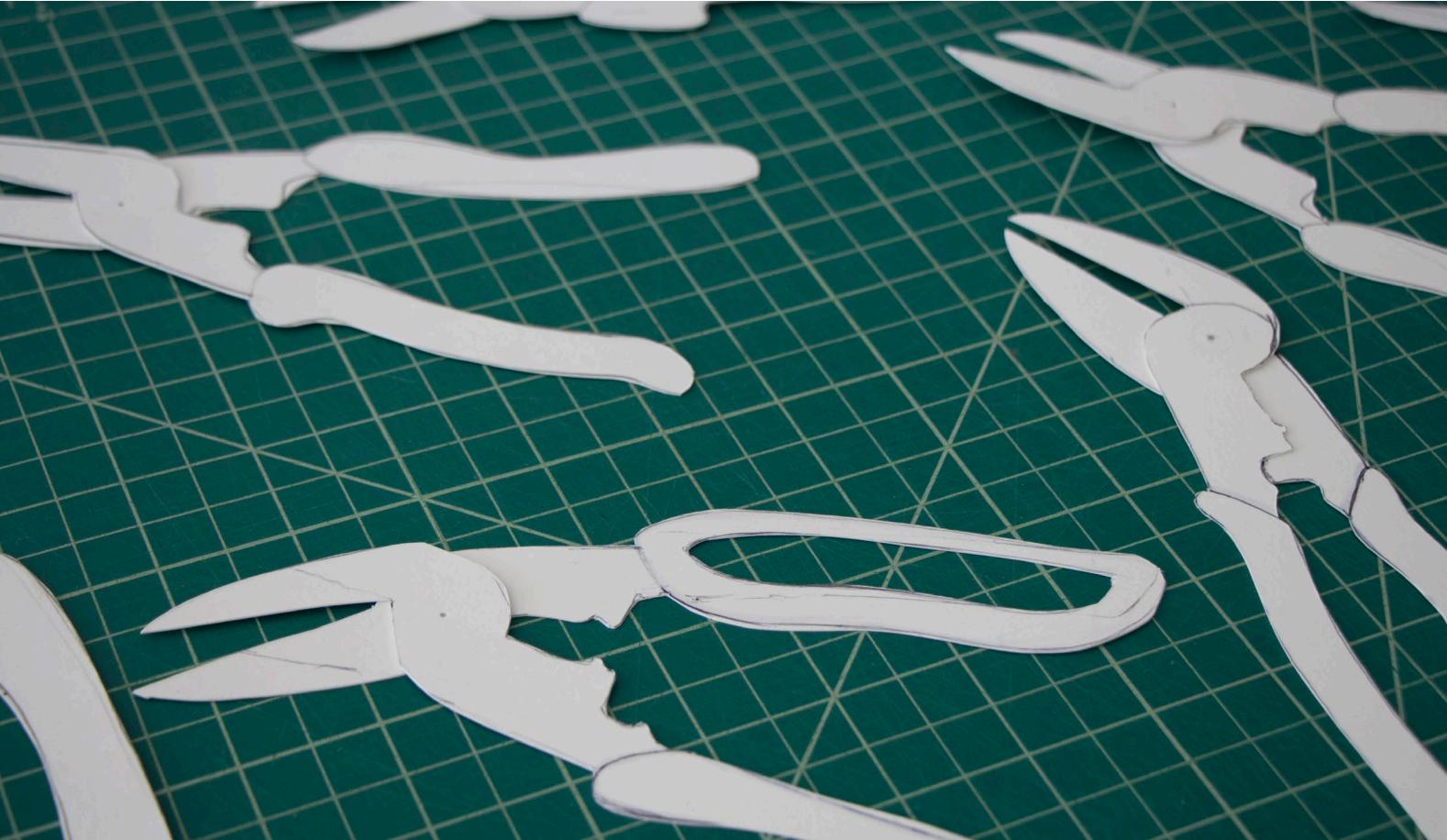
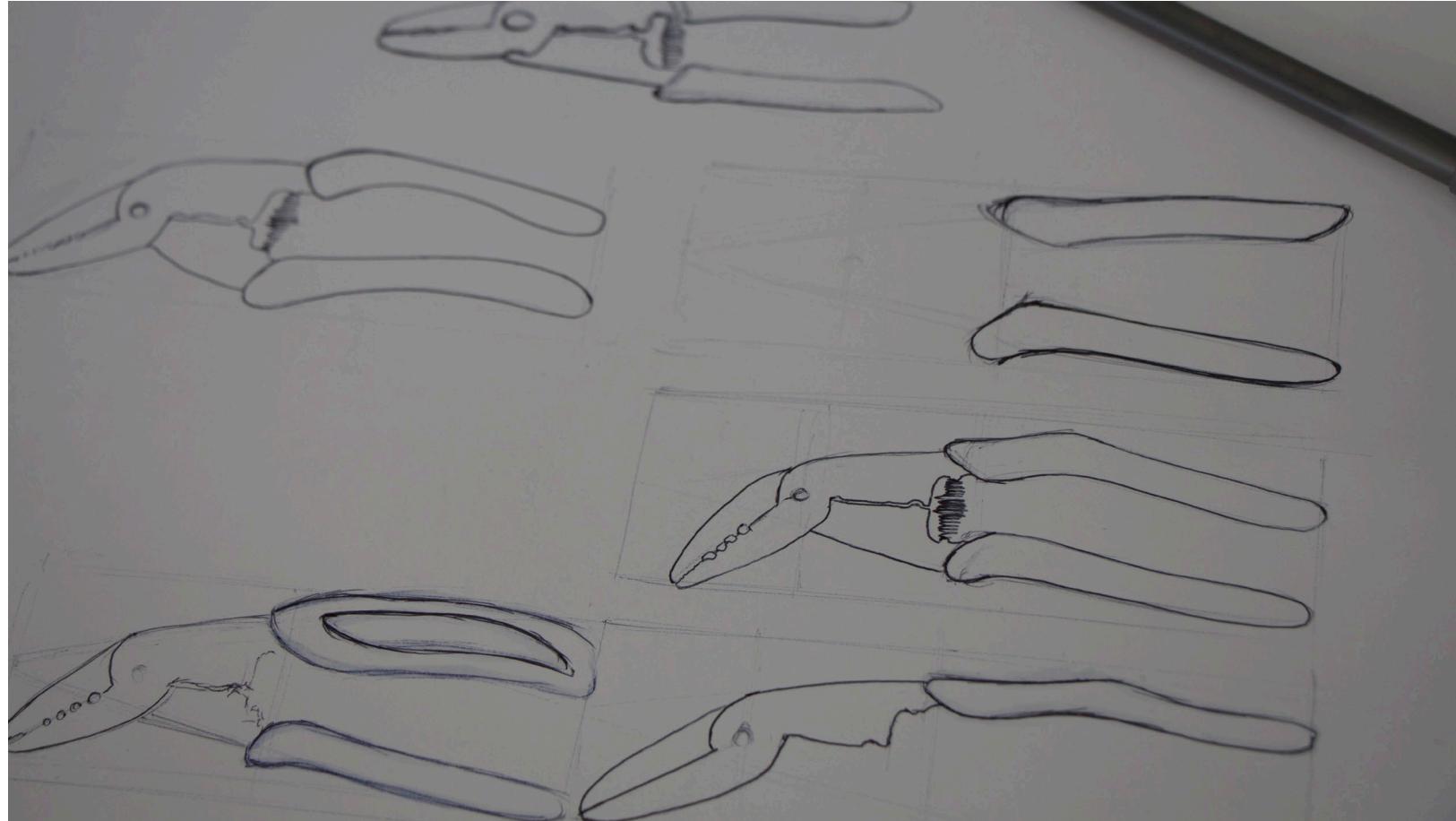


