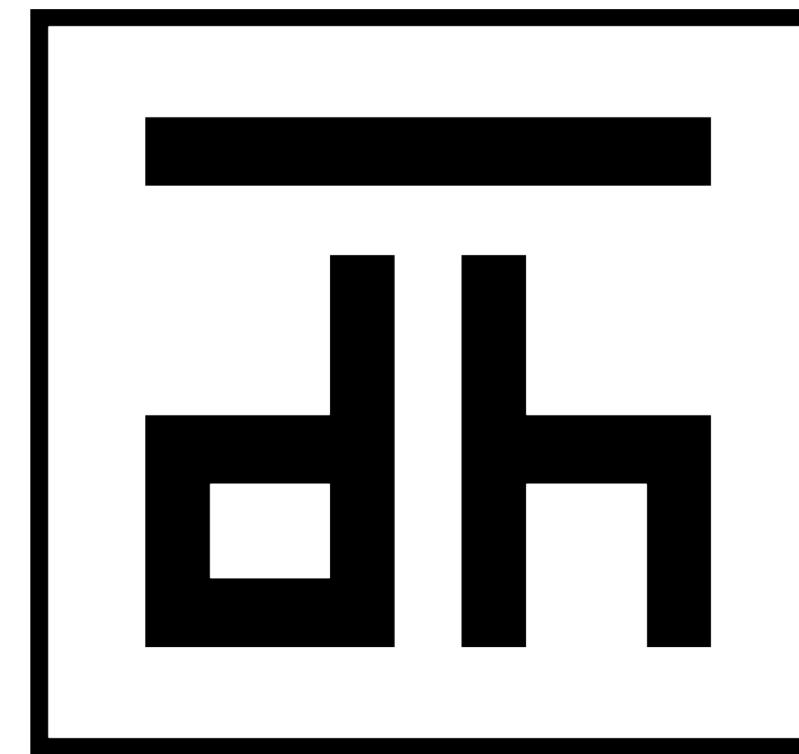


D'VAN HOWARD

INDUSTRIAL DESIGN
PORTFOLIO 2016



TAAJWAR D'VAN HOWARD

7221 Meadow Ridge Drive
 Louisville, Kentucky 40218
www.dvanhoward.com
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

ACTIVITIES AND AWARDS

University Honors Program

University of Cincinnati

Studio Lead, Design For America

University of Cincinnati, 2016

Chapter President, Habitat for Humanity

University of Kentucky, 2013-2014

INTERNATIONAL

Pamplona Learning: Spanish Institute

Renewable Energies Course (Summer 2013)

Pamplona, Navarra, Spain

EMPLOYMENT

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, Alias, AutoCad, Pro Engineer/PTC Creo, Blender, KeyShot, Matlab, Microsoft Office (Word, PowerPoint, Excel), HTML, Photoshop, Illustrator, InDesign

Skills

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

Interests

Problem Solving, Futuristic Innovation, 3D Printing, Ultimate Frisbee, Food, Superheroes, Rock Climbing

Languages

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



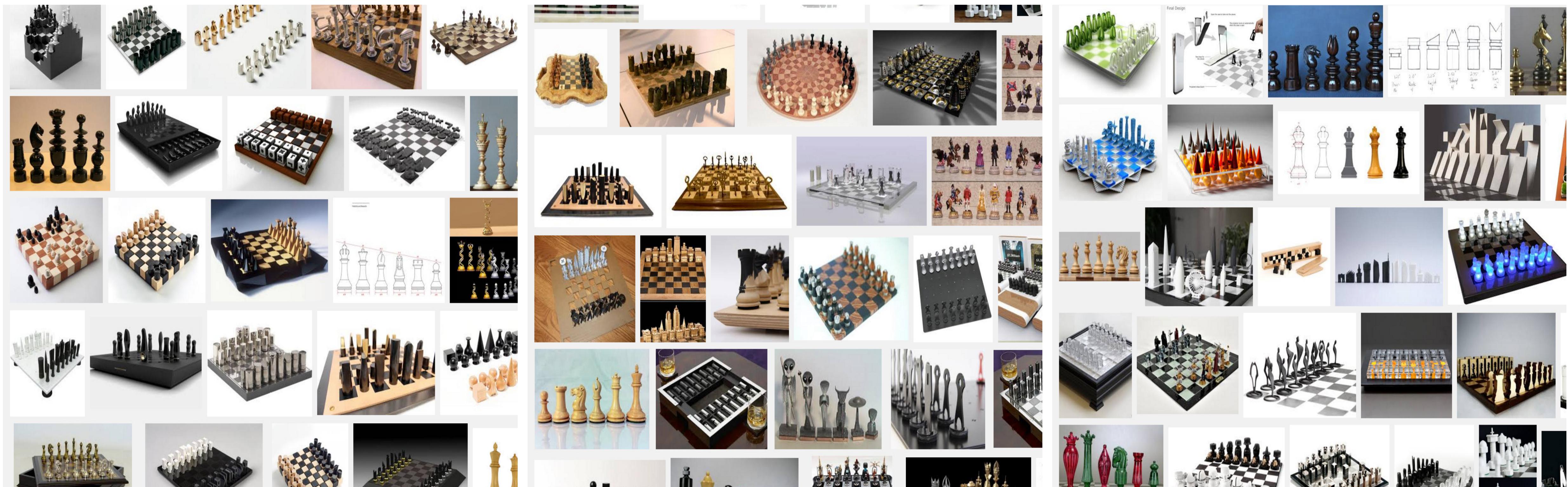
My name is Taajwar D'Van Howard, but you can just call me D'Van. I graduated from the University of Kentucky in 2014 with a degree in Mechanical Engineering. I then decided one wasn't enough, so to pursue a passion in design I now attend the University of Cincinnati currently pursuing a degree in Industrial 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

CREATING 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

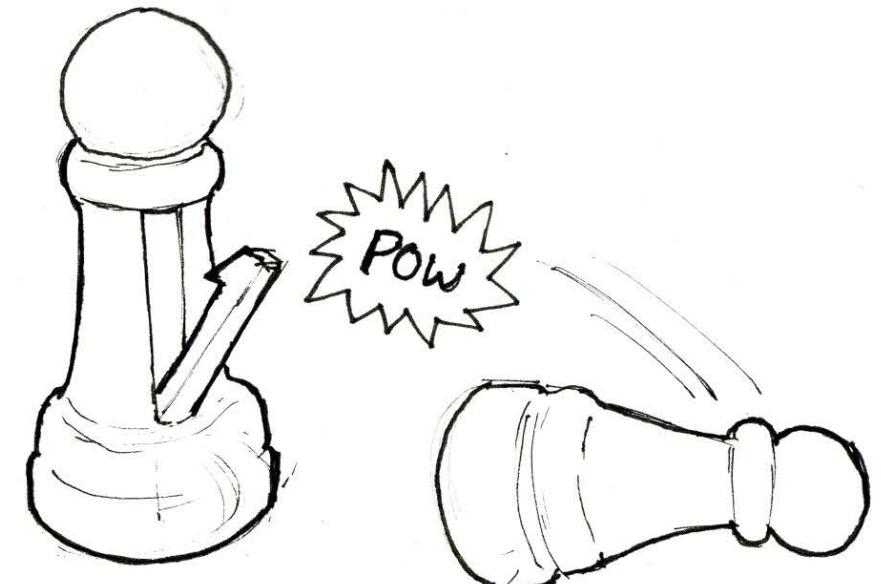
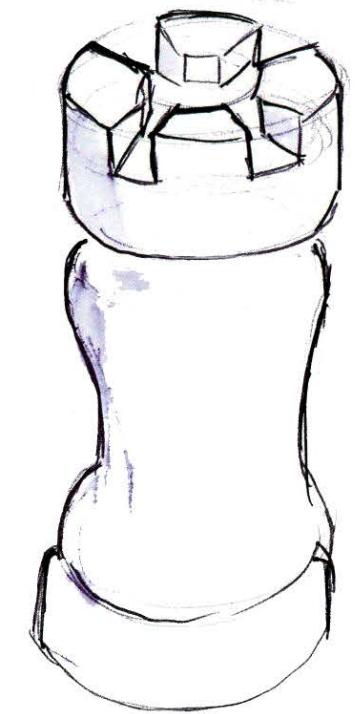
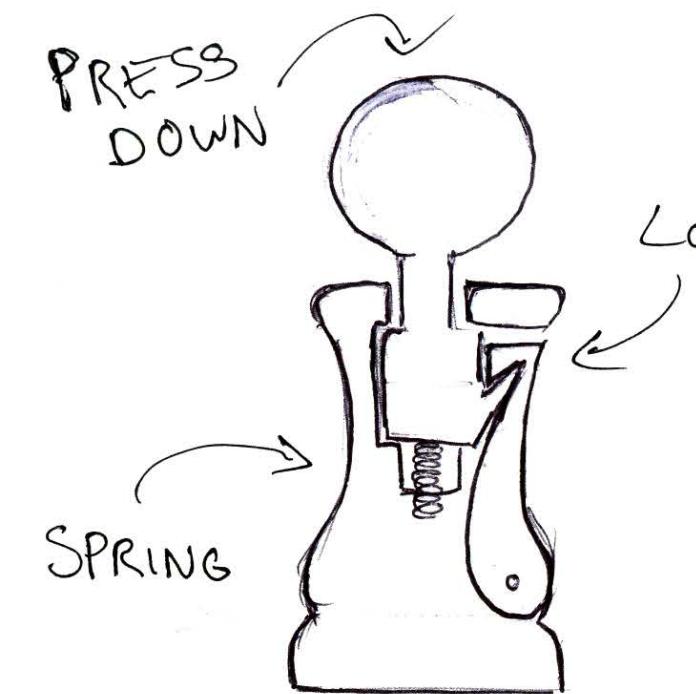