SMALLER HANDLE
FOR SMALLER HANDS



SHOCK PROTECTION

PROCESS

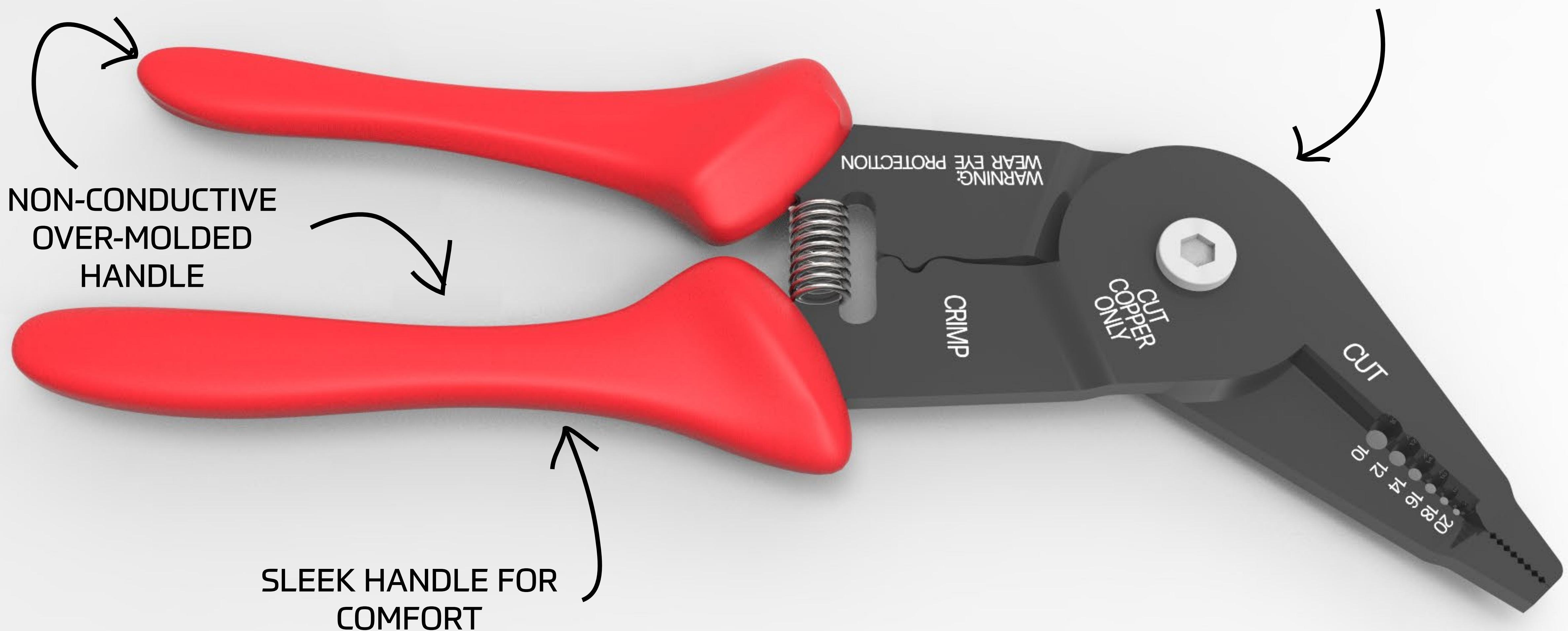


SKETCHES

MODEL ITERATION

“FEELS LIKE” MODEL

RENDER

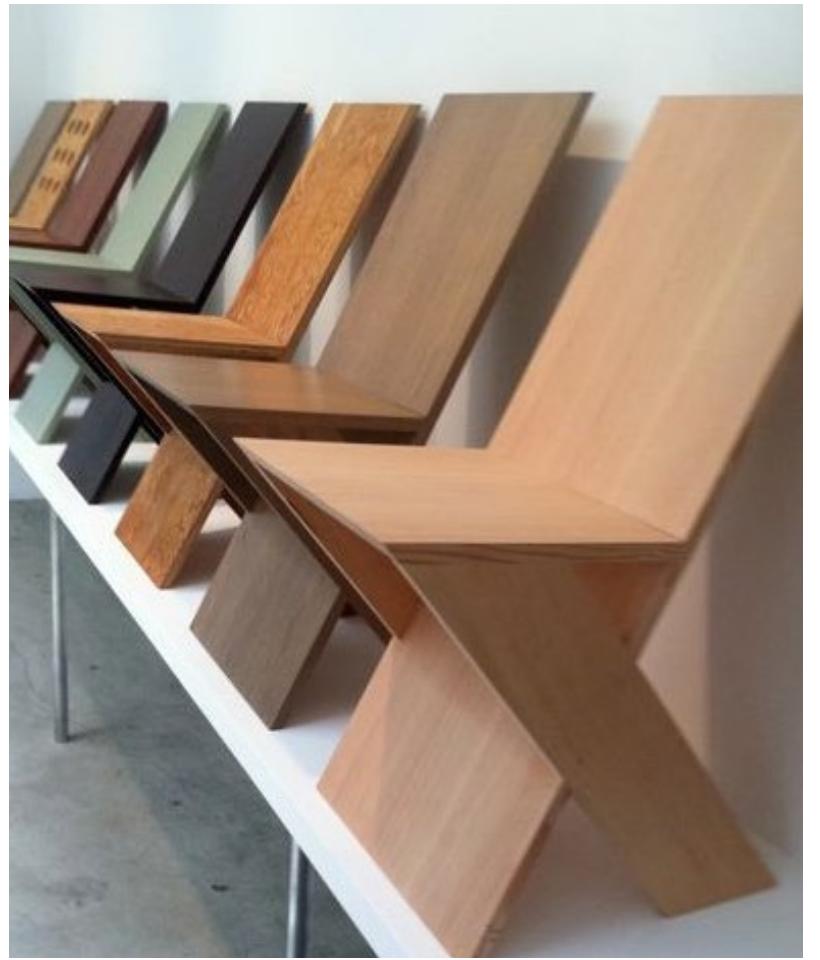


DELTA STOOL

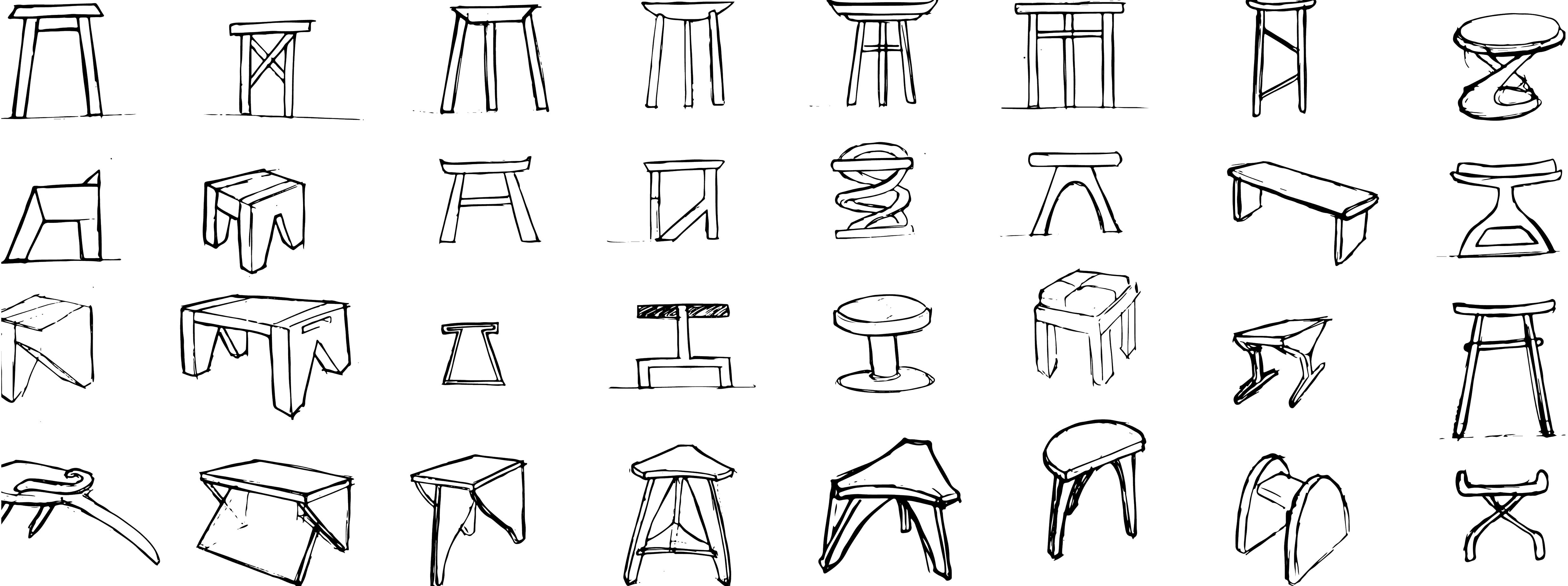
WINDSOR STOOL REMIX



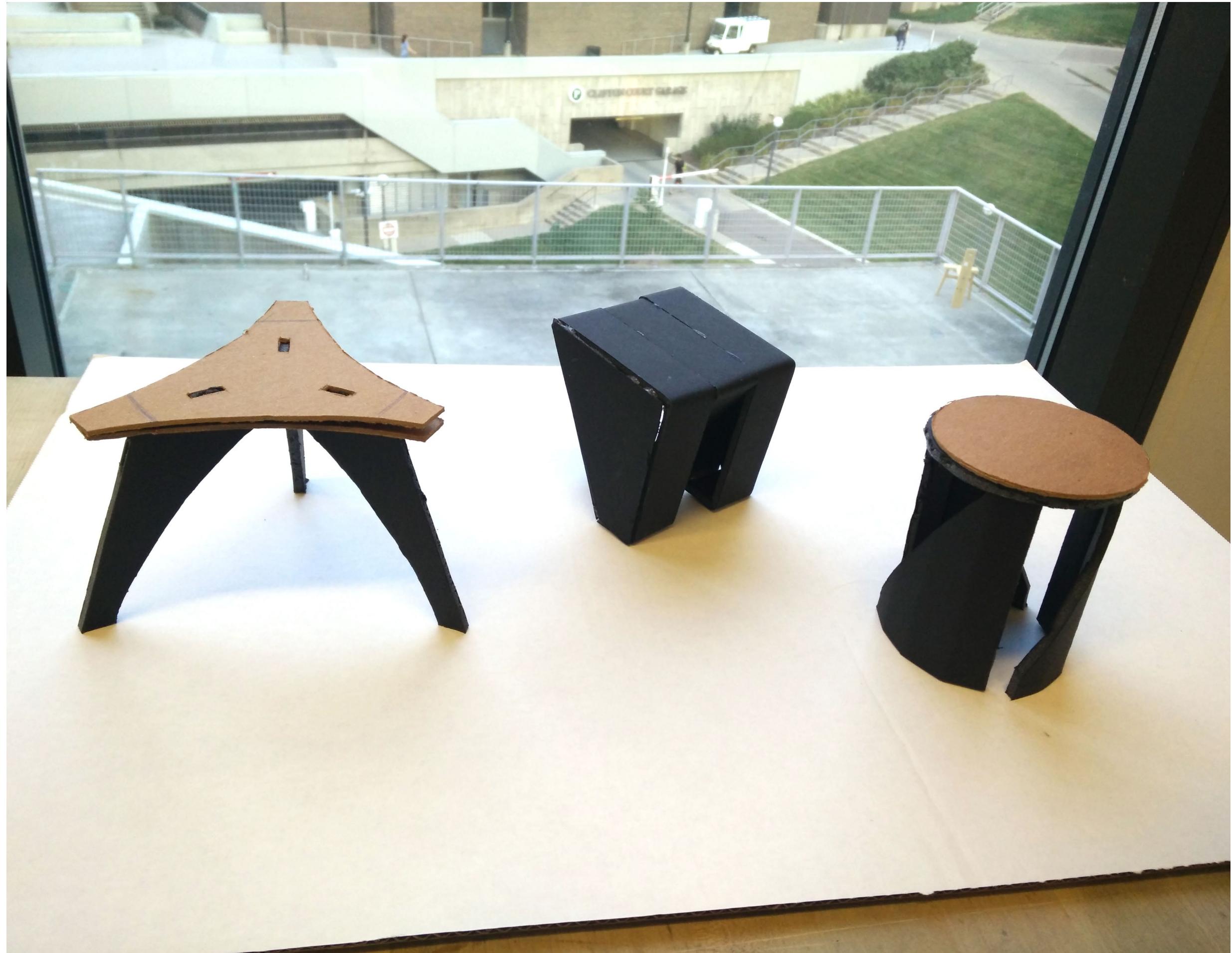
INSPIRATION



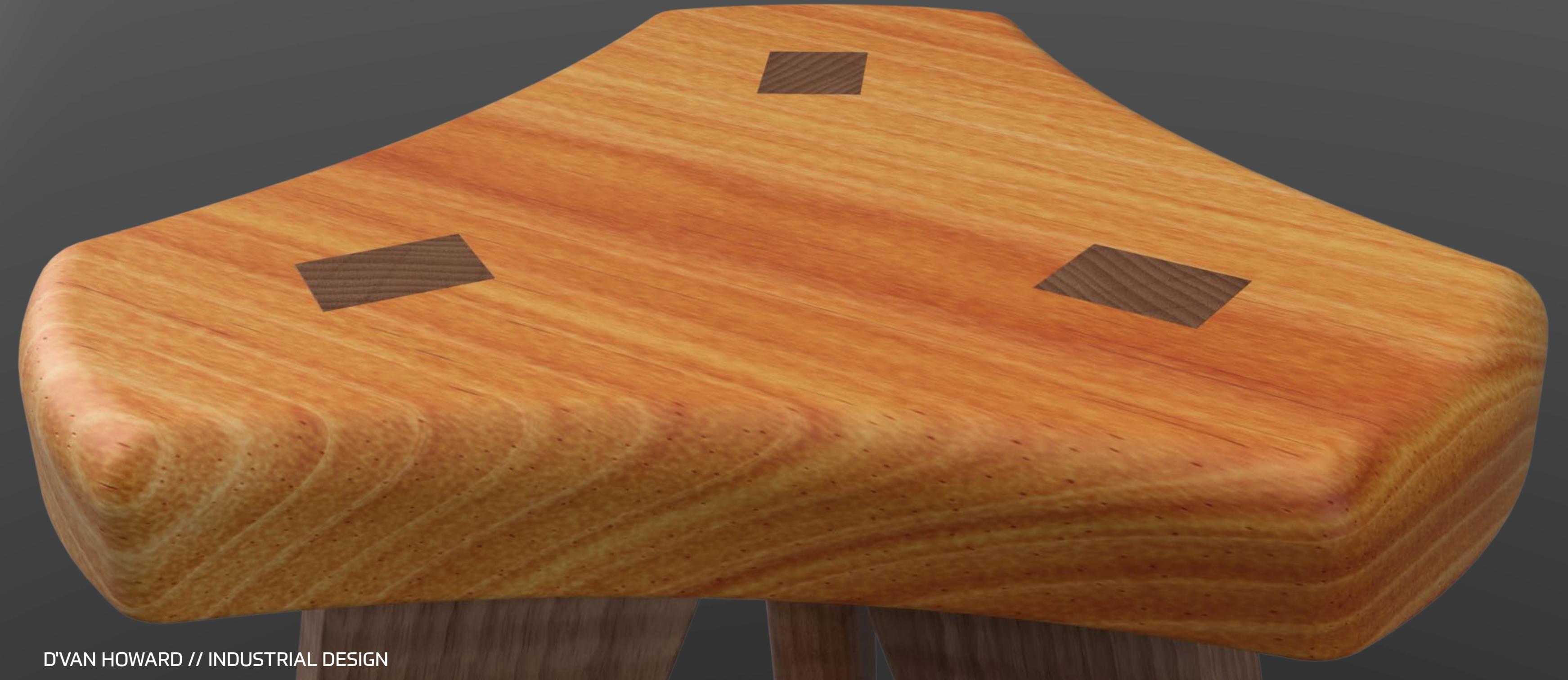
SKETCHES



SCALE MODELS

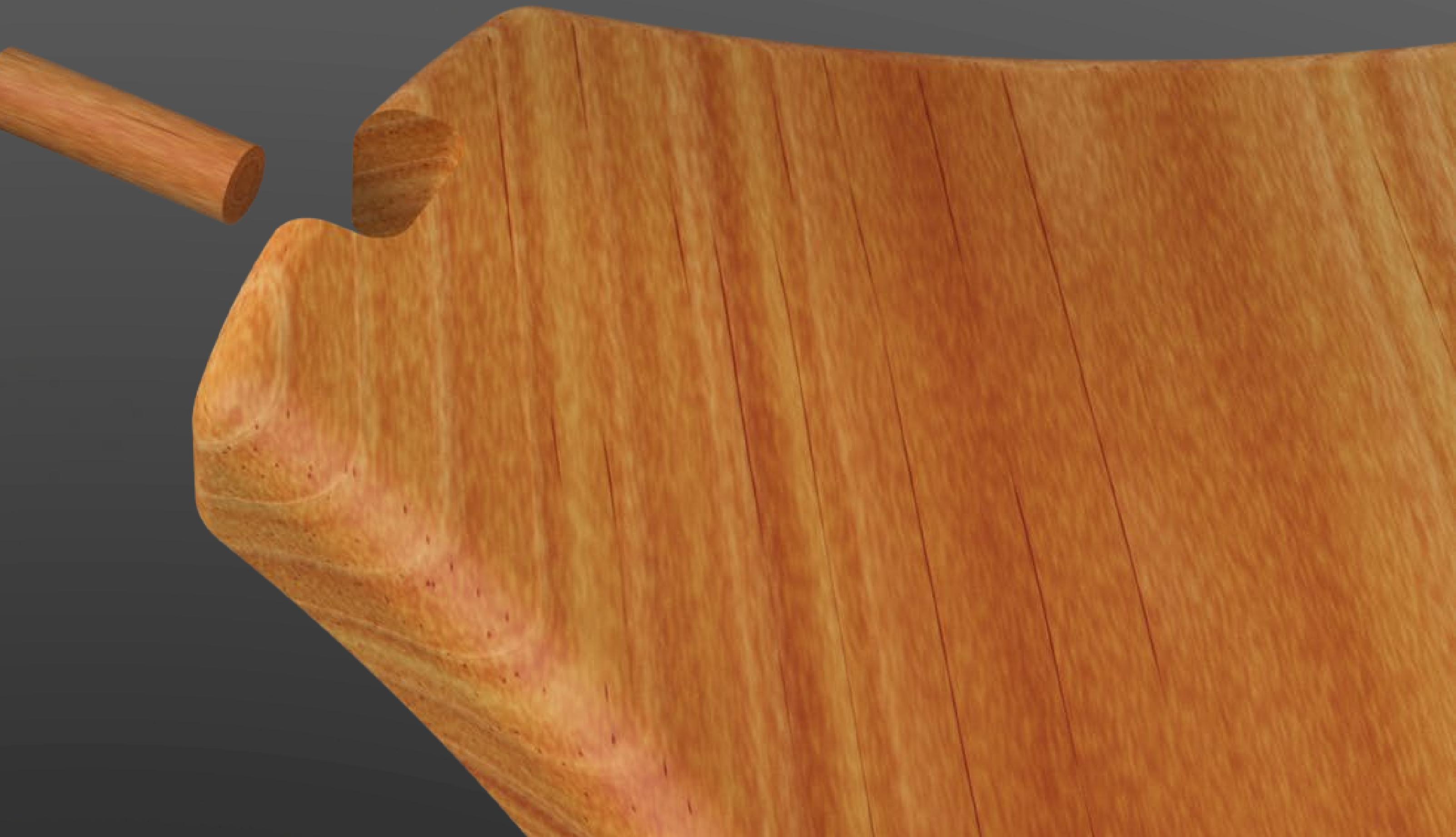


Legs characterizes true windsor by piercing seat with mortise and tenon joint





Domino joins legs
with foot rest





DELTA STOOL

WINSOR REMIX

LUMBER

Mahogany

(1x) 33"x30"x1.5"

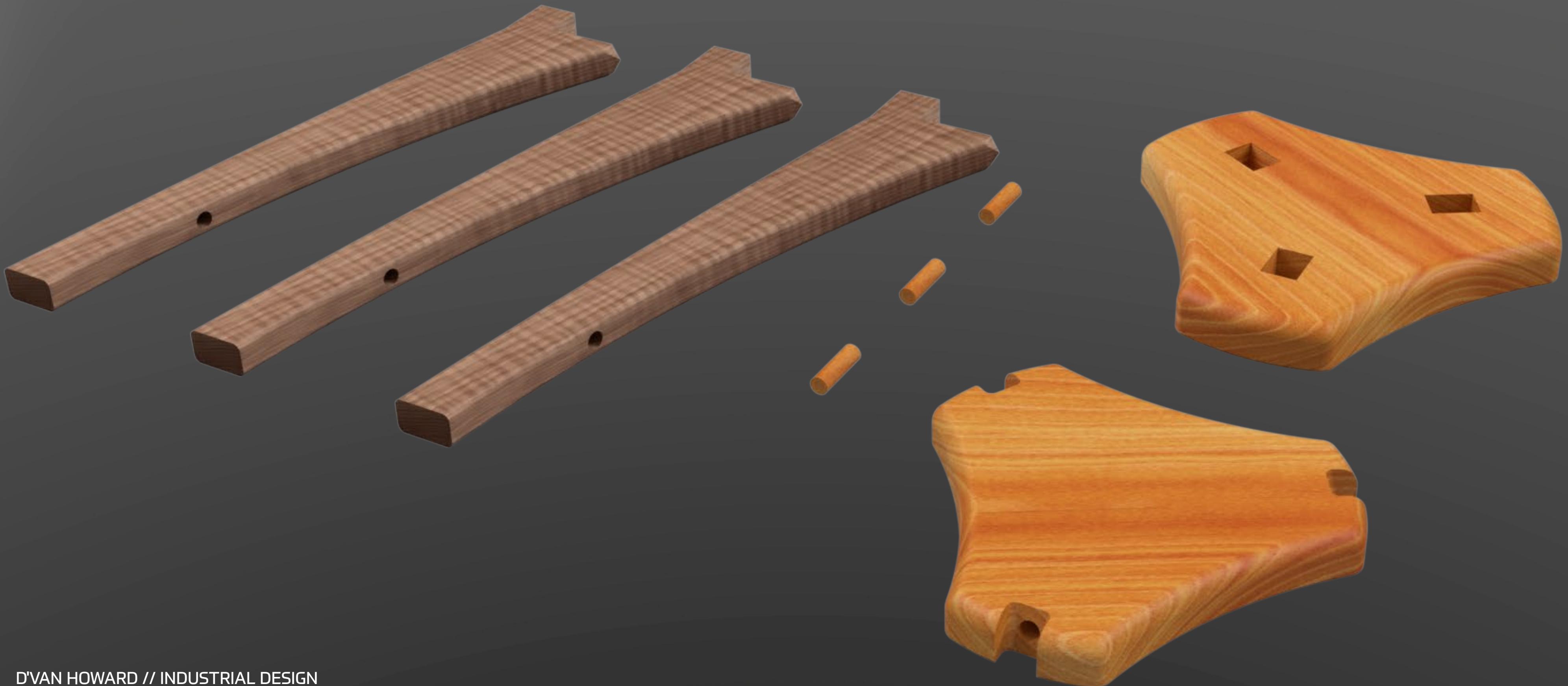
Oak

(1x) 19"x19"x2"

(1x) 17"x17"x1.75"

(1x) 9"x0.75" rod

PARTS LIST			