FUNCTION



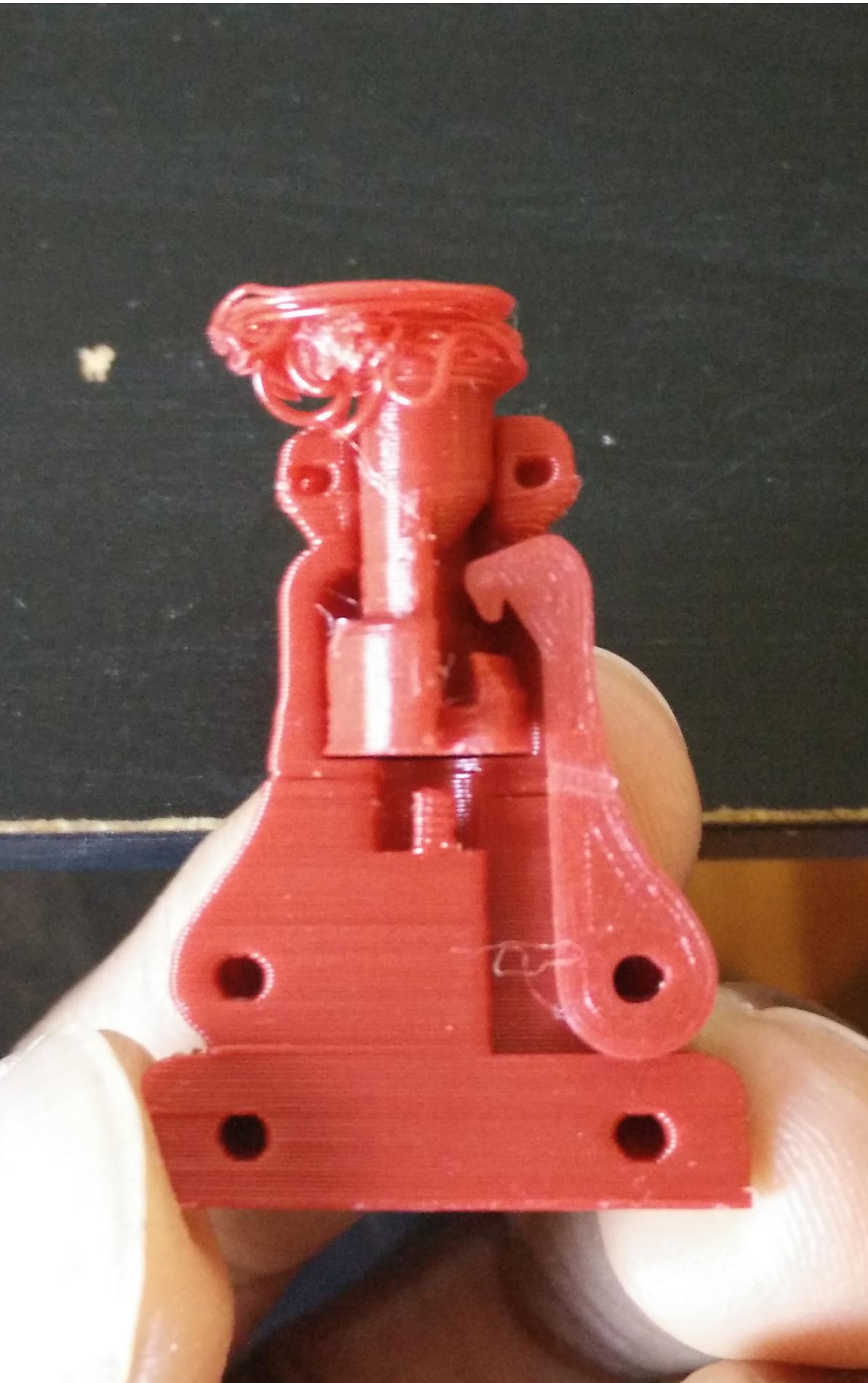
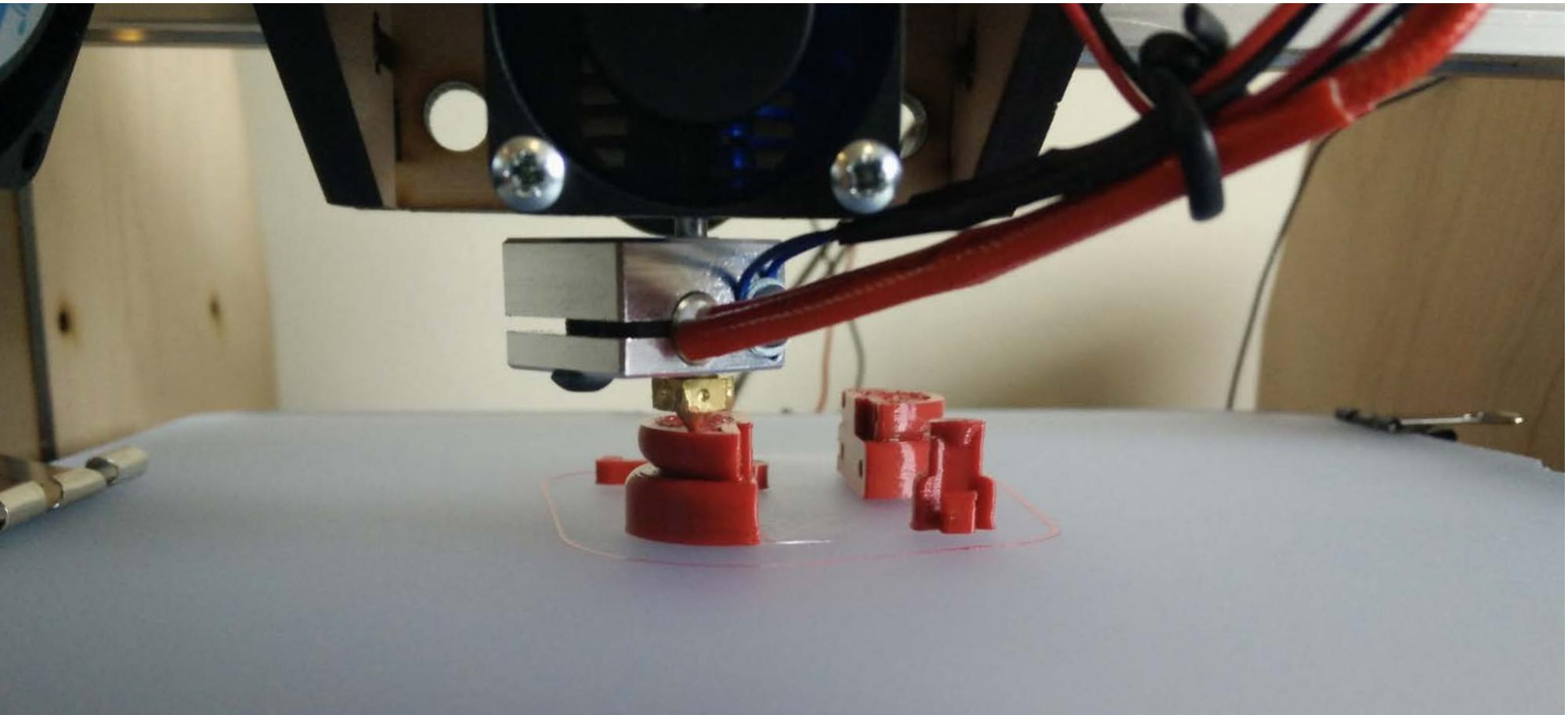
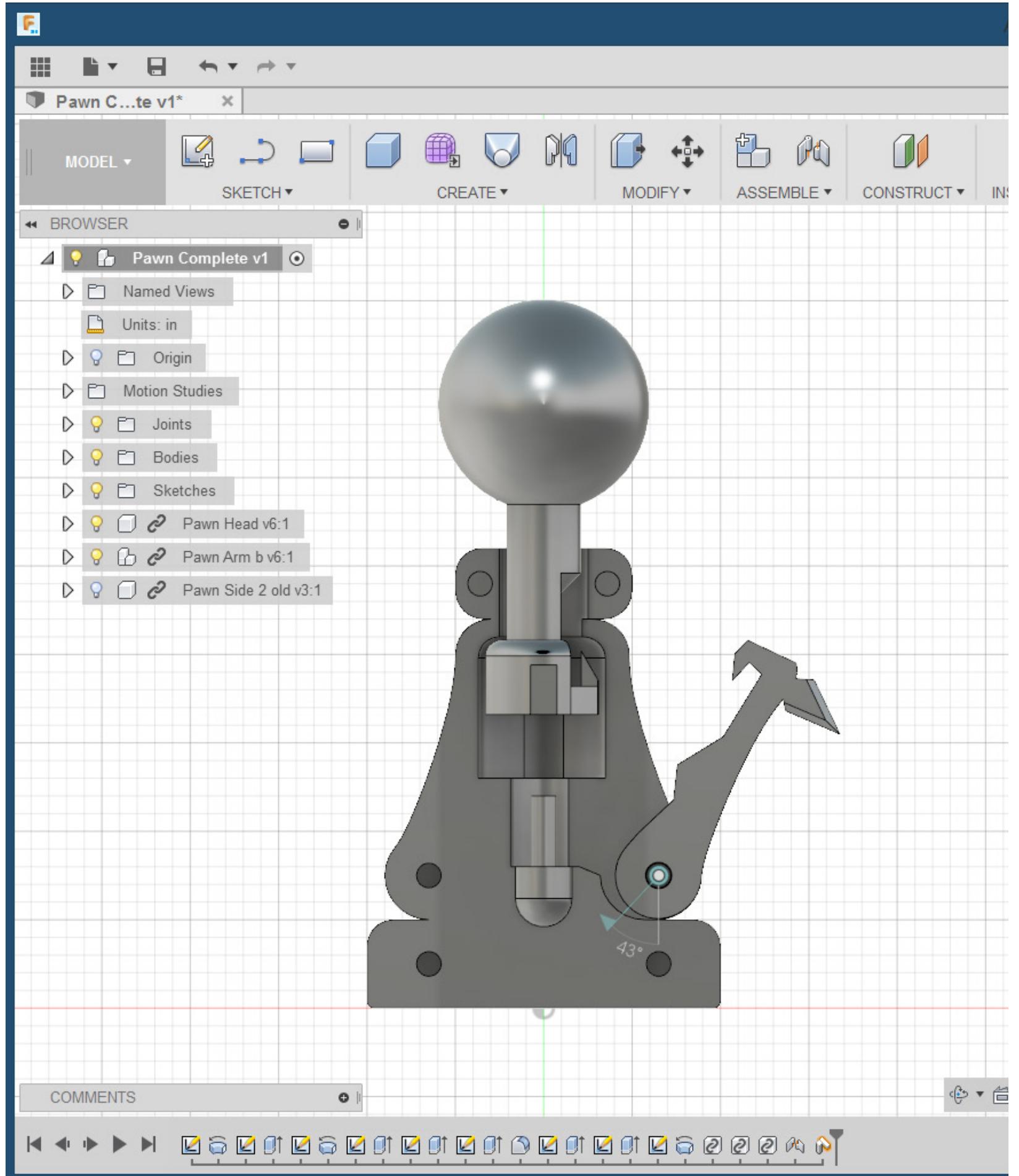
INTERACTION

SKETCHES



<u>PIECE</u>	<u>SYMBOL</u>	<u>WEAPONS</u>
PAWN	DAGGER	
ROOK	AXE / MALET	
BISHOP	STAFF	
KNIGHT	HORSESHOE	
QUEEN	BIG SWORD	
KING	SHIELD	