ITEM	QTY	PART NUMBER	MATERIAL
1	3	STOOL LEG REAL	MAHOGANY
2	1	STOOL REST	WOOD (OAK)
3	1	STOOL SEAT	WOOD (OAK)
4	3	DOMINO	WOOD (OAK)



FABRICATION PLAN

Seat and foot rest

CNC mill

Drill holes for dominos in foot rest

Domino

Purchase rod

Cut into three equal lengths



Legs

Cut profile with bandsaw

Drill domino holes

Sand fillets and surfaces

Glue all joints

Finish with urethane sealer

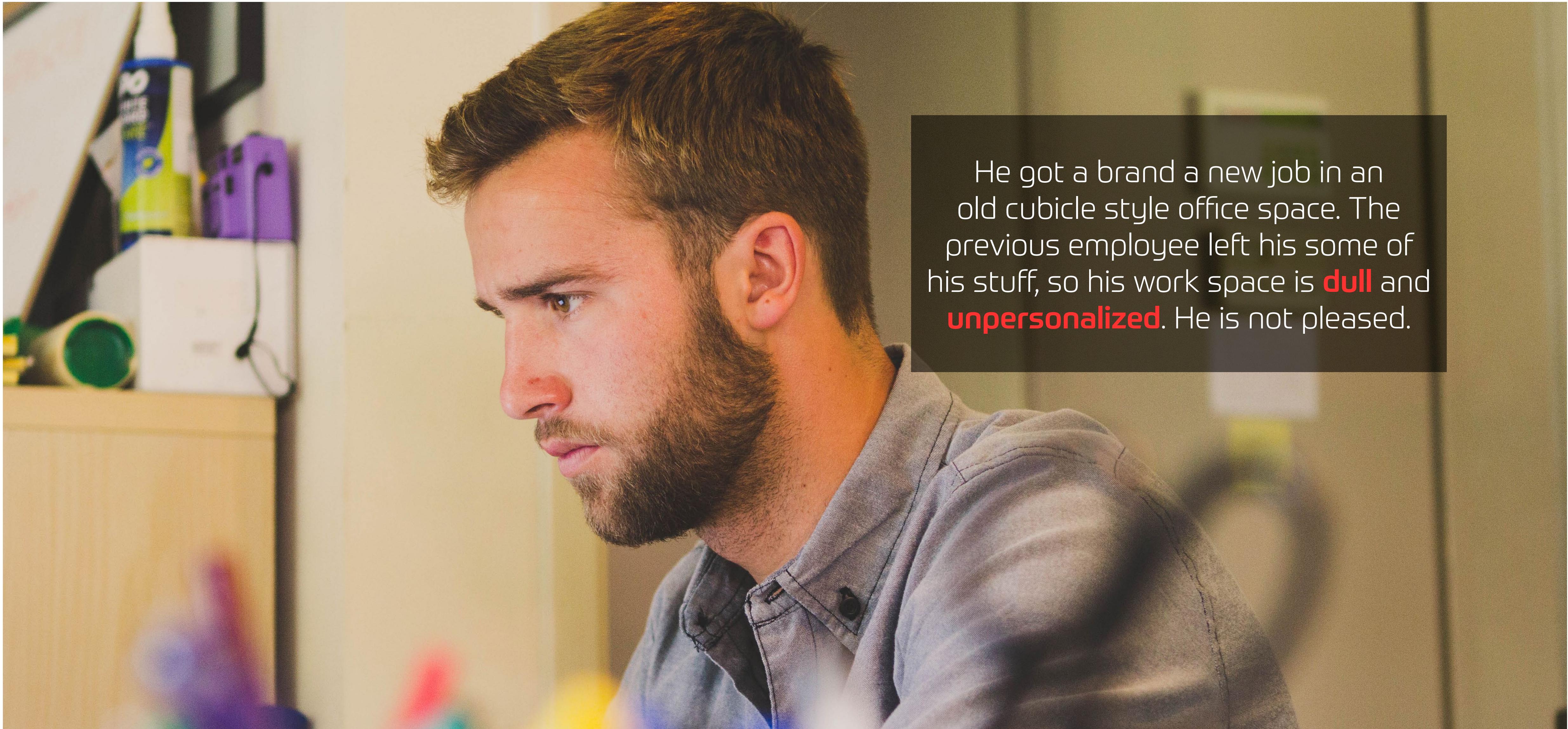


HELIX HOLDERS

SPICING UP YOUR BORING DESK
WITH THESE SPIRALING CONTAINERS

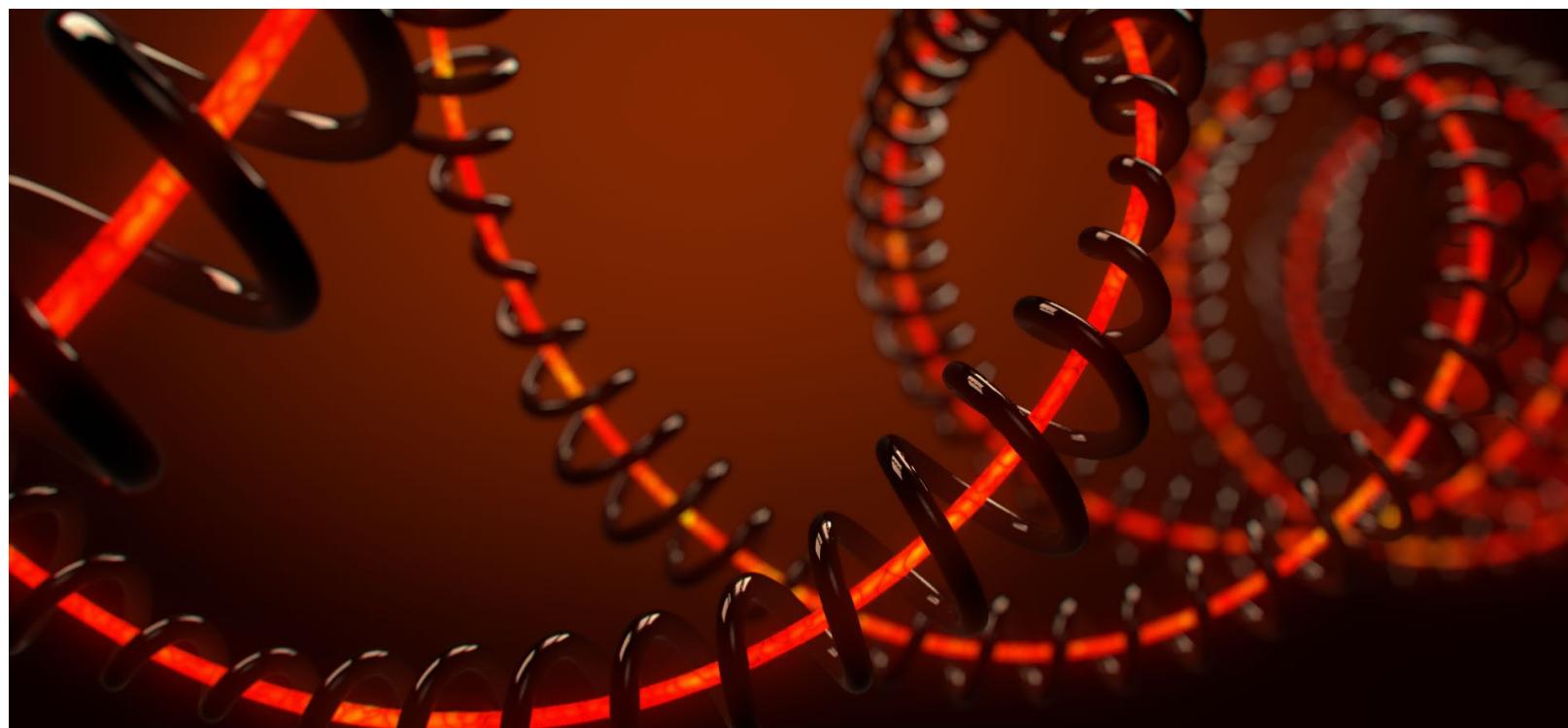


Meet Peter



He got a brand a new job in an old cubicle style office space. The previous employee left his some of his stuff, so his work space is **dull** and **unpersonalized**. He is not pleased.

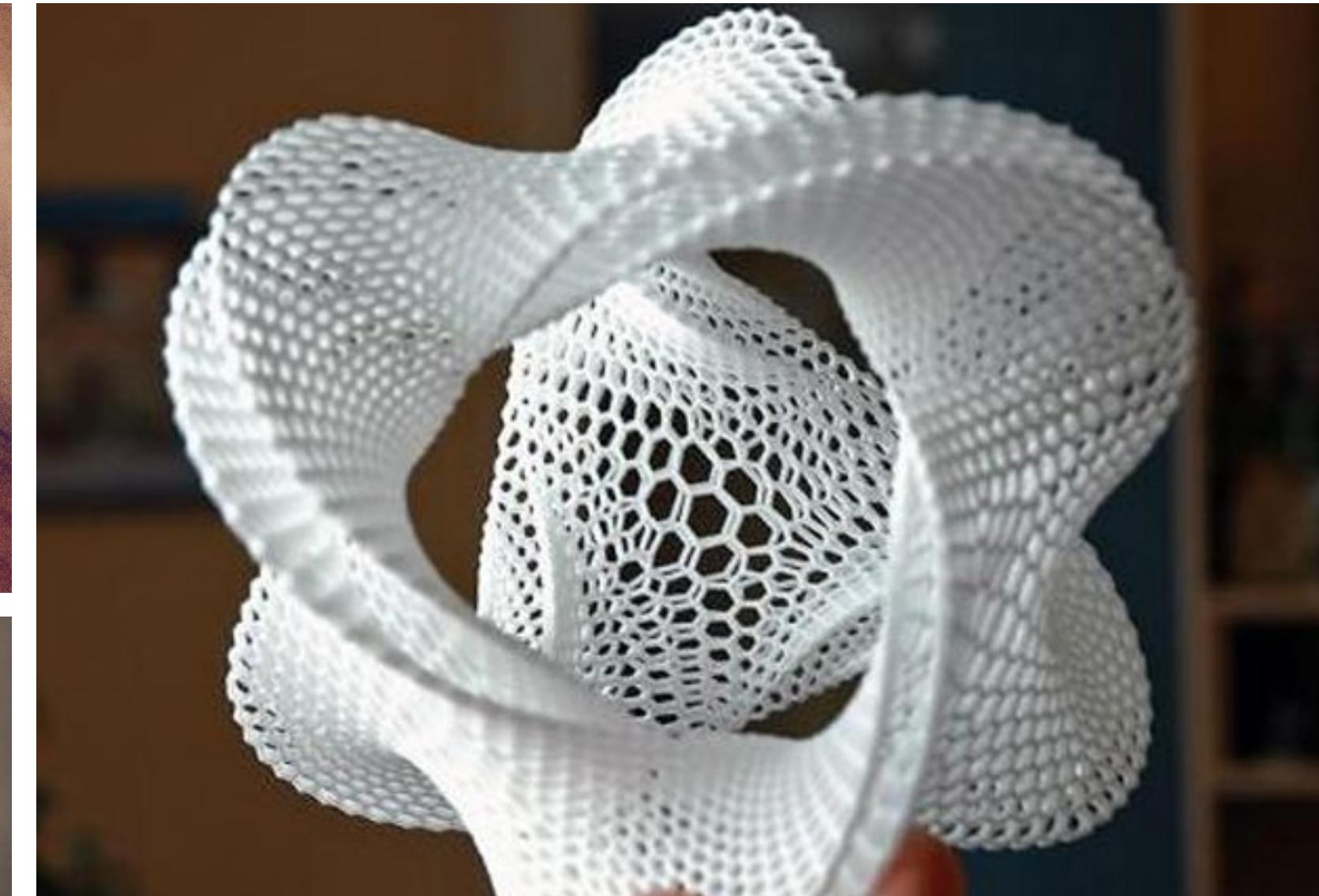
DESIGN GOALS



INSPIRATION

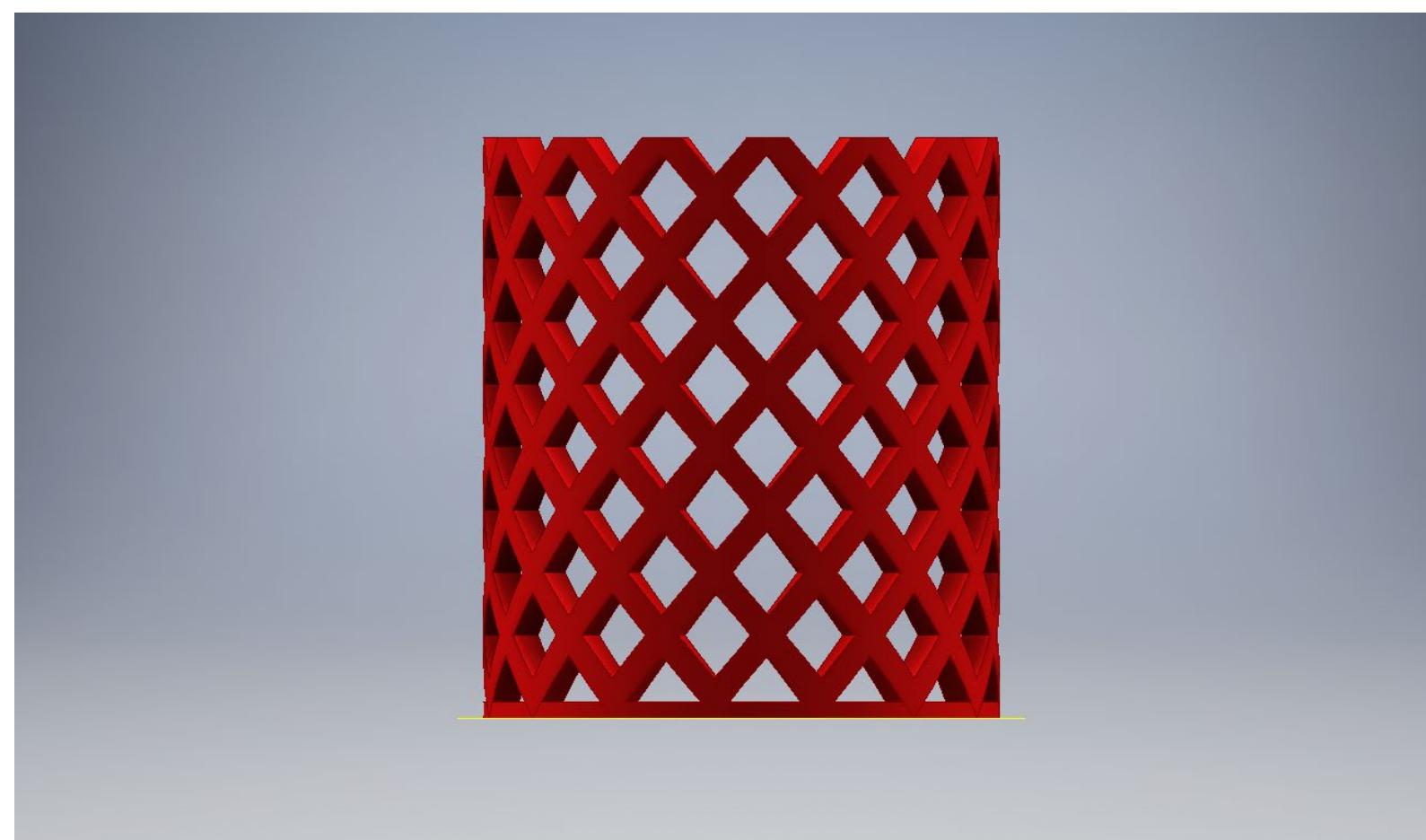
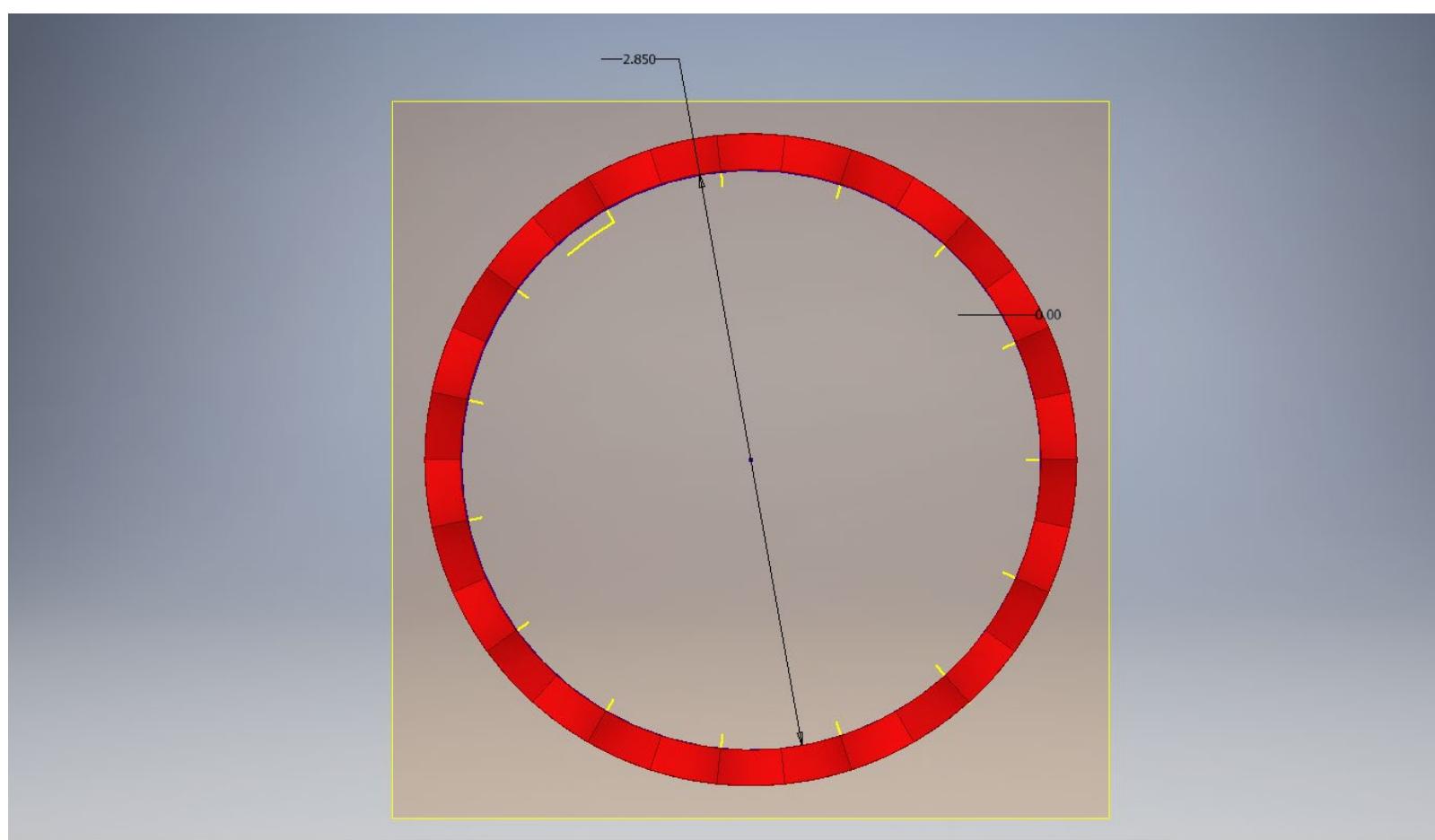