PROCESS



ACTION

CHESS



PRINTED MODELS



PRINTED MODELS





MULTI-TOOL SHEARS

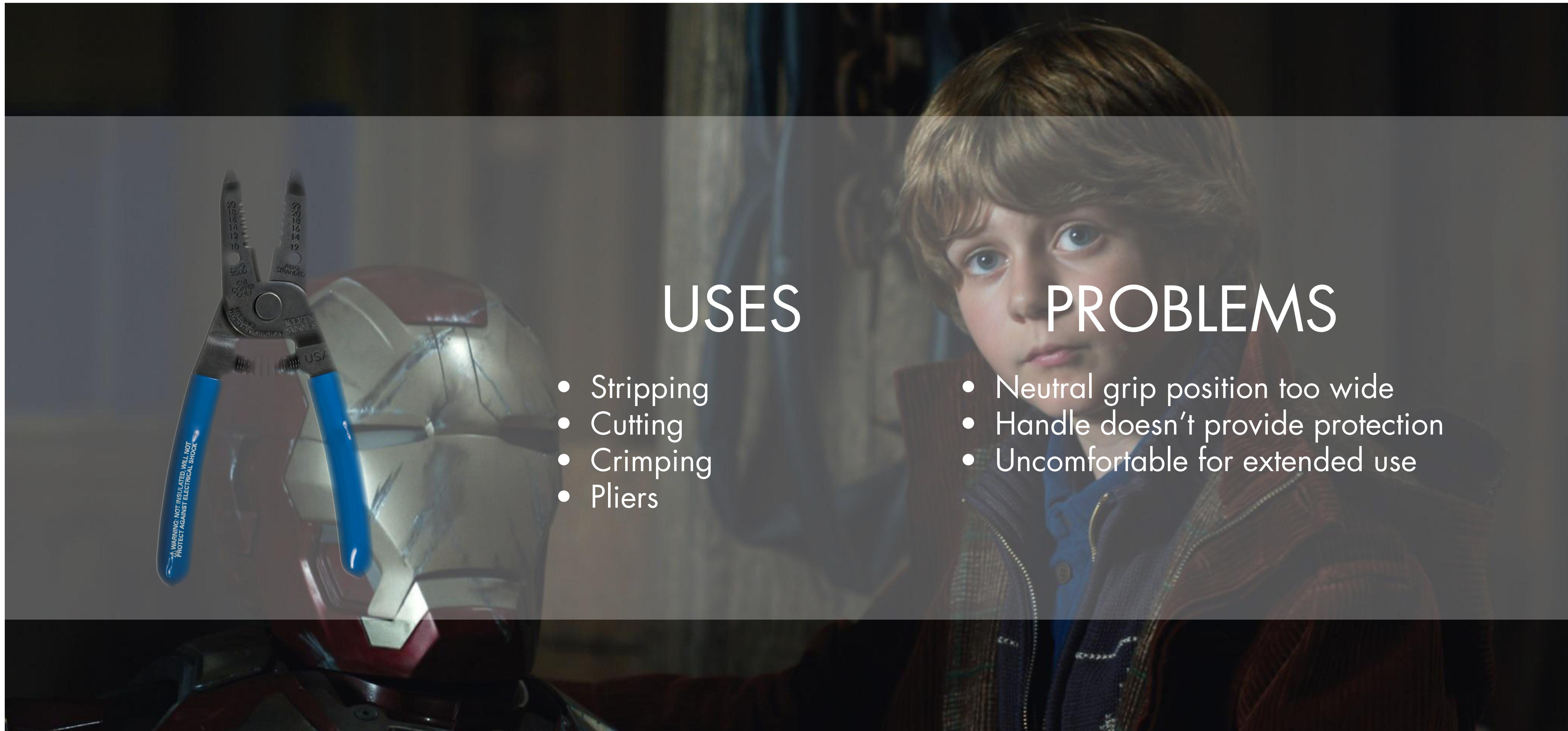
ERGONOMIC SHEARS FOR SMALL
HANDS AND TOUGH PROJECTS

THIS IS HARLEY

Just 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



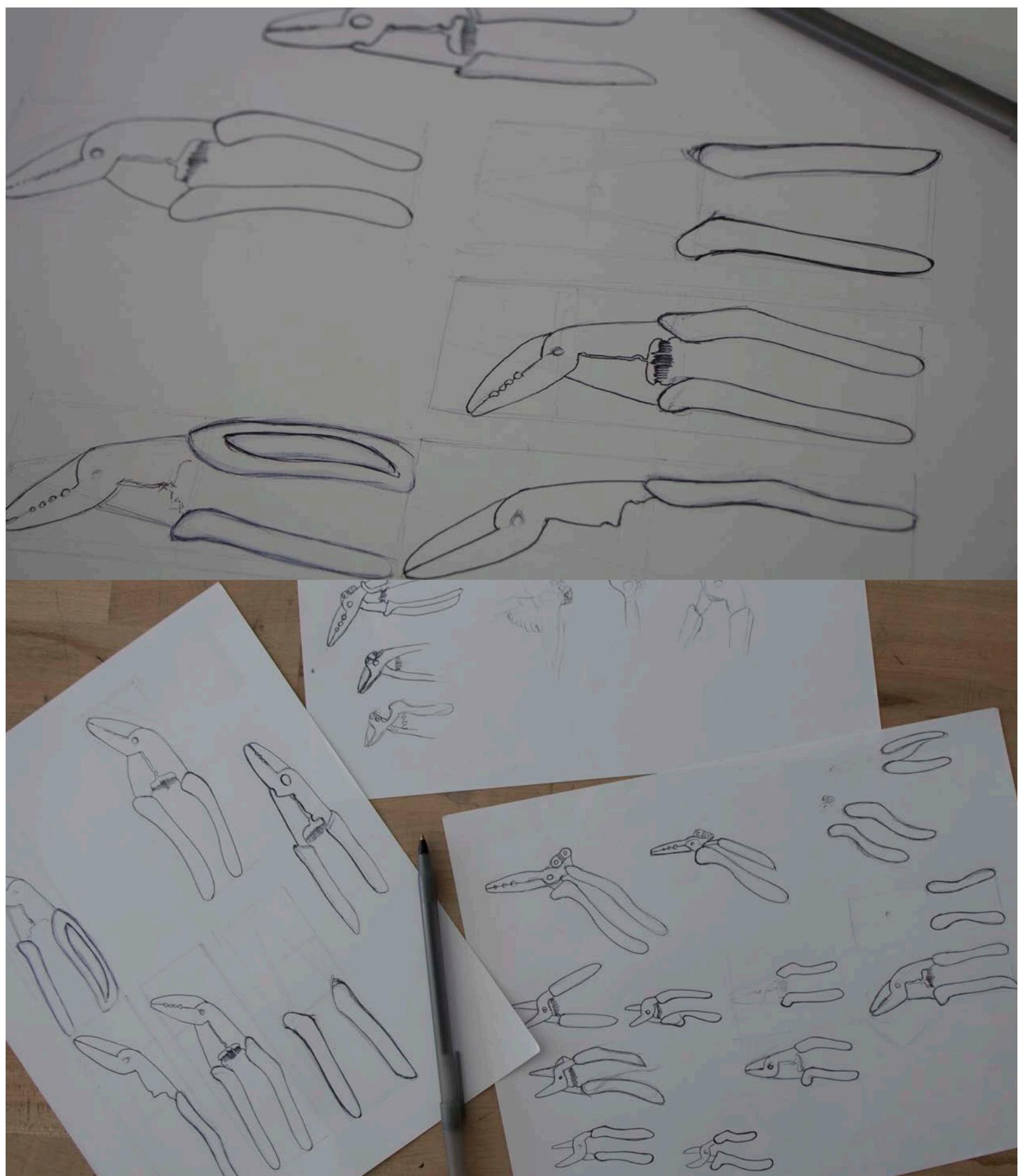
HANDLE SIZED FOR
SMALLER HANDS



SHOCK
PROTECTION



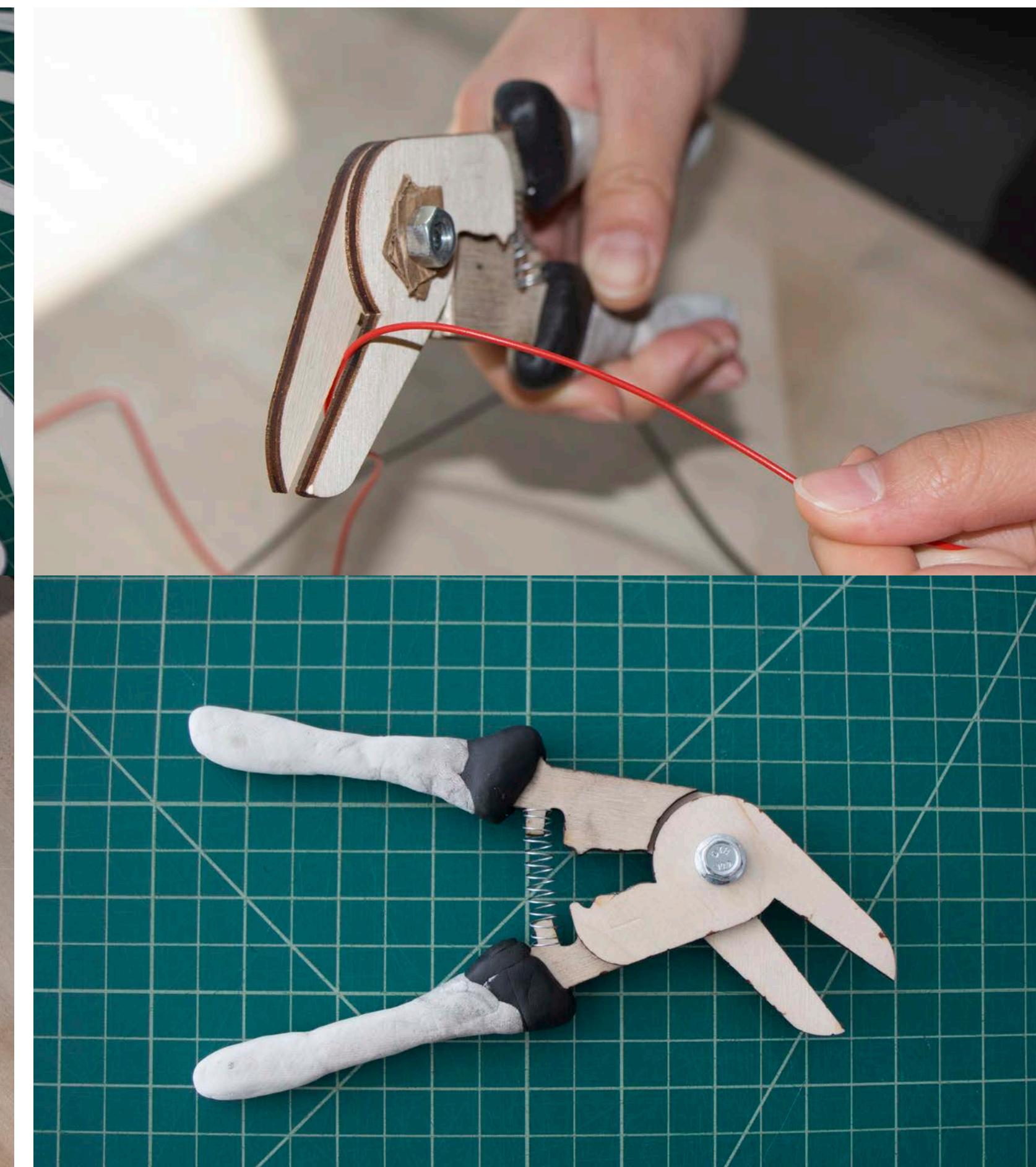
PROCESS



SKETCHES