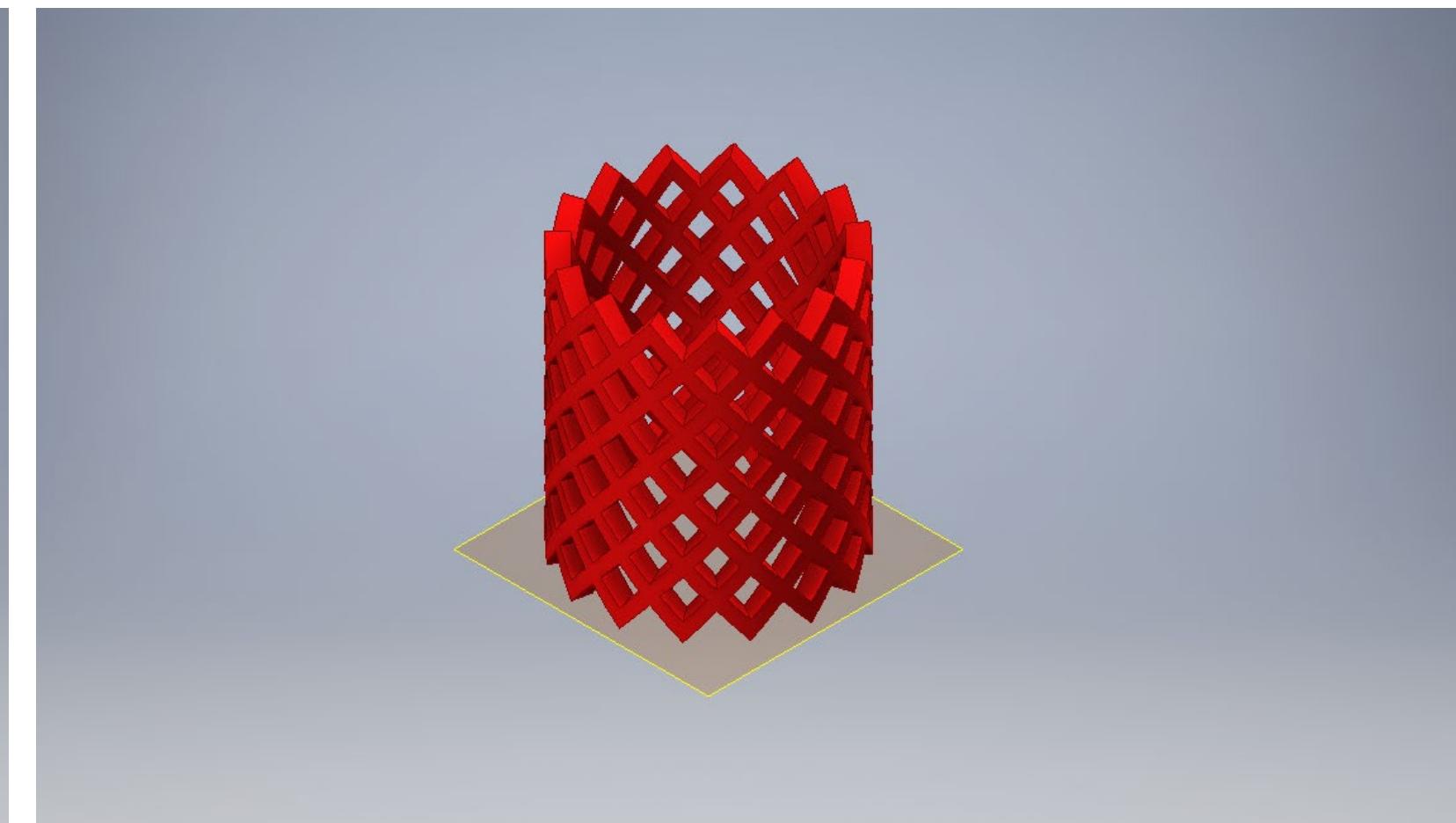
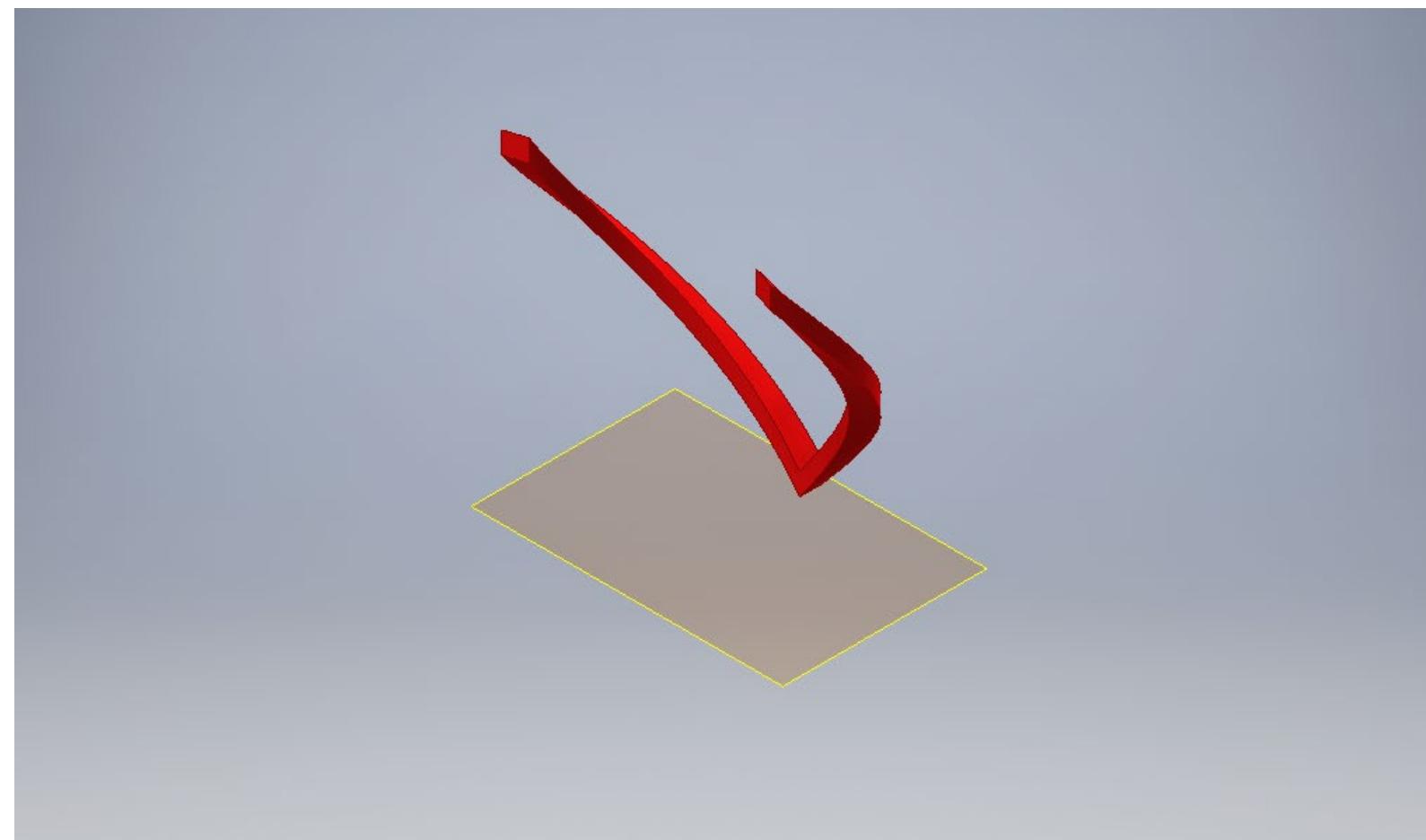
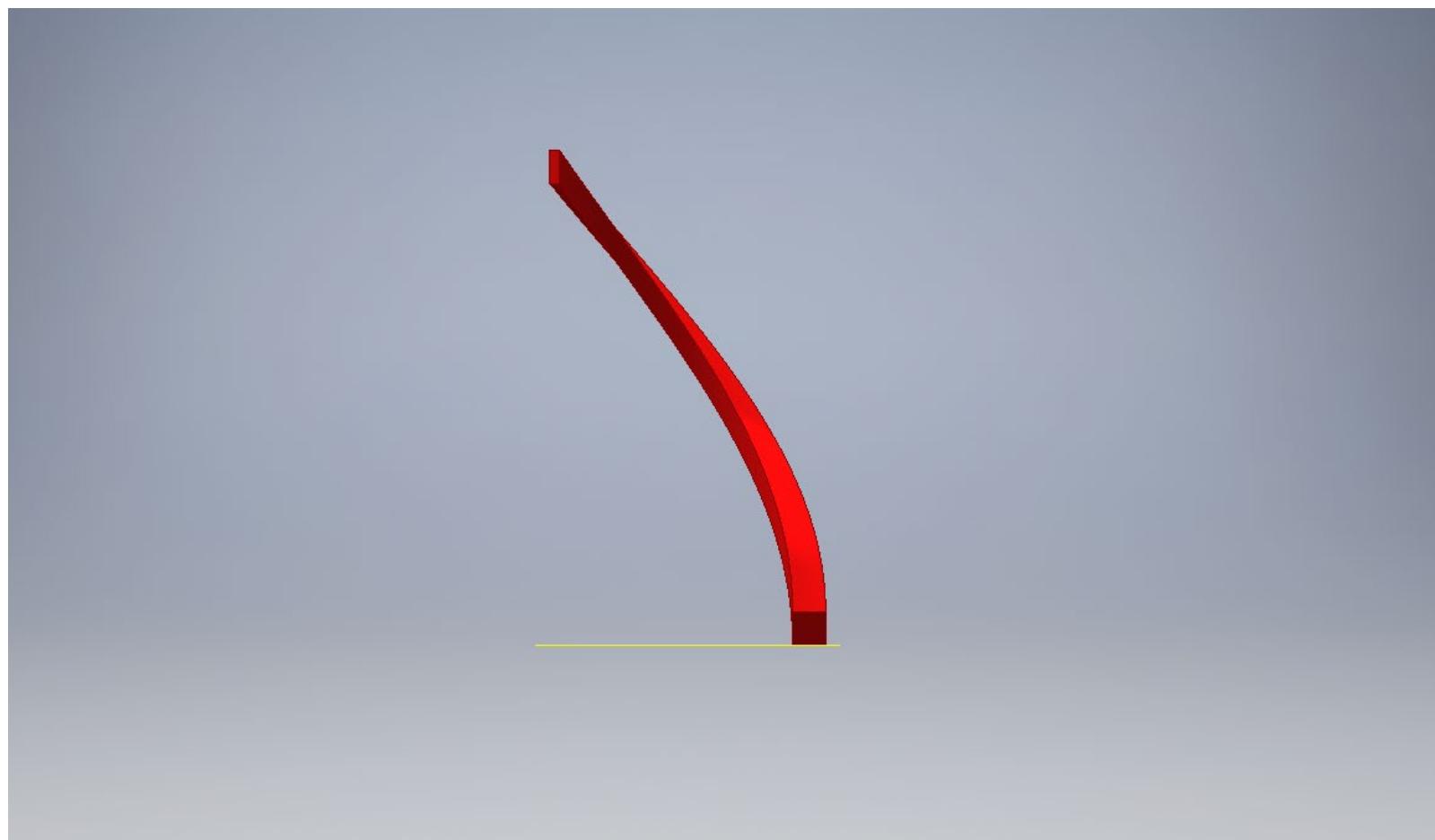