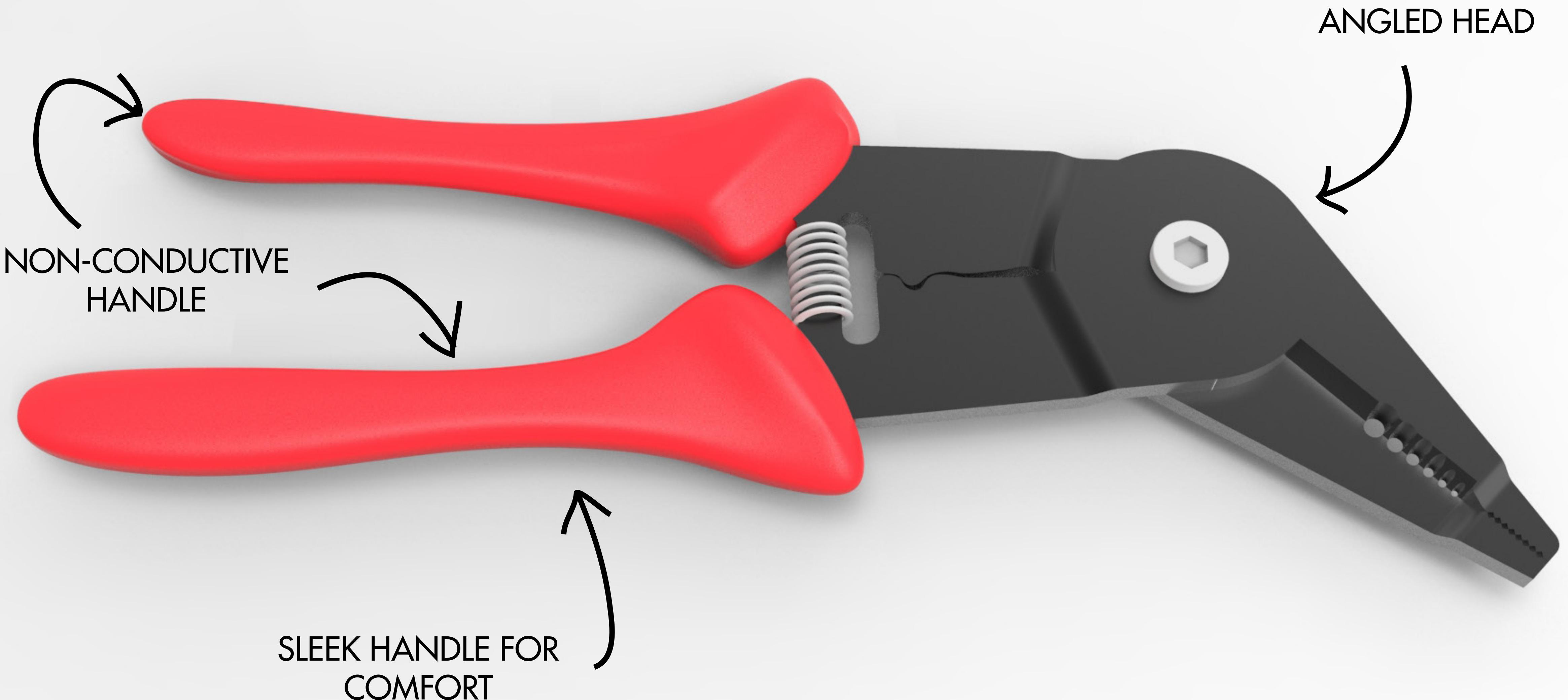


MODEL ITERATION



"FEELS LIKE" MODEL

RENDER

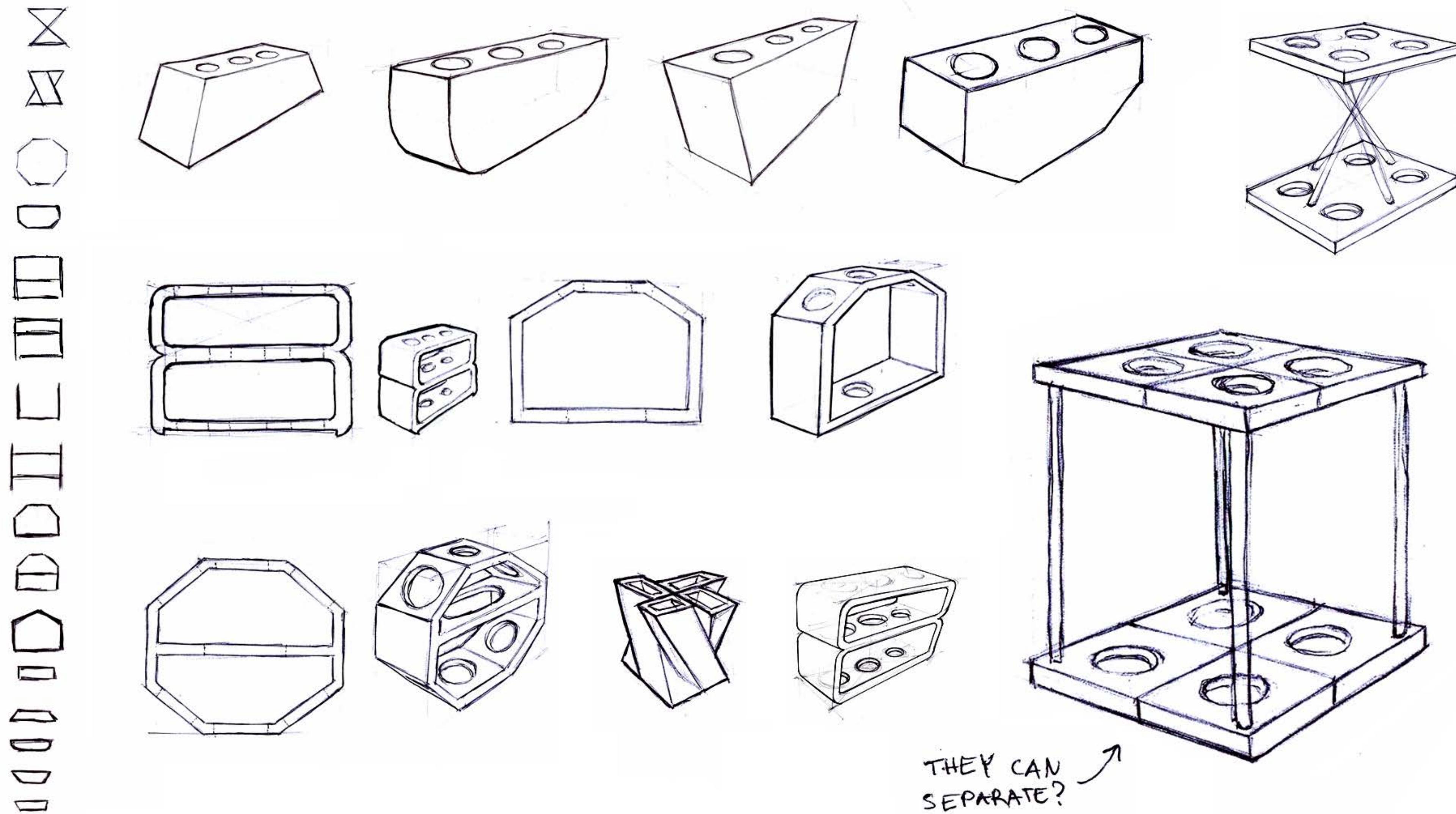


TOOTHBRUSH HOLDER

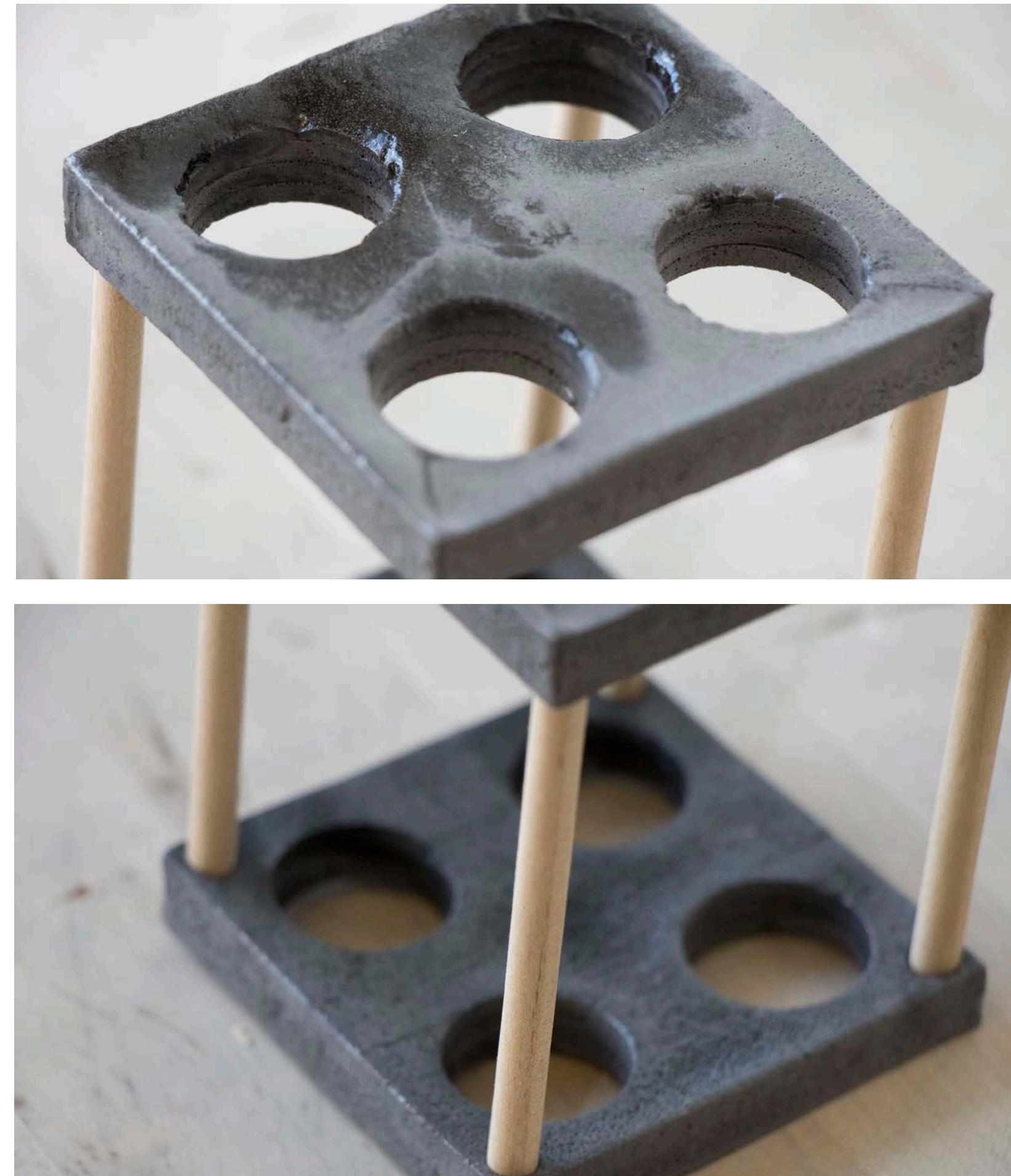
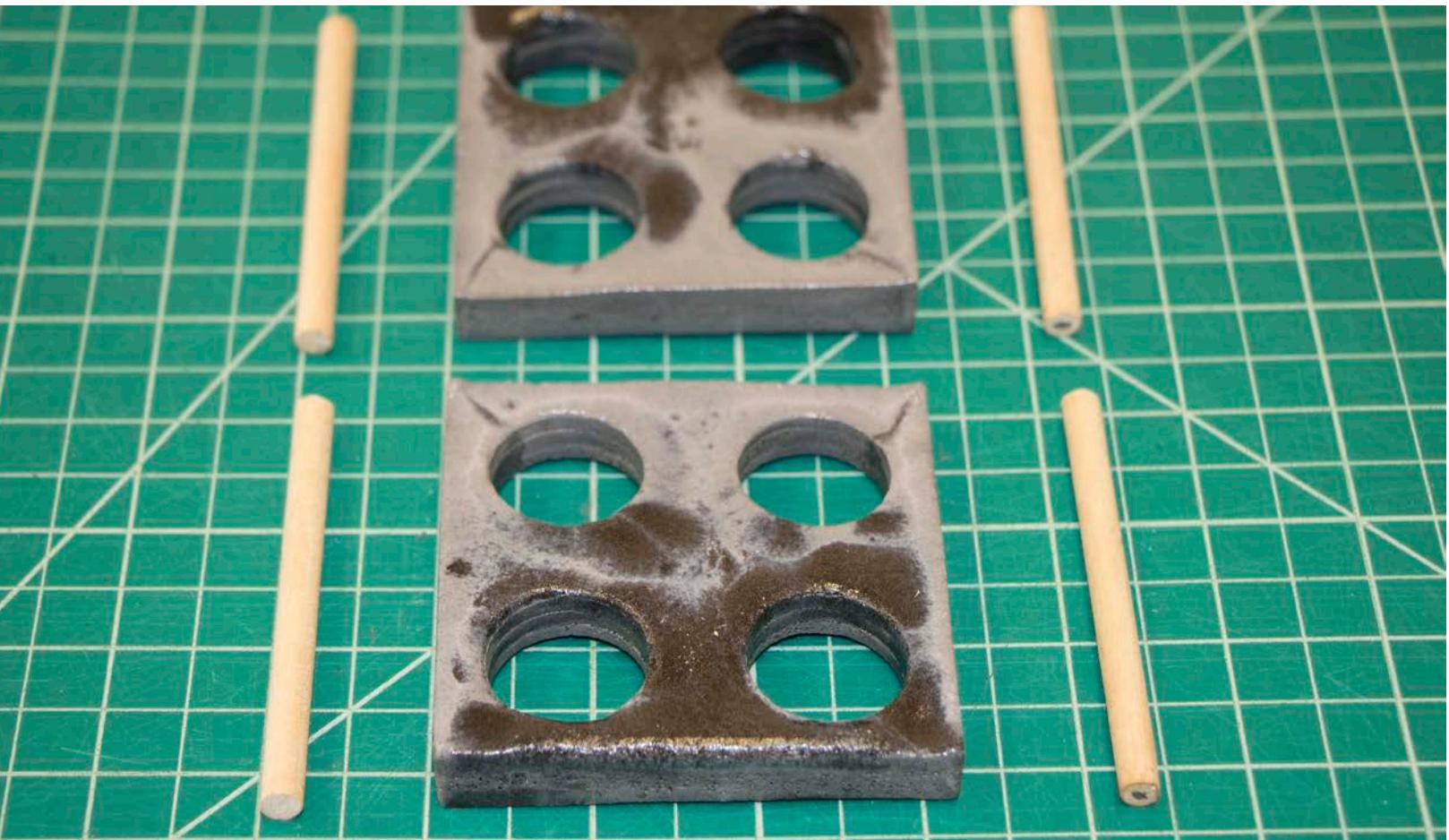
SIMPLE UNOBTRUSIVE HOLDER FOR
YOUR MOST IMPORTANT MORNING
ROUTINE



SKETCHES



FINAL

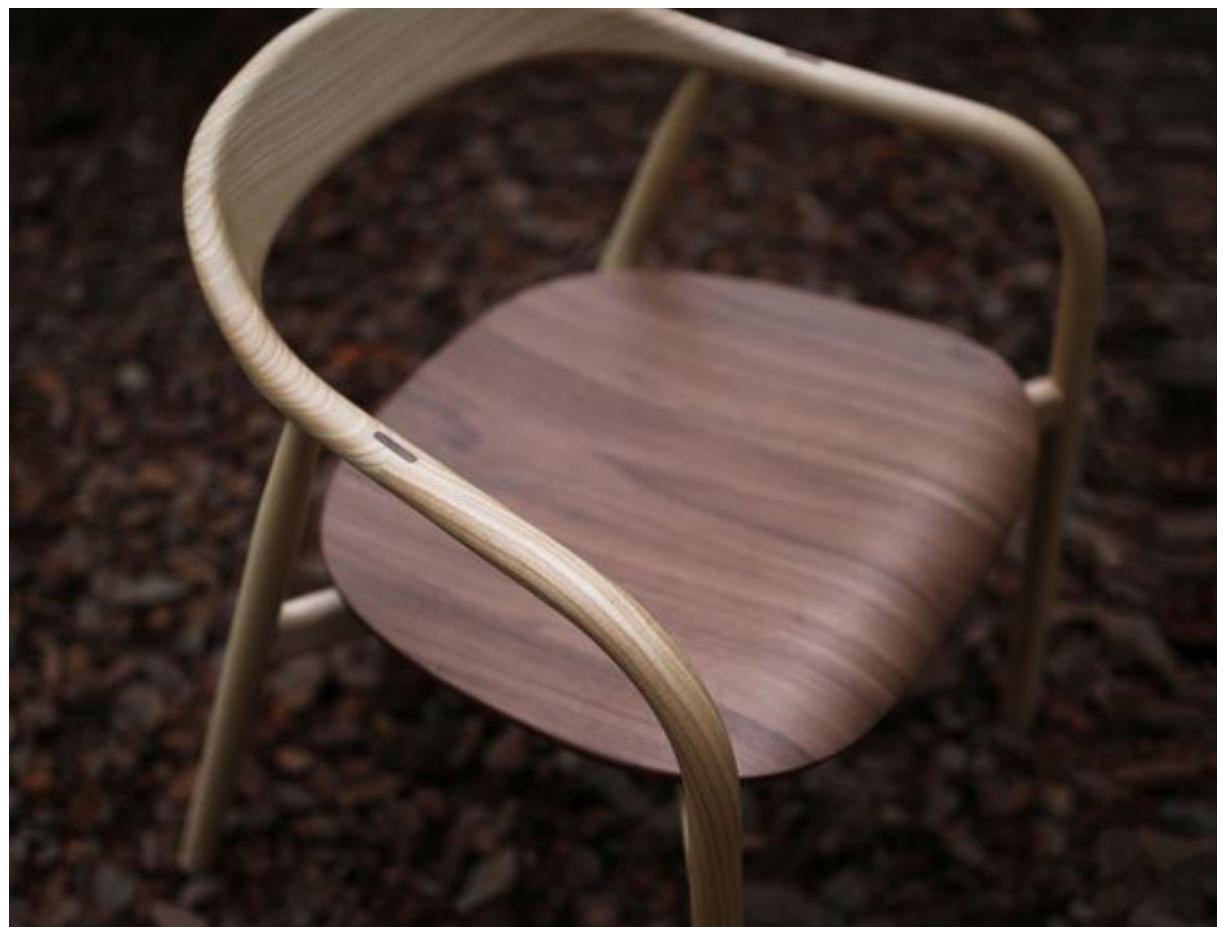
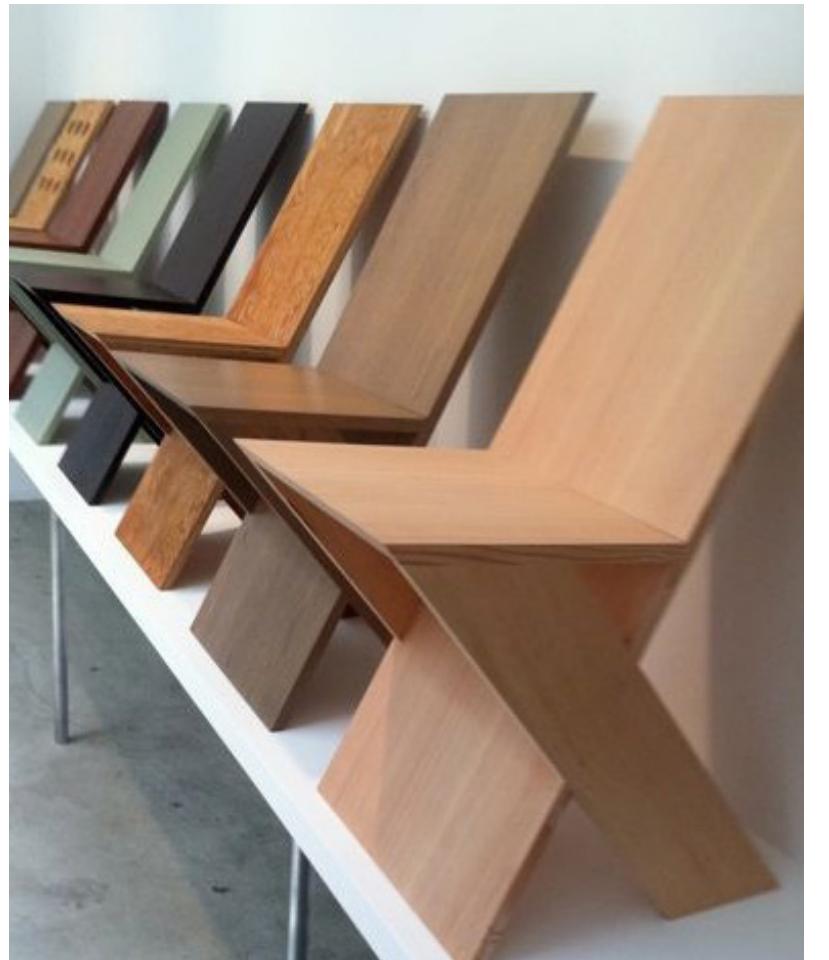


DELTA STOOL

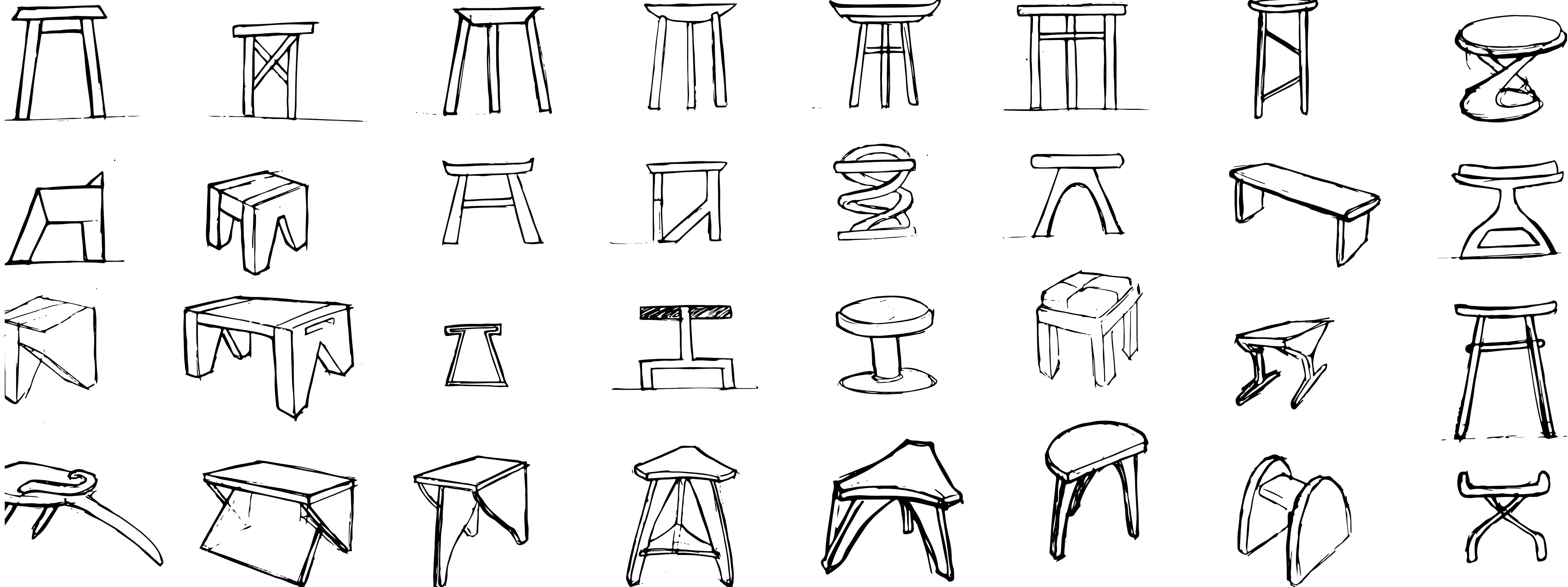
WINDSOR STOOL REMIX



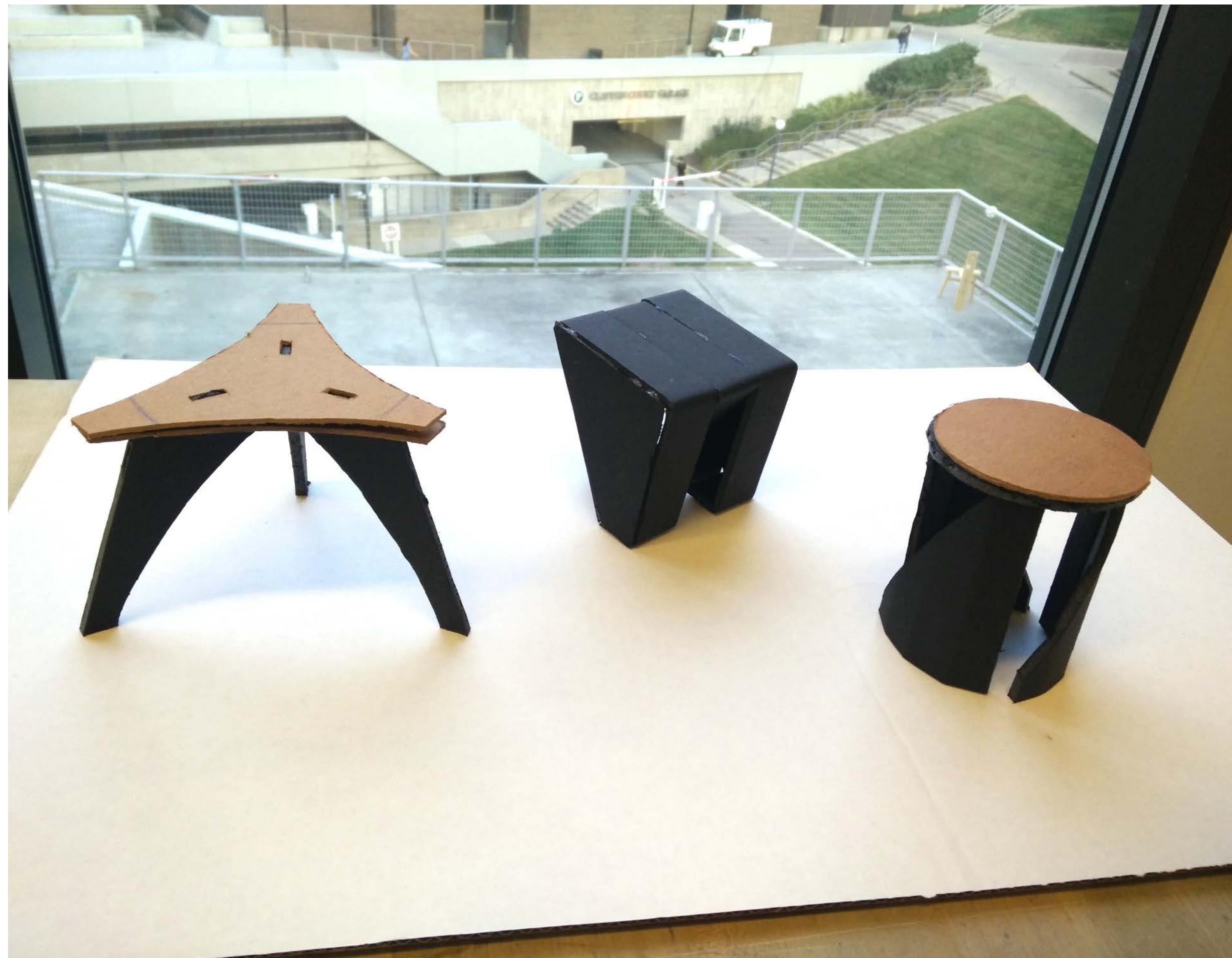
INSPIRATION



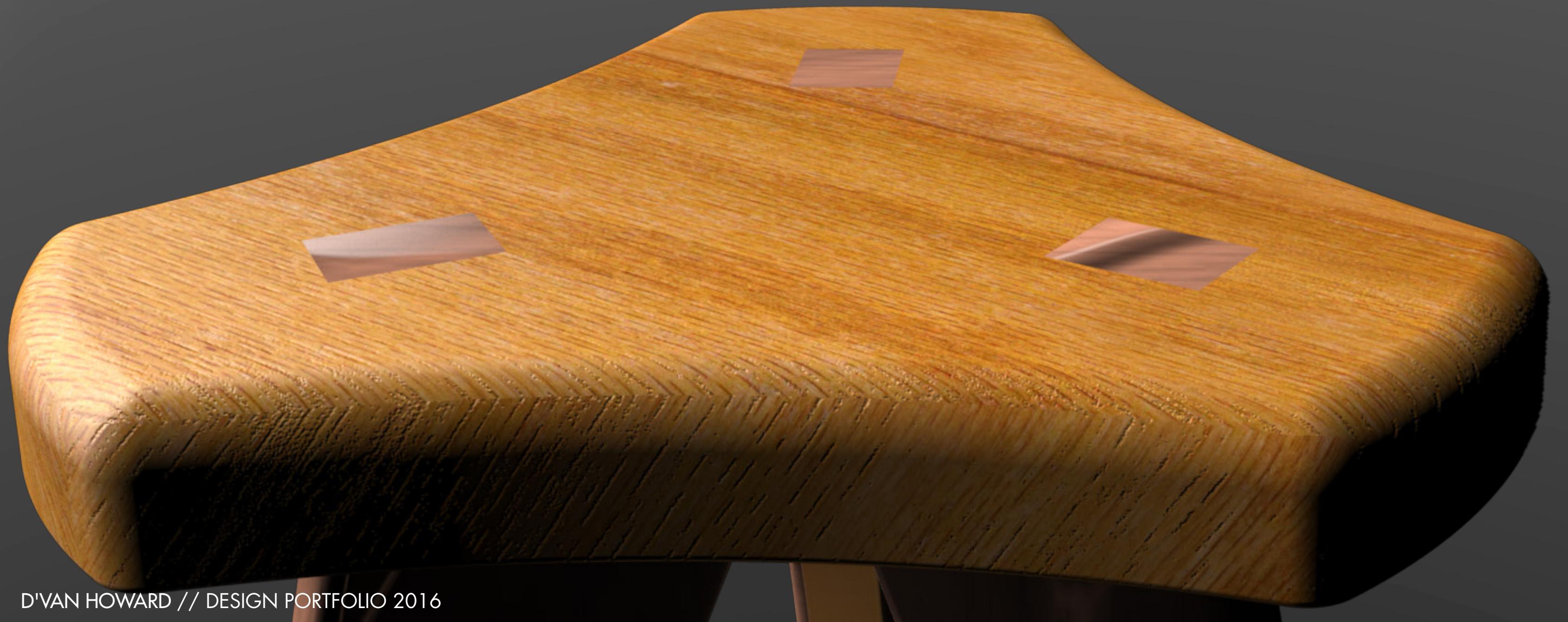
SKETCHES



SCALE MODELS

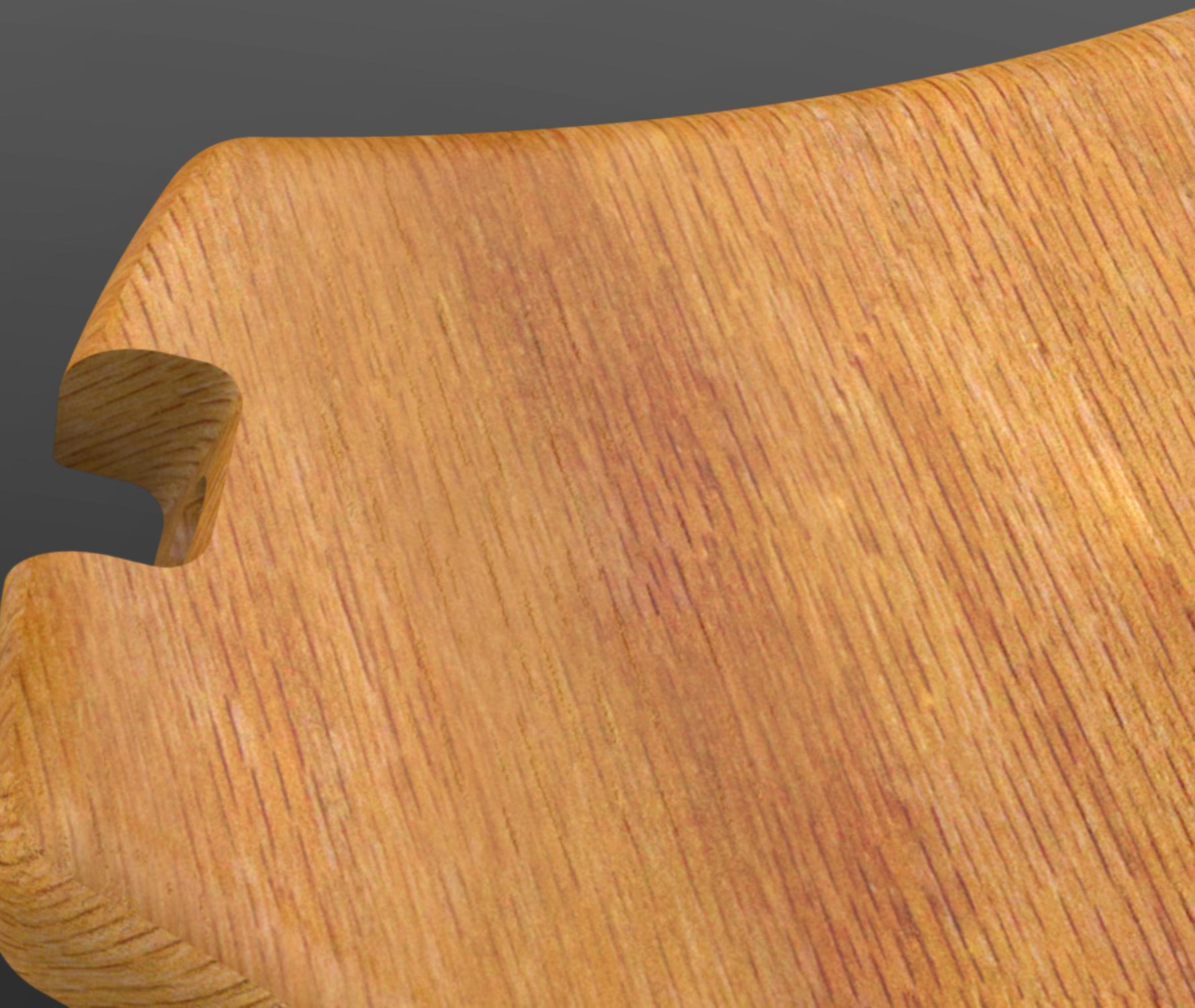
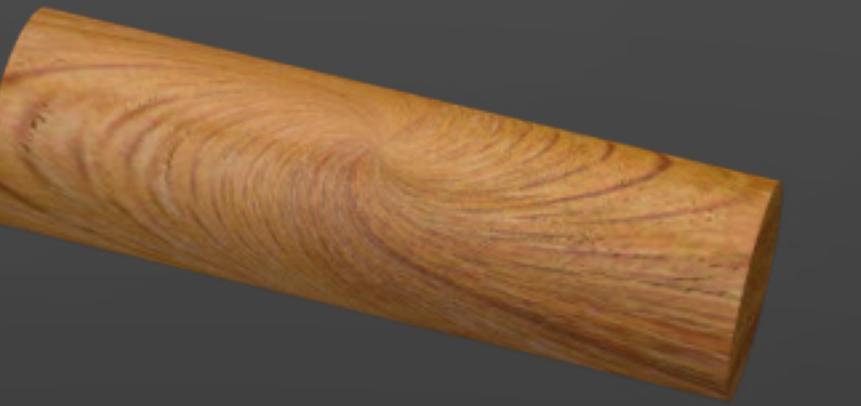