FUNCTION



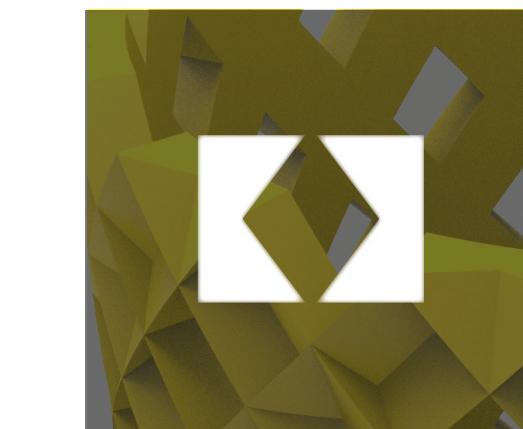
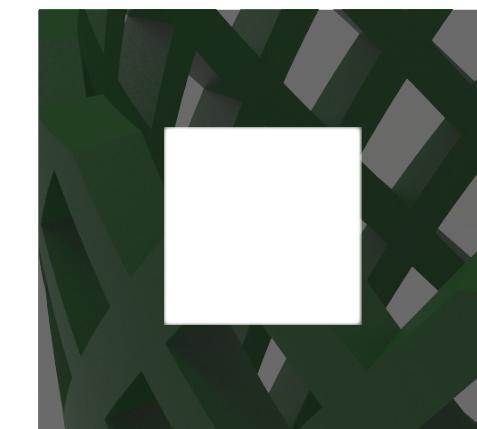
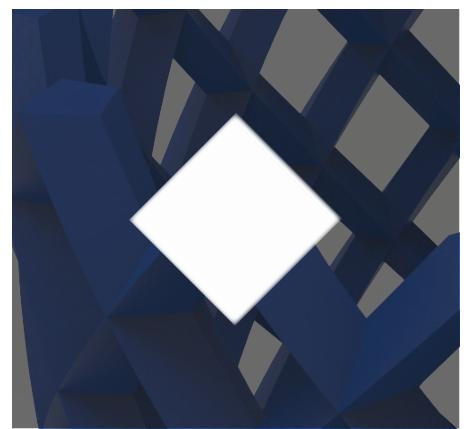
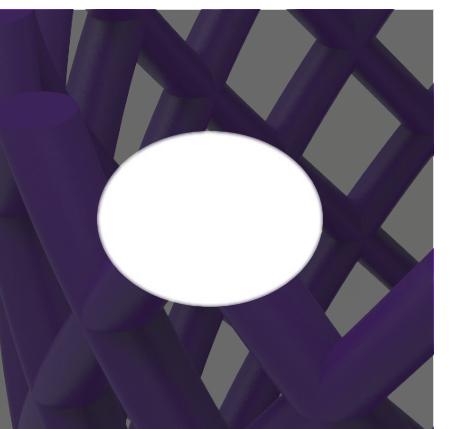
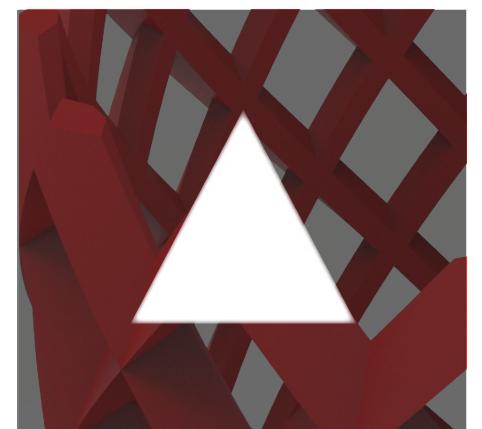
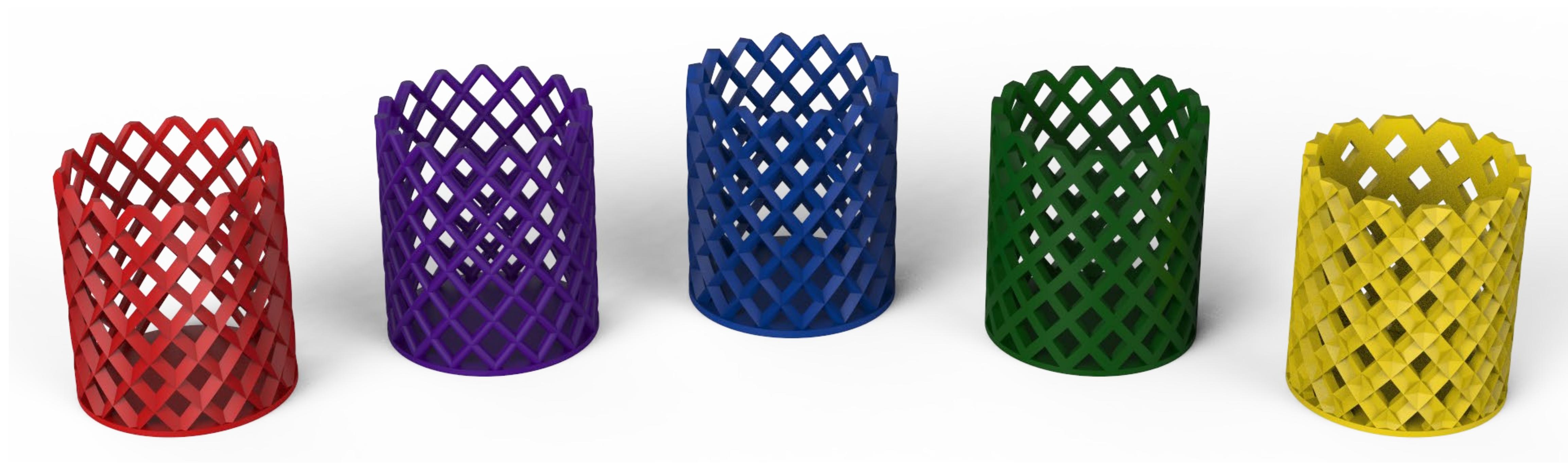
3D PRINTED

CAD+3D PRINTING



With CAD the concept was quickly modeled and sent directly to the 3D printer.

FINAL MODELS



DUO-LUX

A LAMP FOR ALL OCCASIONS

DESIGN GOALS

COOL WHITE LIGHT

- Promotes focusing
- Helps you stay awake
- Colors appear closer to true color



WARM WHITE LIGHT

- Promotes relaxation
- Less strain on eyes
- Better transition to sleep

BENCKMARKING

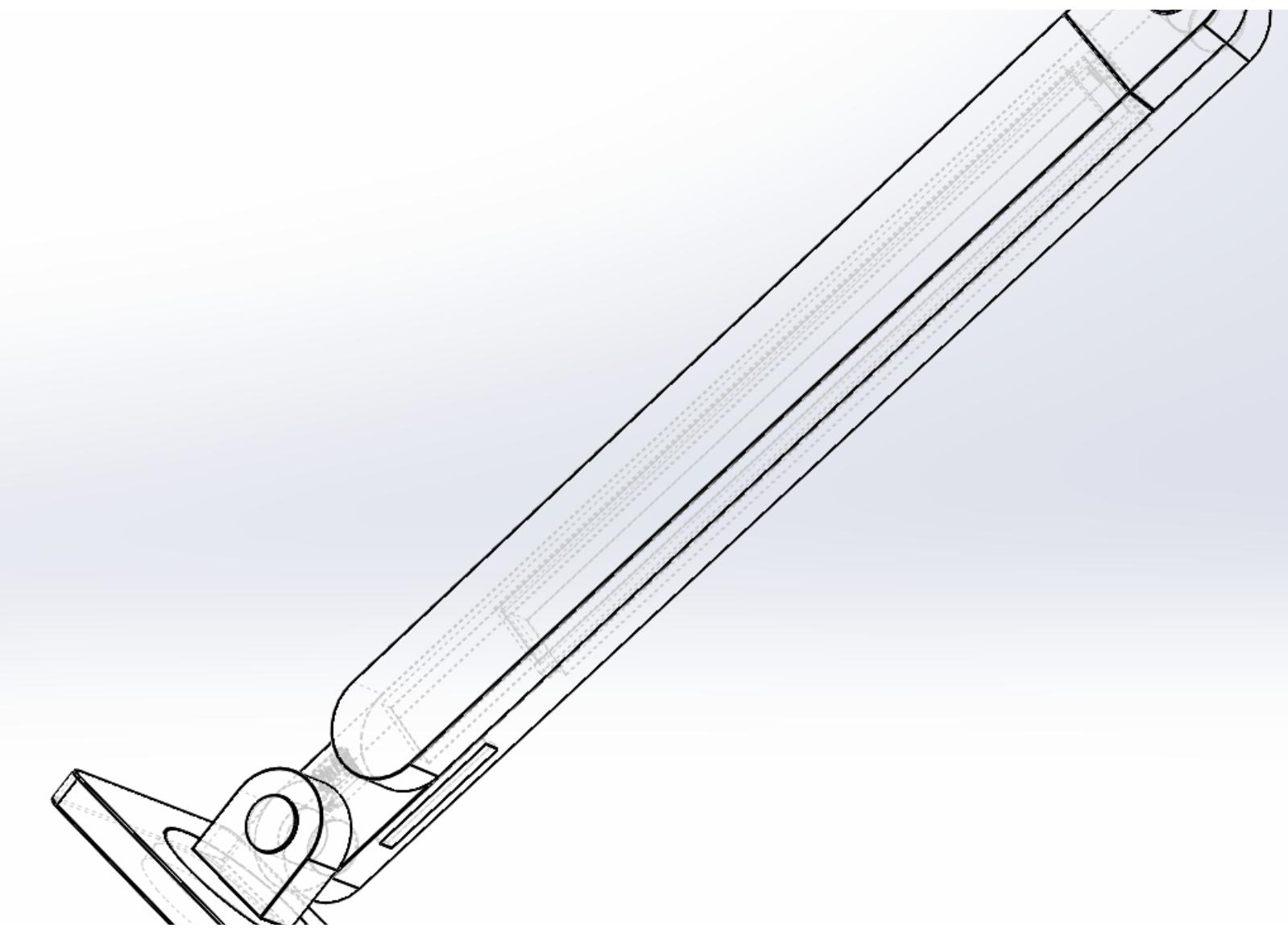
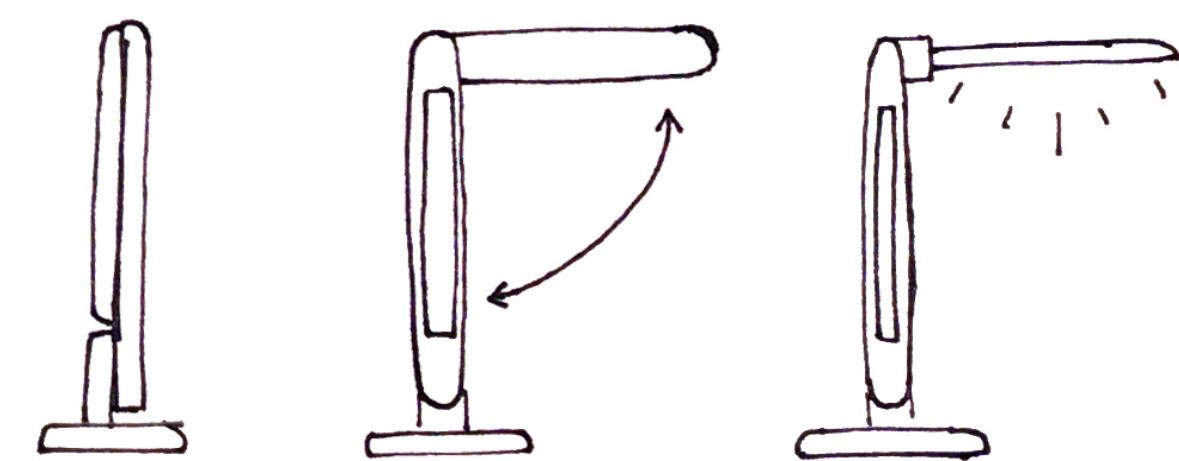
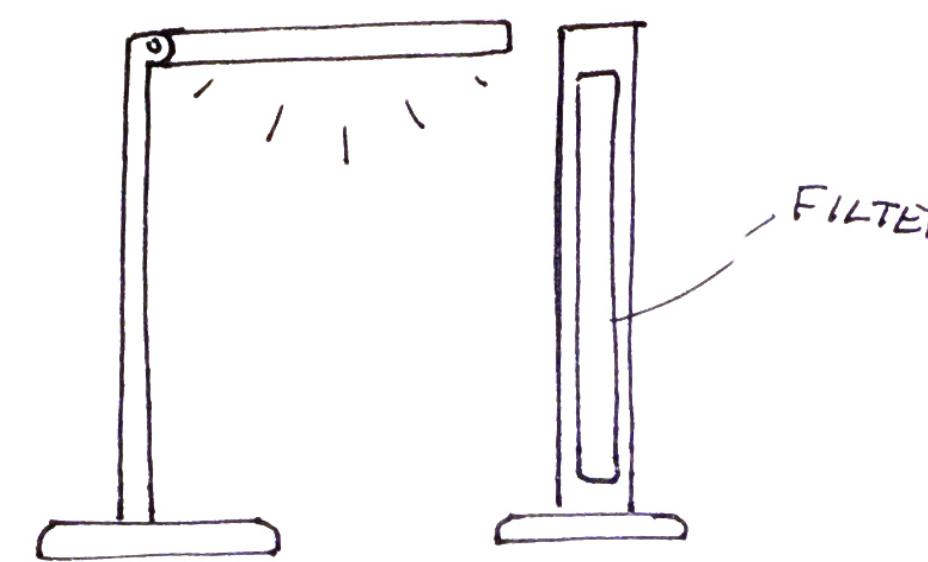
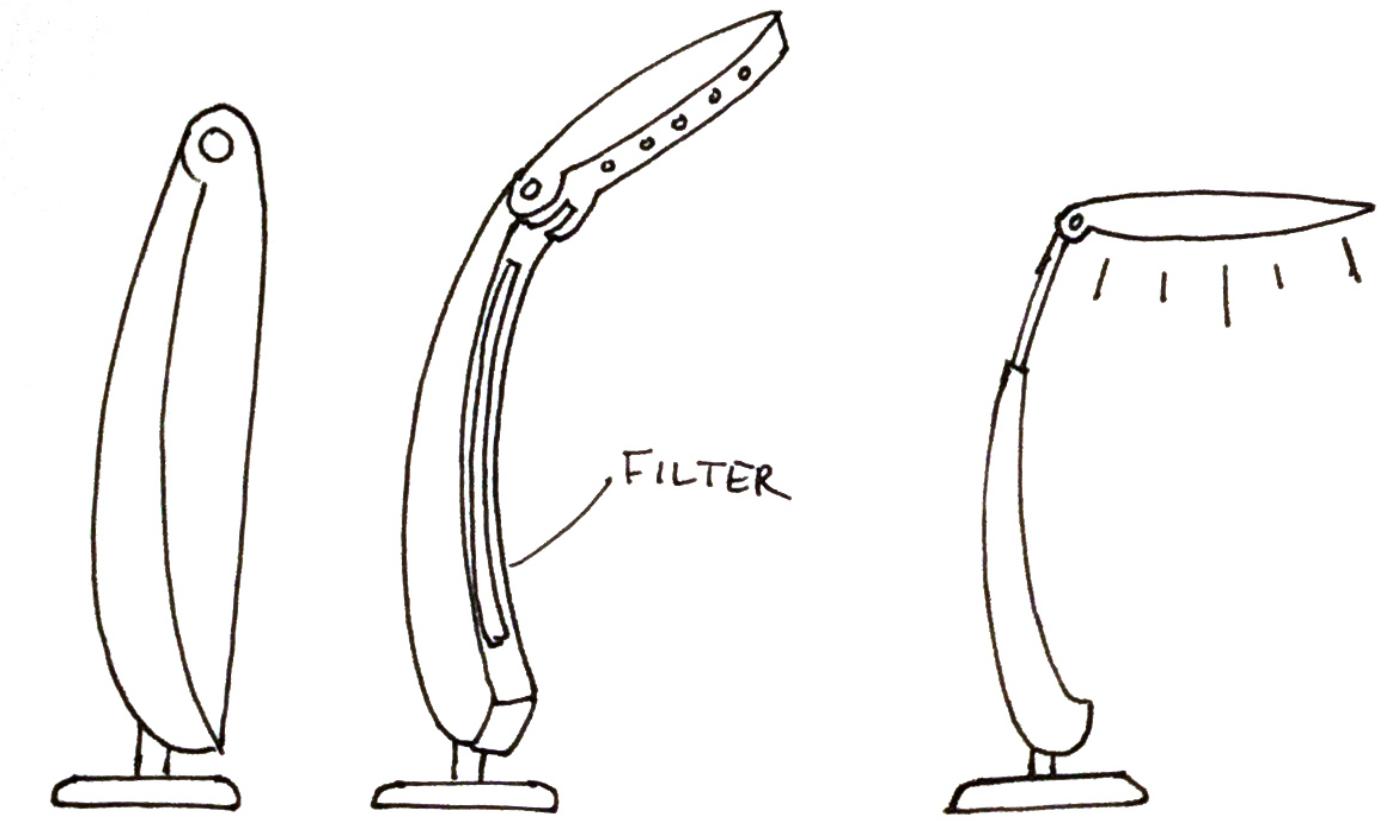
Best Desk Lamps 2017 - BestReviews.com