Legs characterizes true windsor by
piercing seat with mortise and tenon
joint





Domino joins legs
with foot rest





DELTA STOOL
WINSOR REMIX

LUMBER

Mahogany

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

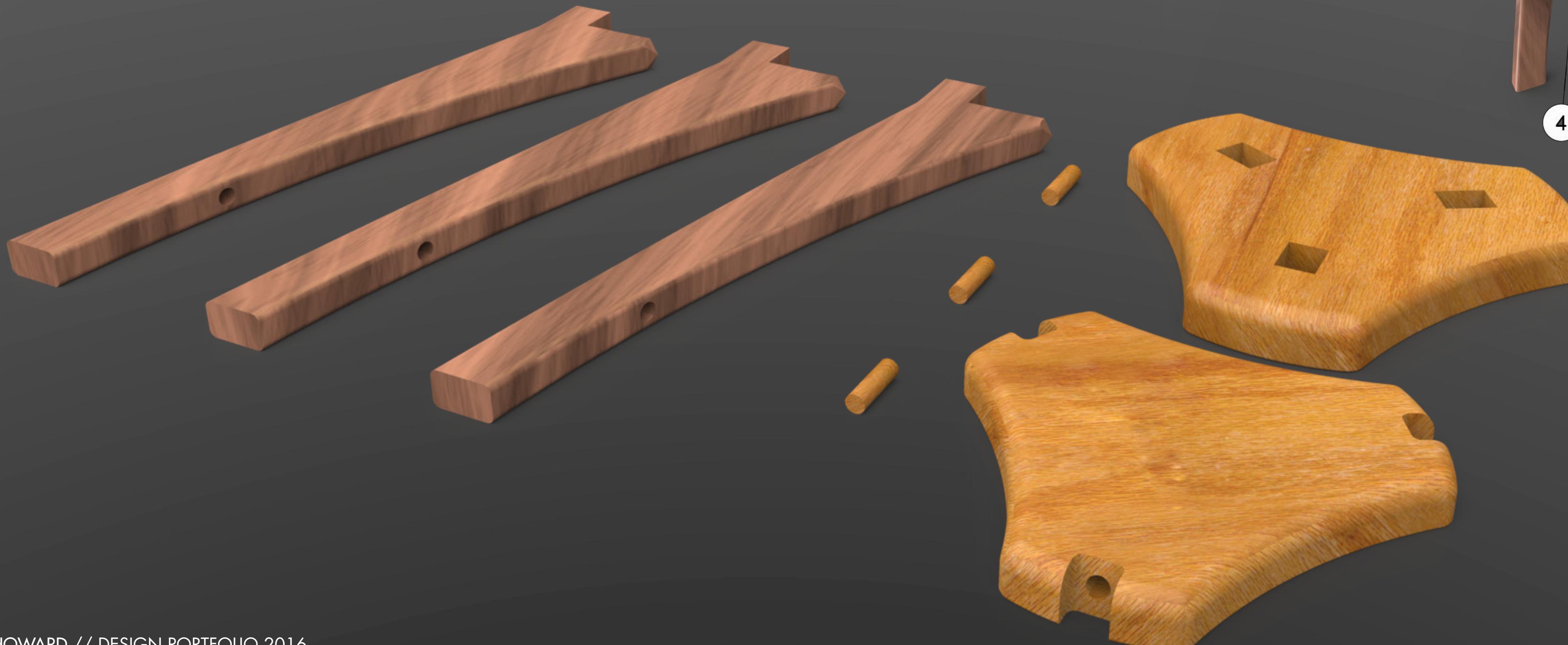
Oak

(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

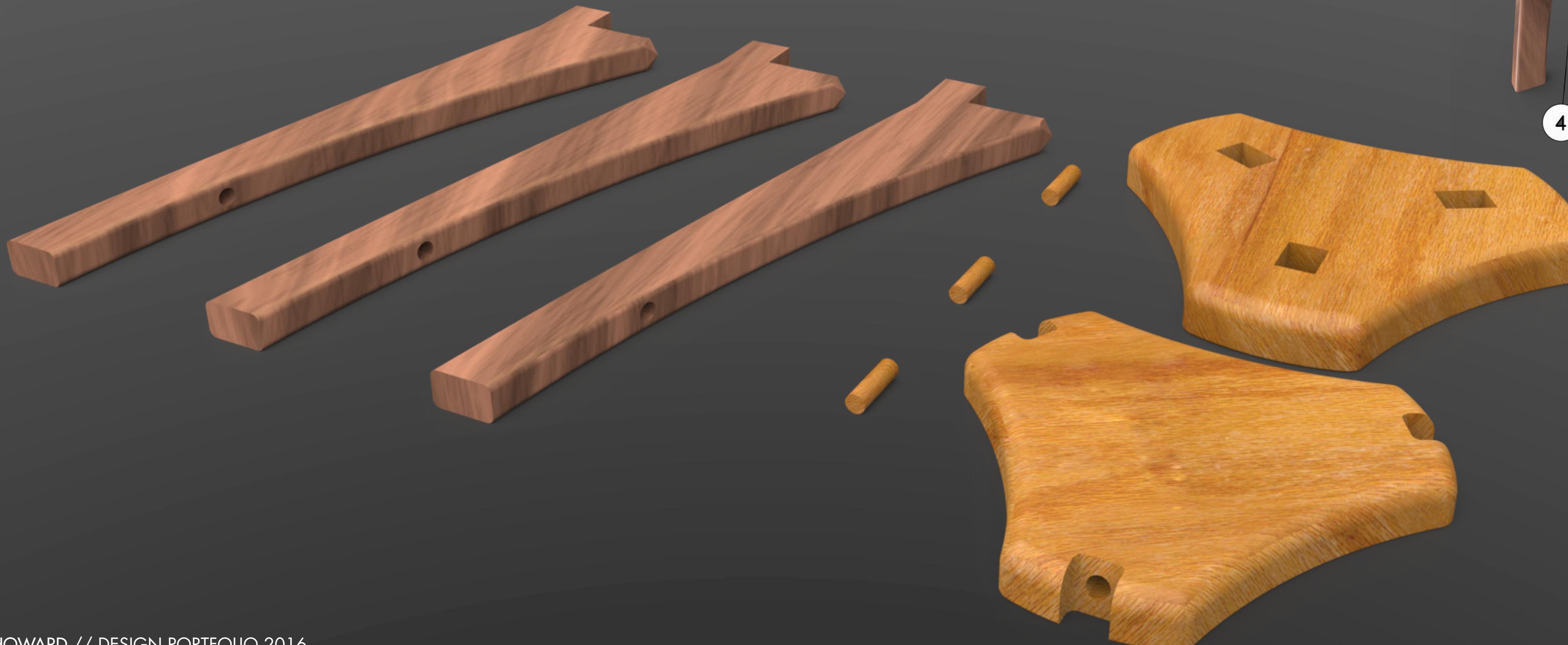
Cut profile with bandsaw

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

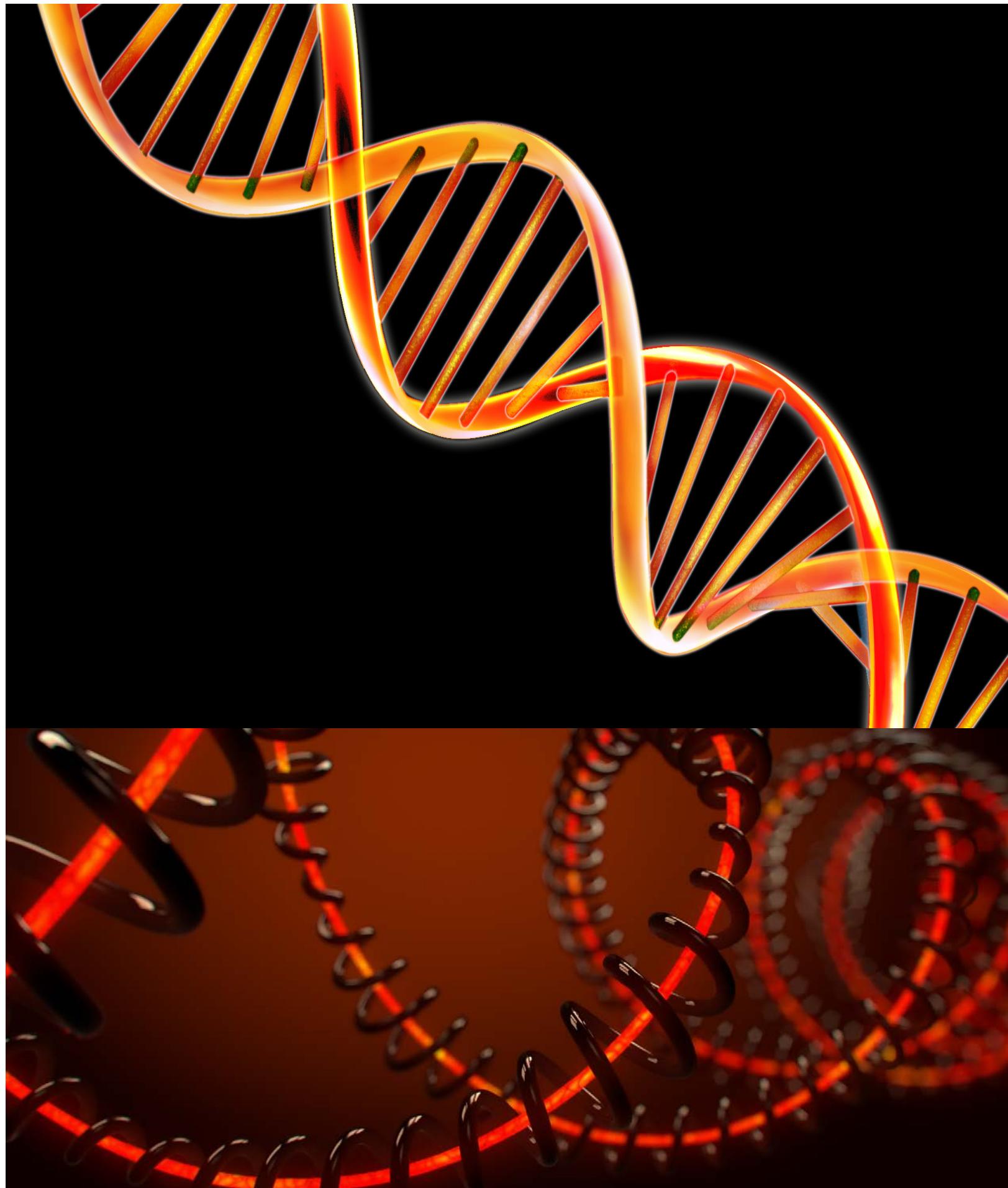


Meet Peter



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.