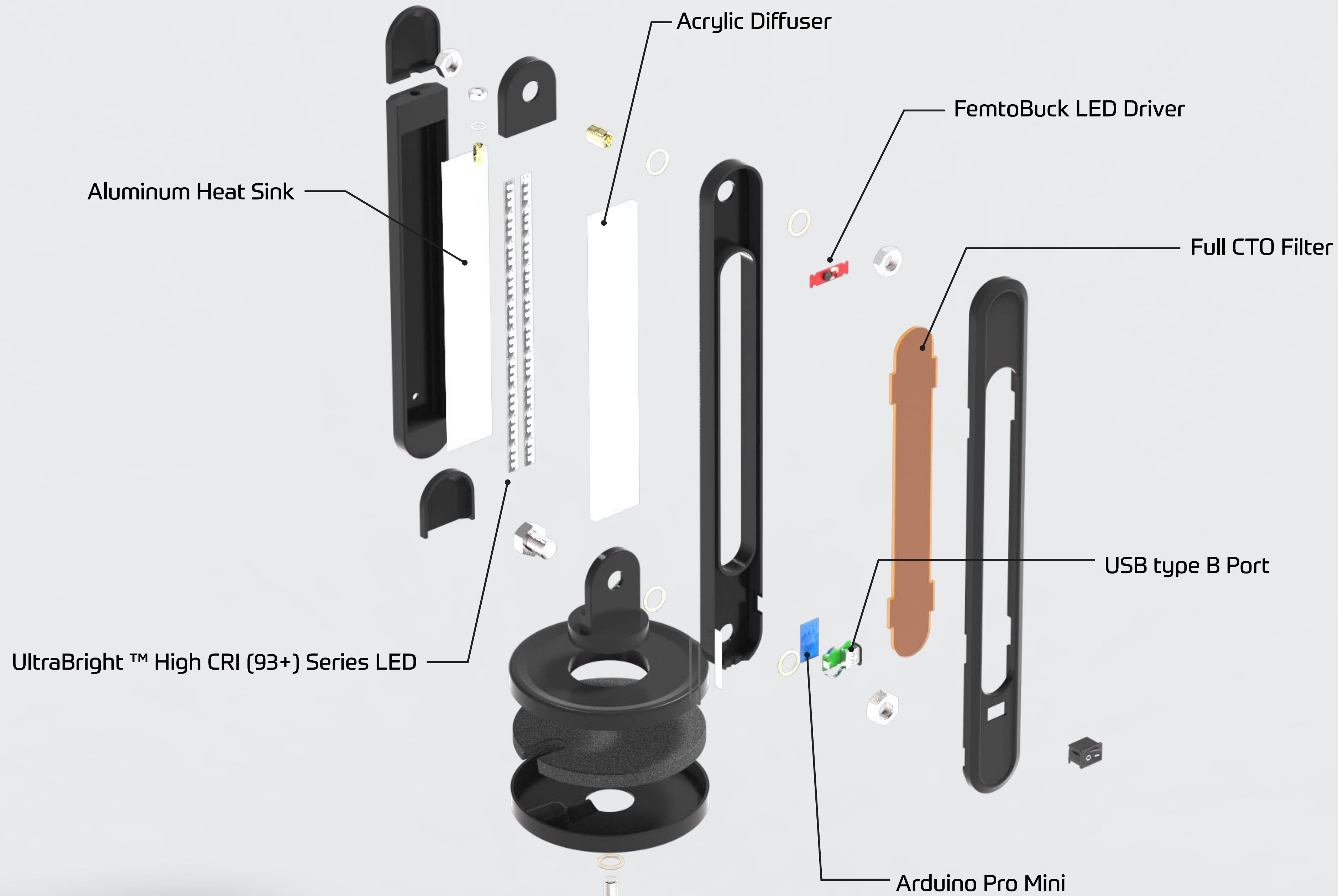


Feature Requirements

- Dimmable
- Adjustable
- USB charging port
- Multiple light temperatures

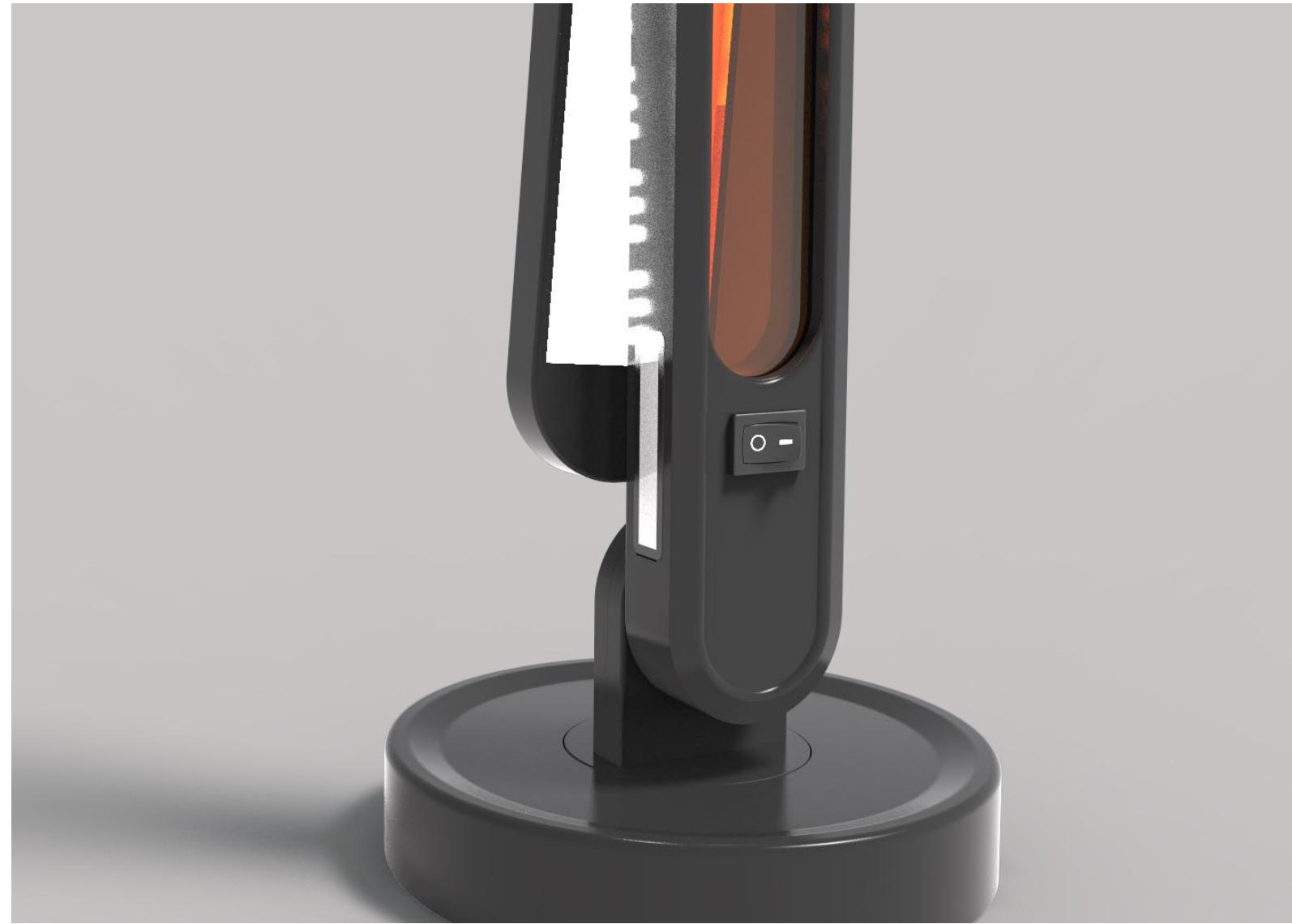
SKETCHING/CAD IDEATION







USB



Dual color temperatures

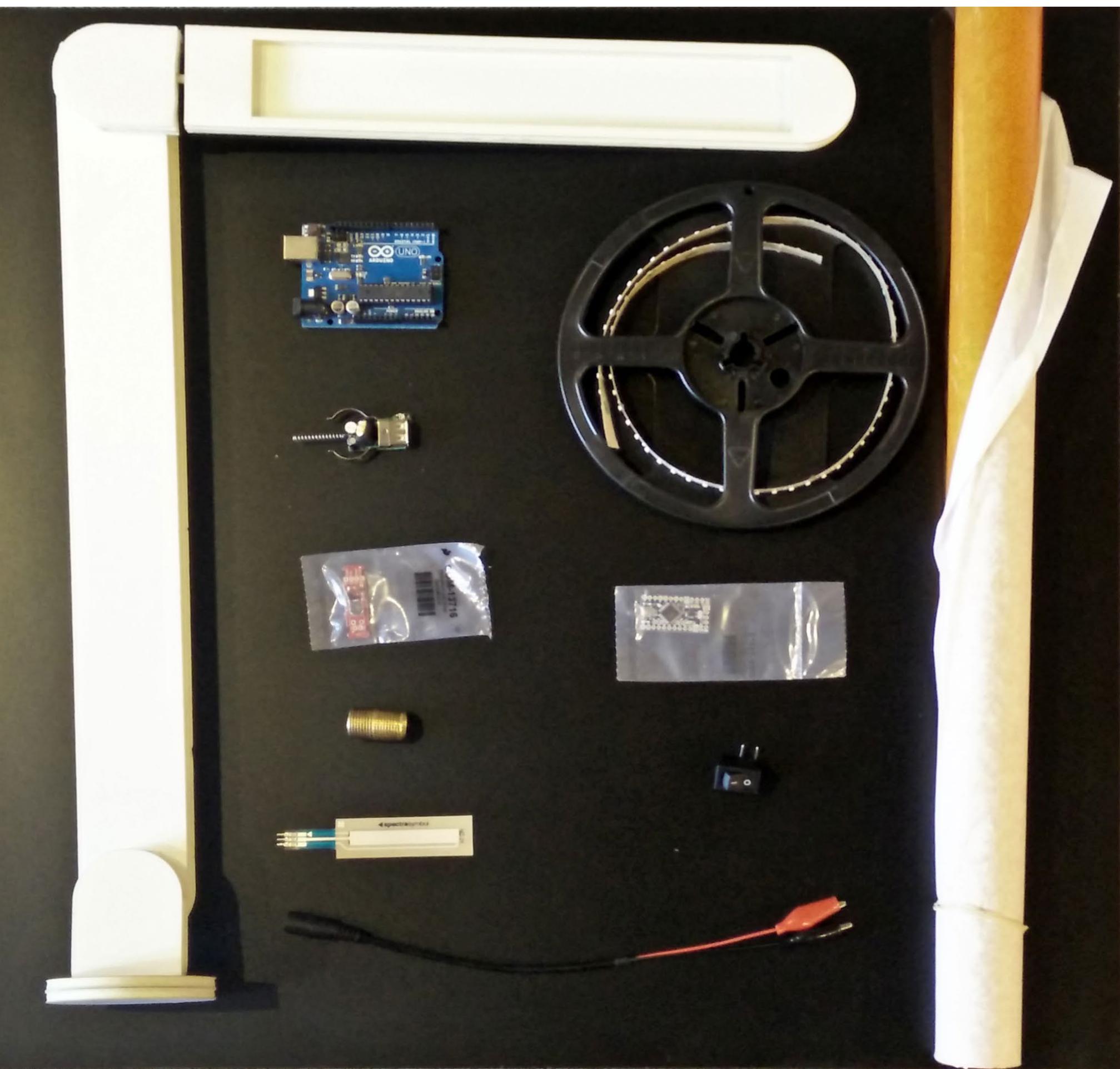


360° movement

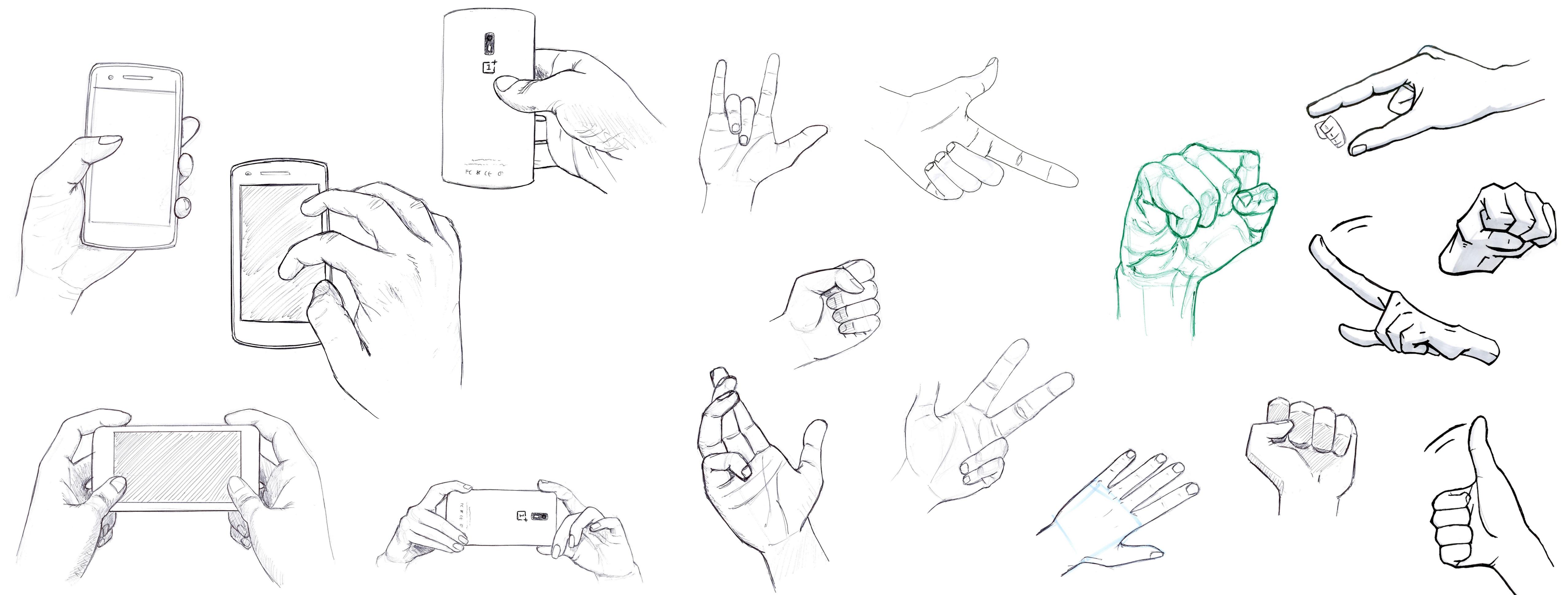


Touch sensor dimming

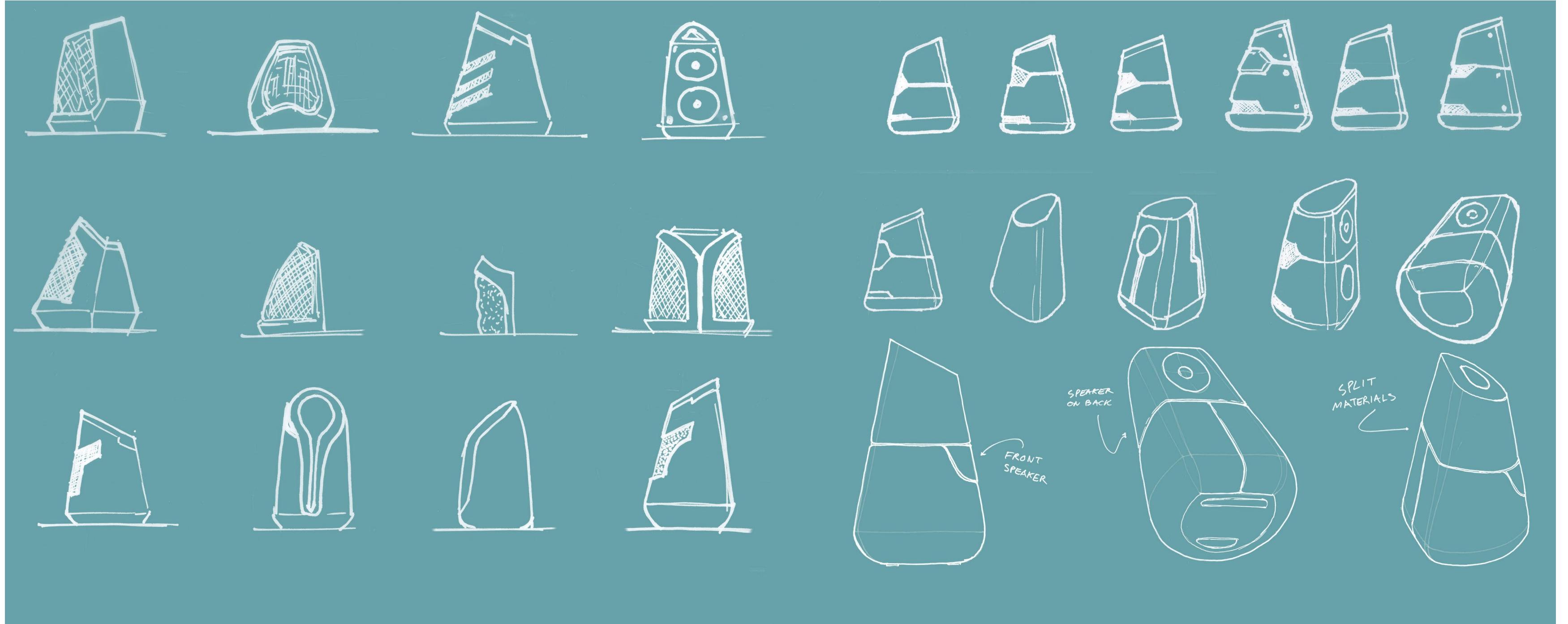
Too be continued...



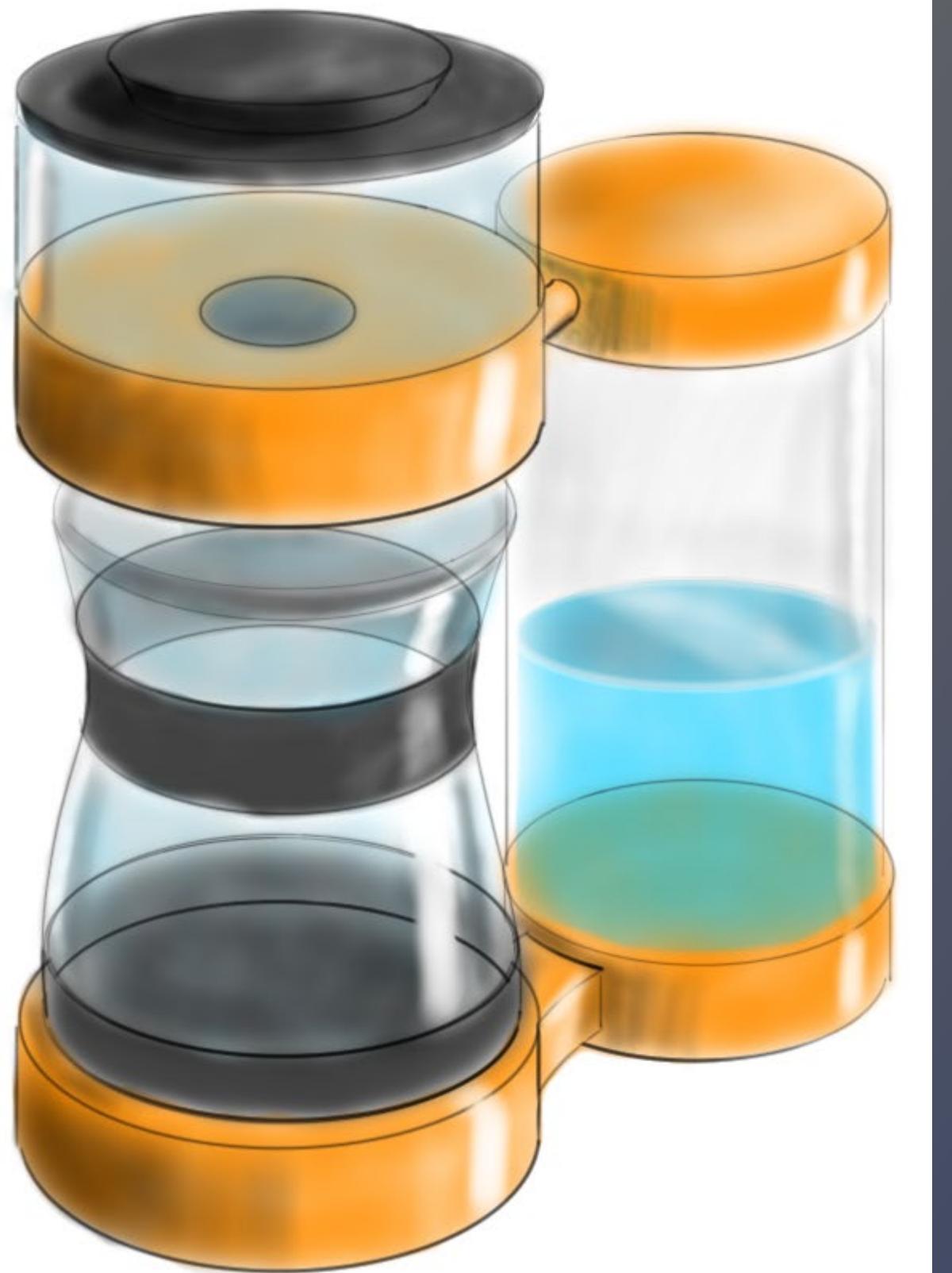
Additional Work



Hand Sketches



Bluetooth Speaker



Digital Renders

THANKS

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dvanhoward@gmail.com
dvanhoward.com
502-298-4418