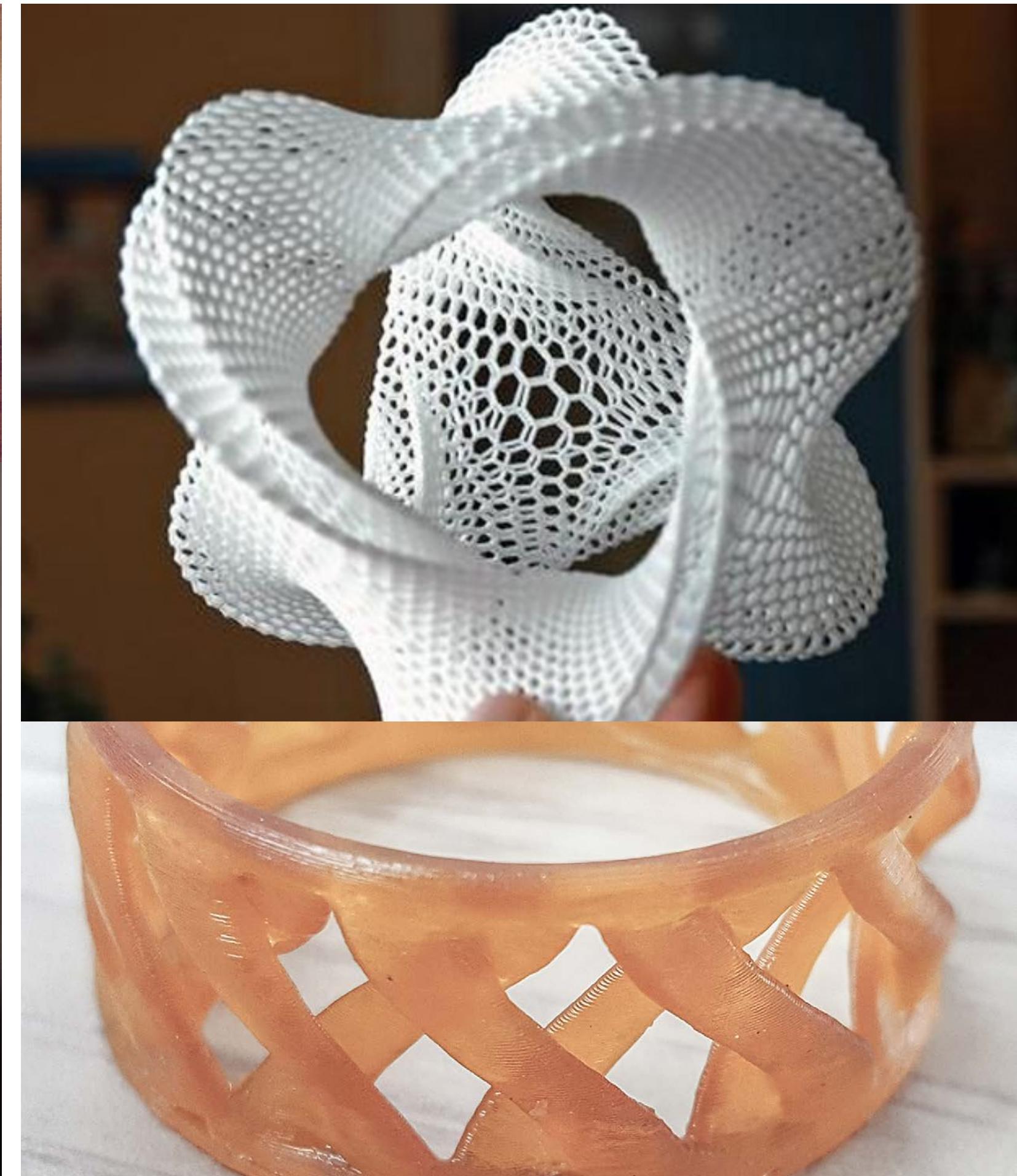
DESIGN GOALS



INSPIRATION



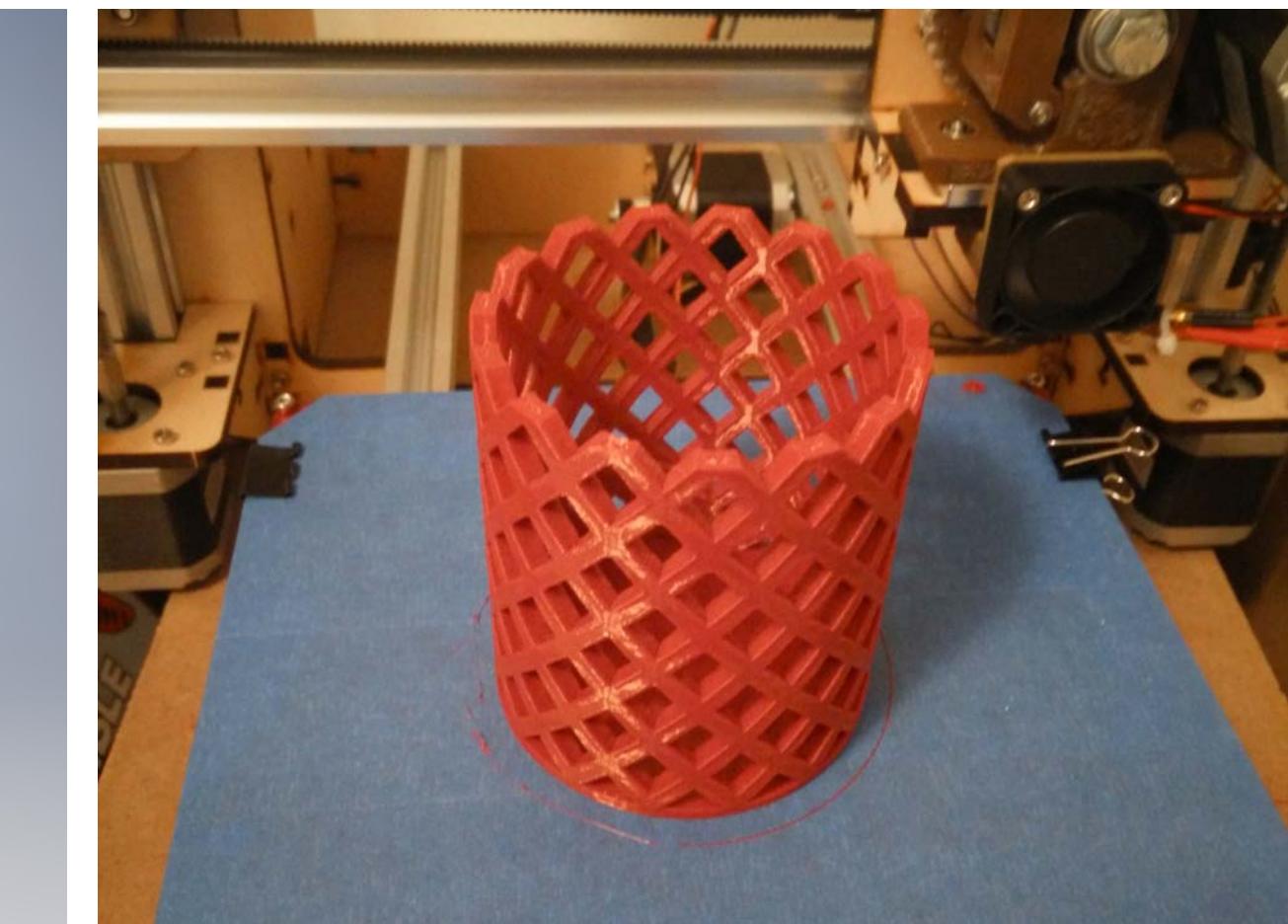
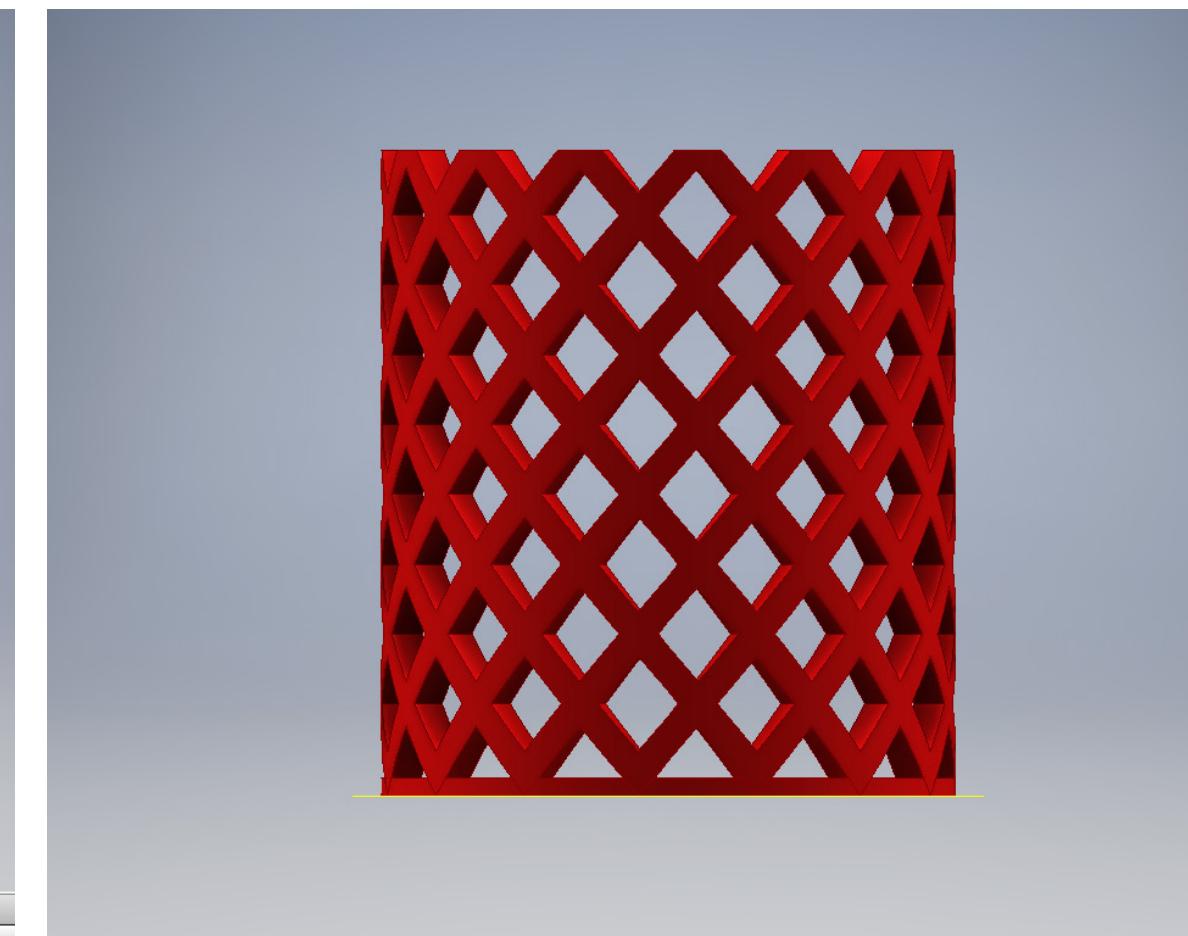
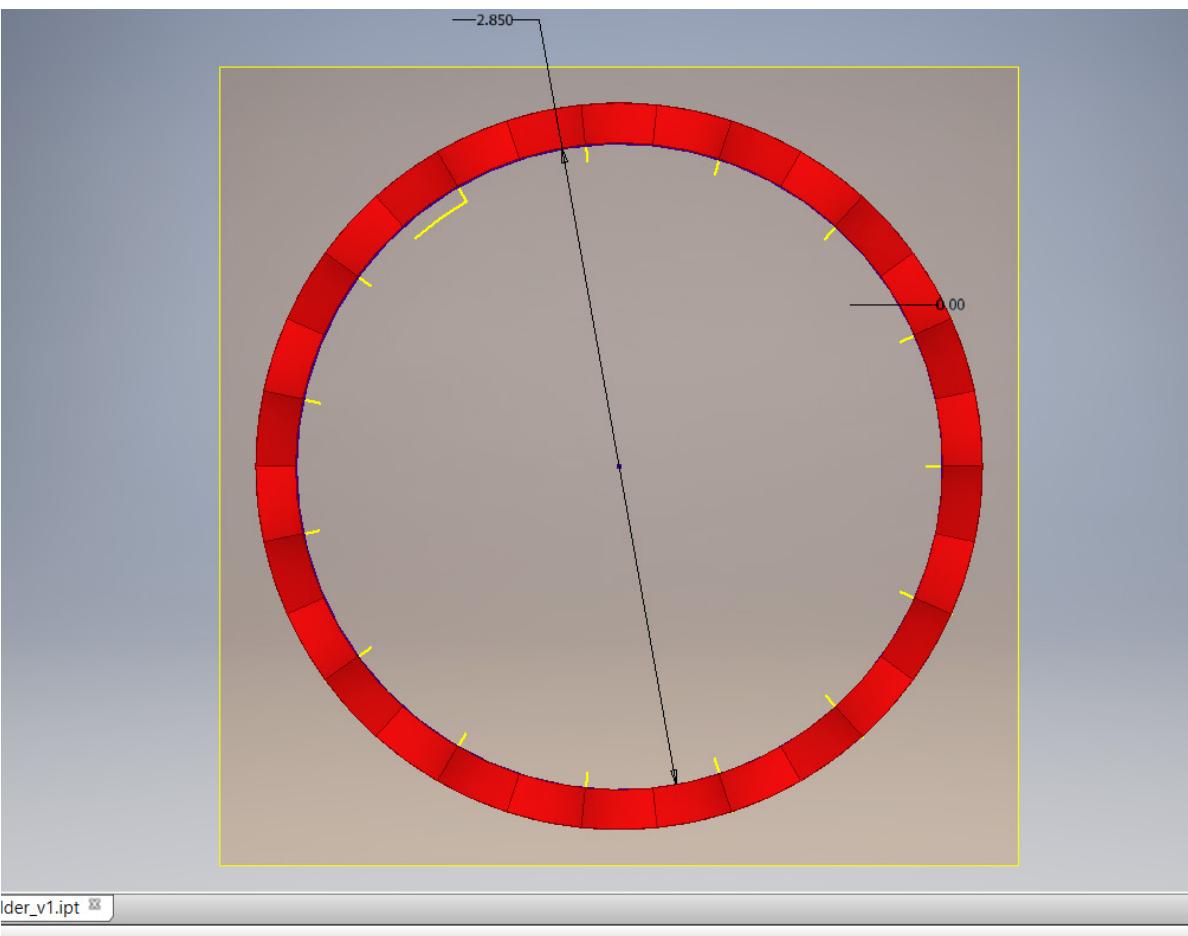
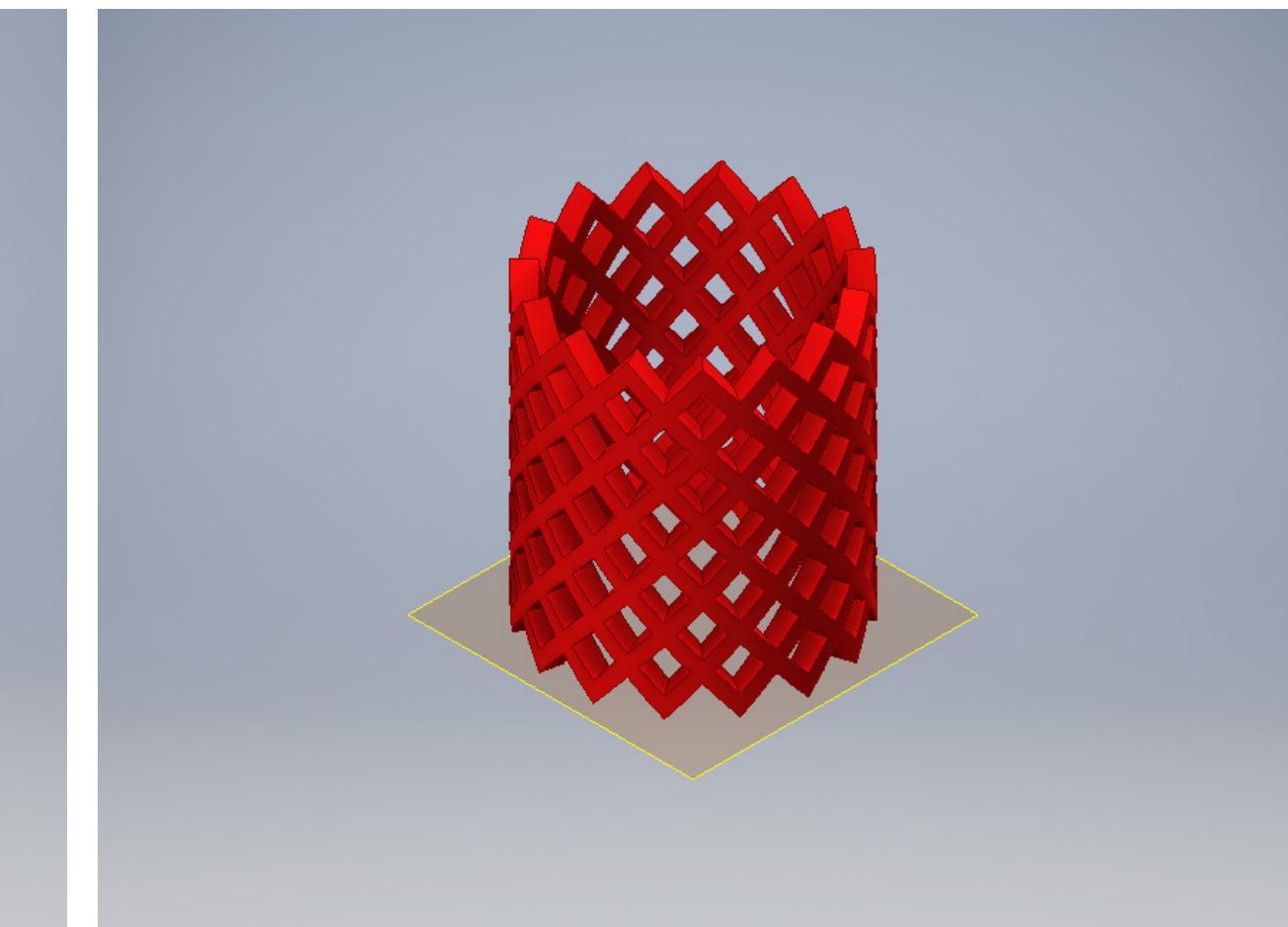
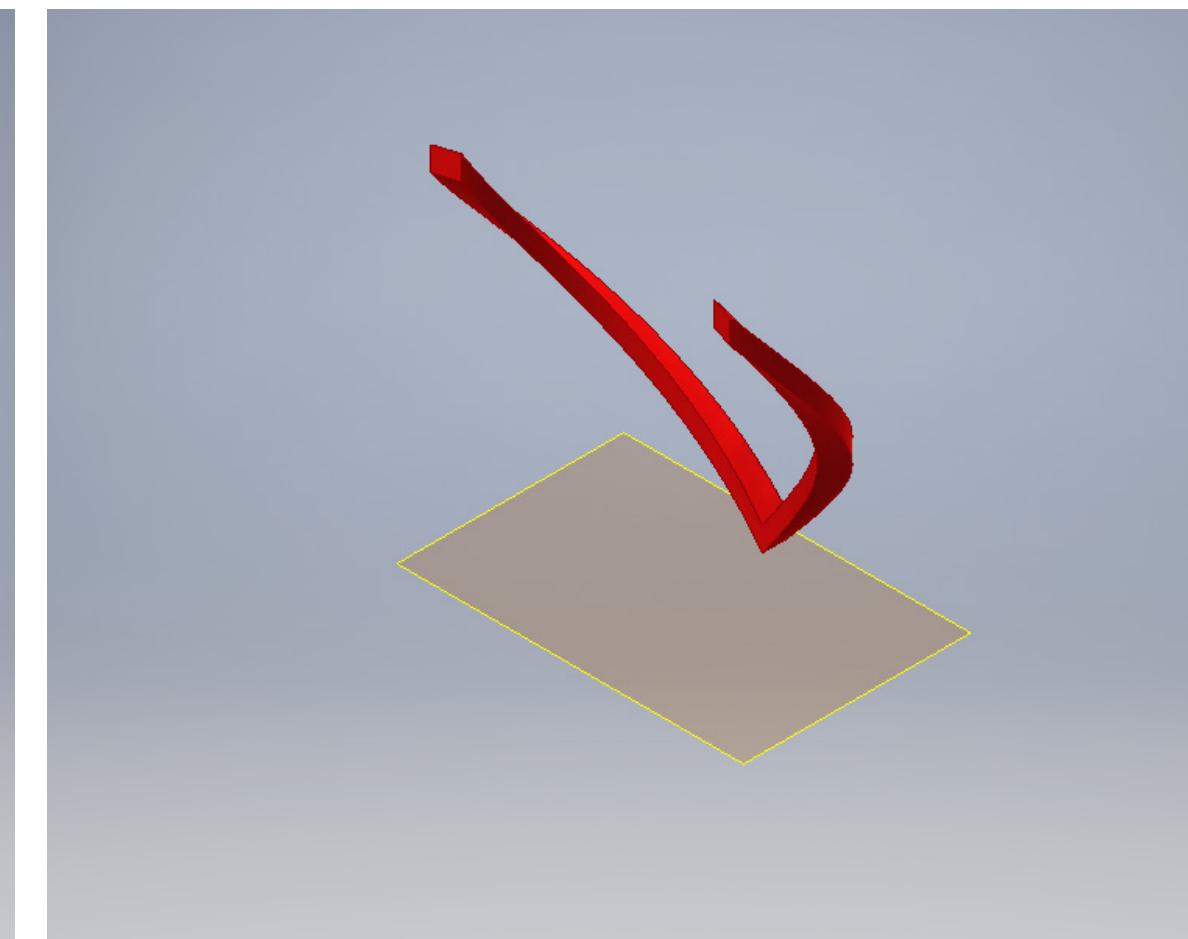
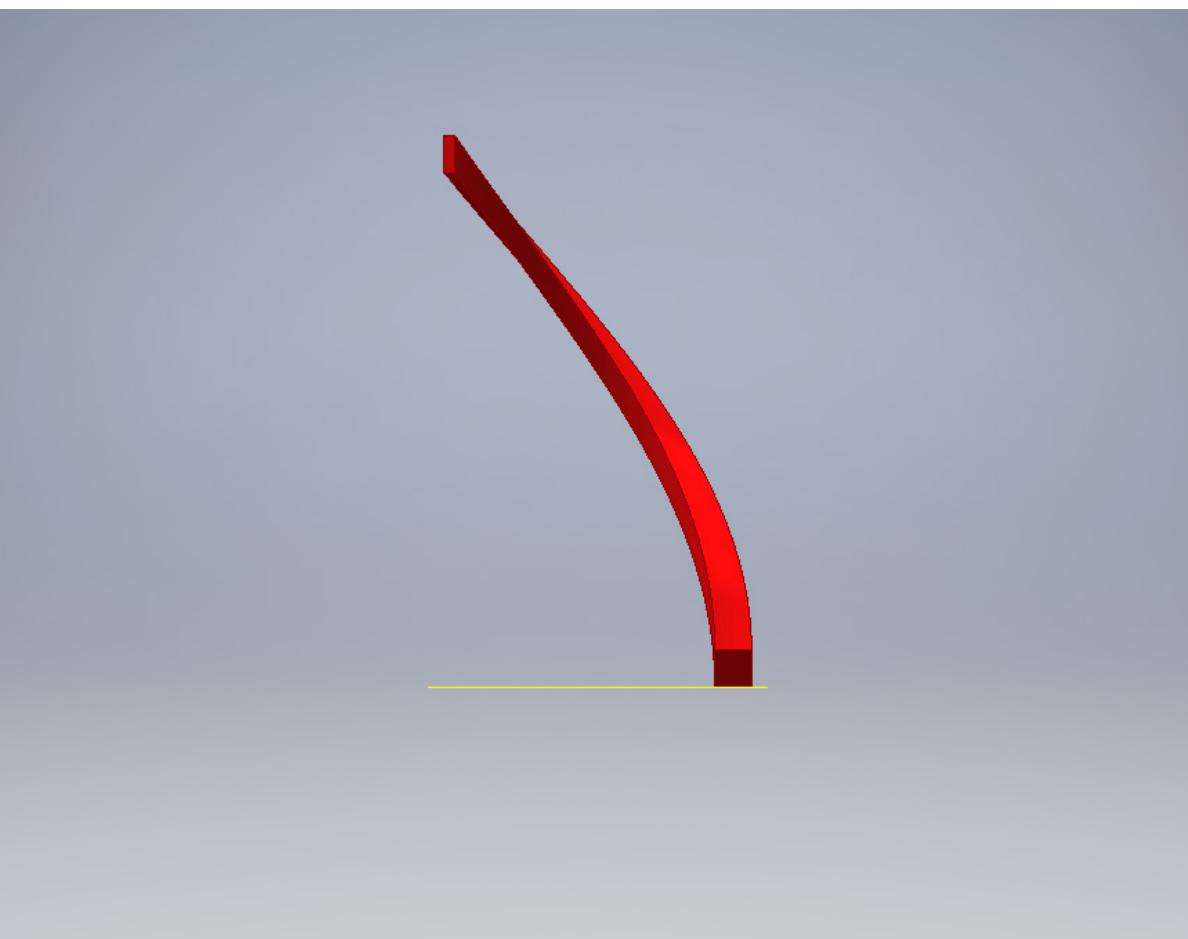
FUNCTION



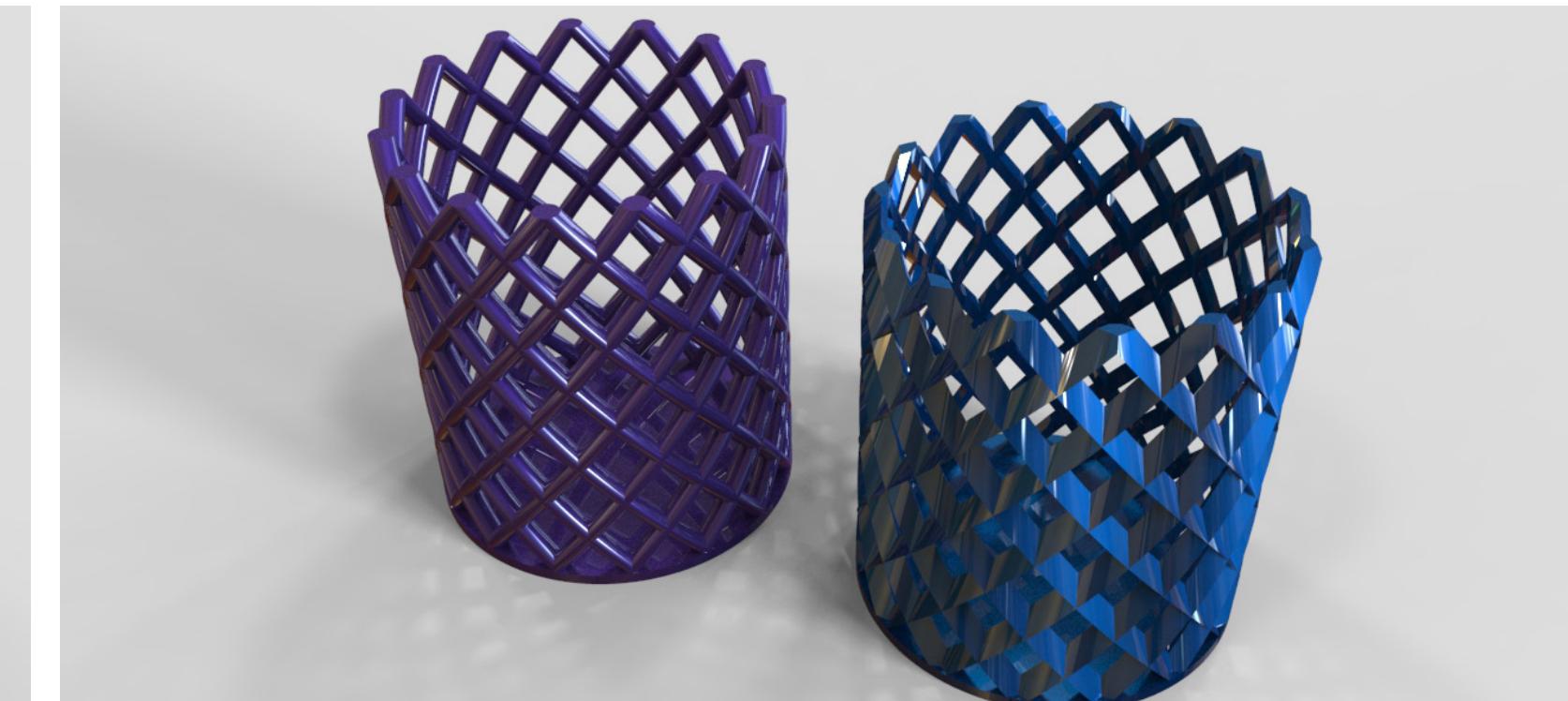
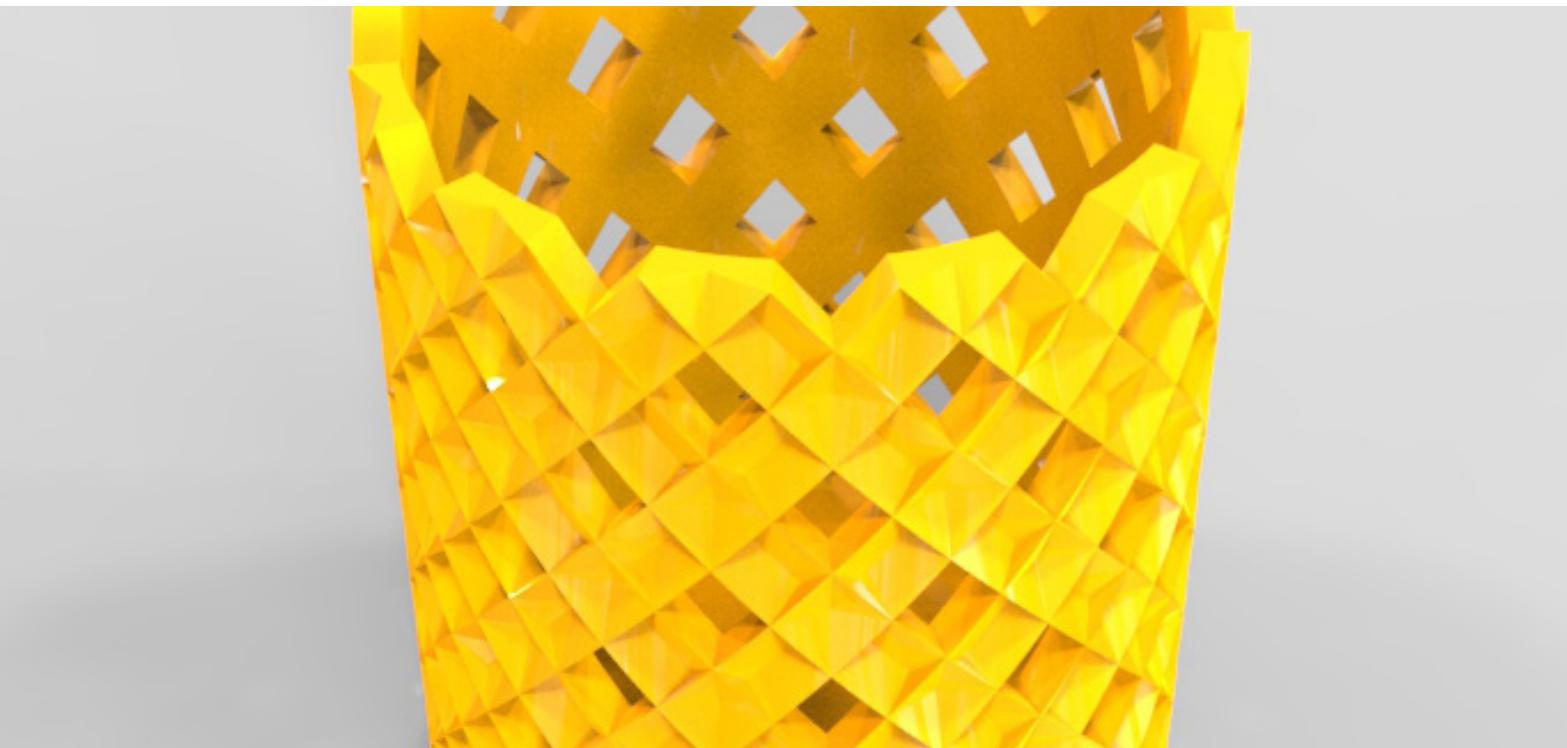
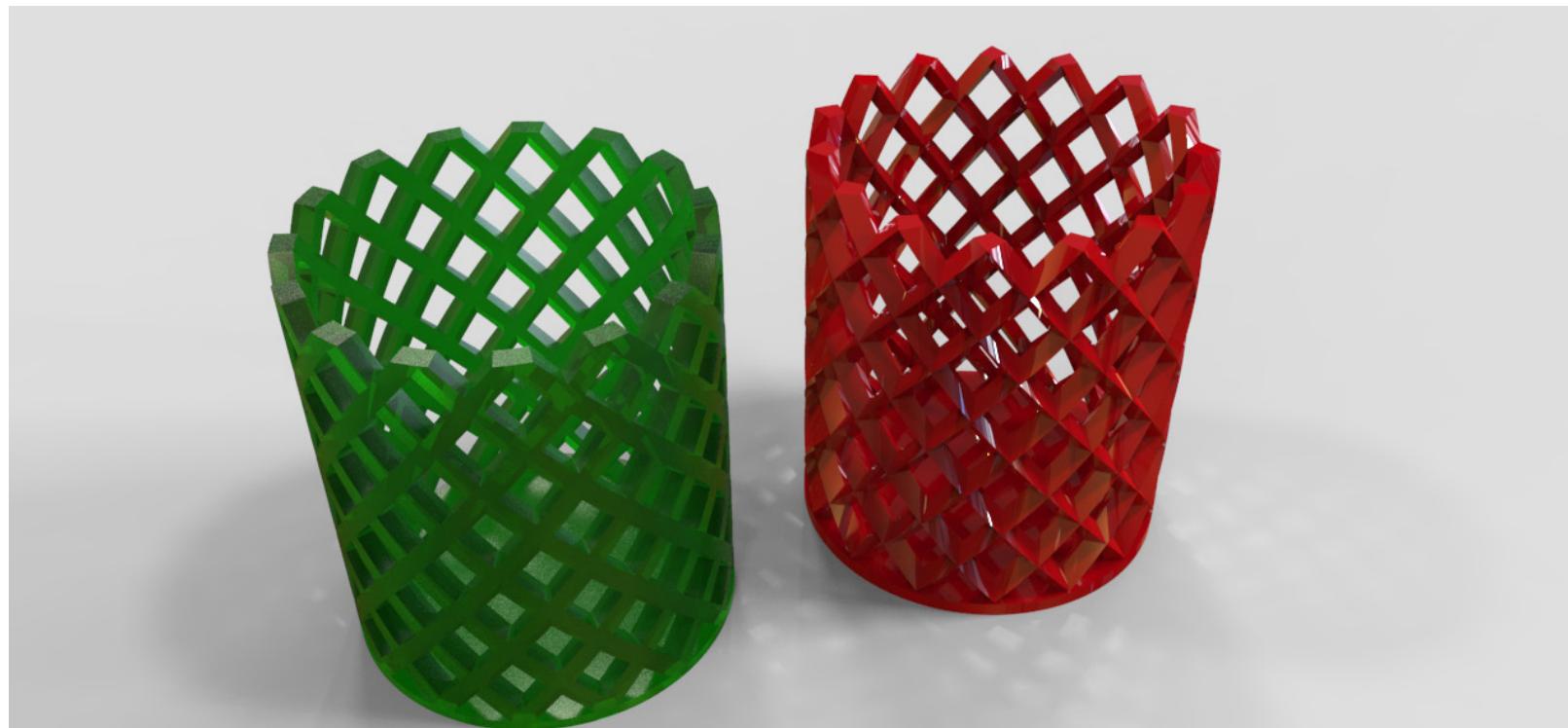
3D PRINTED

CAD+3D PRINTING

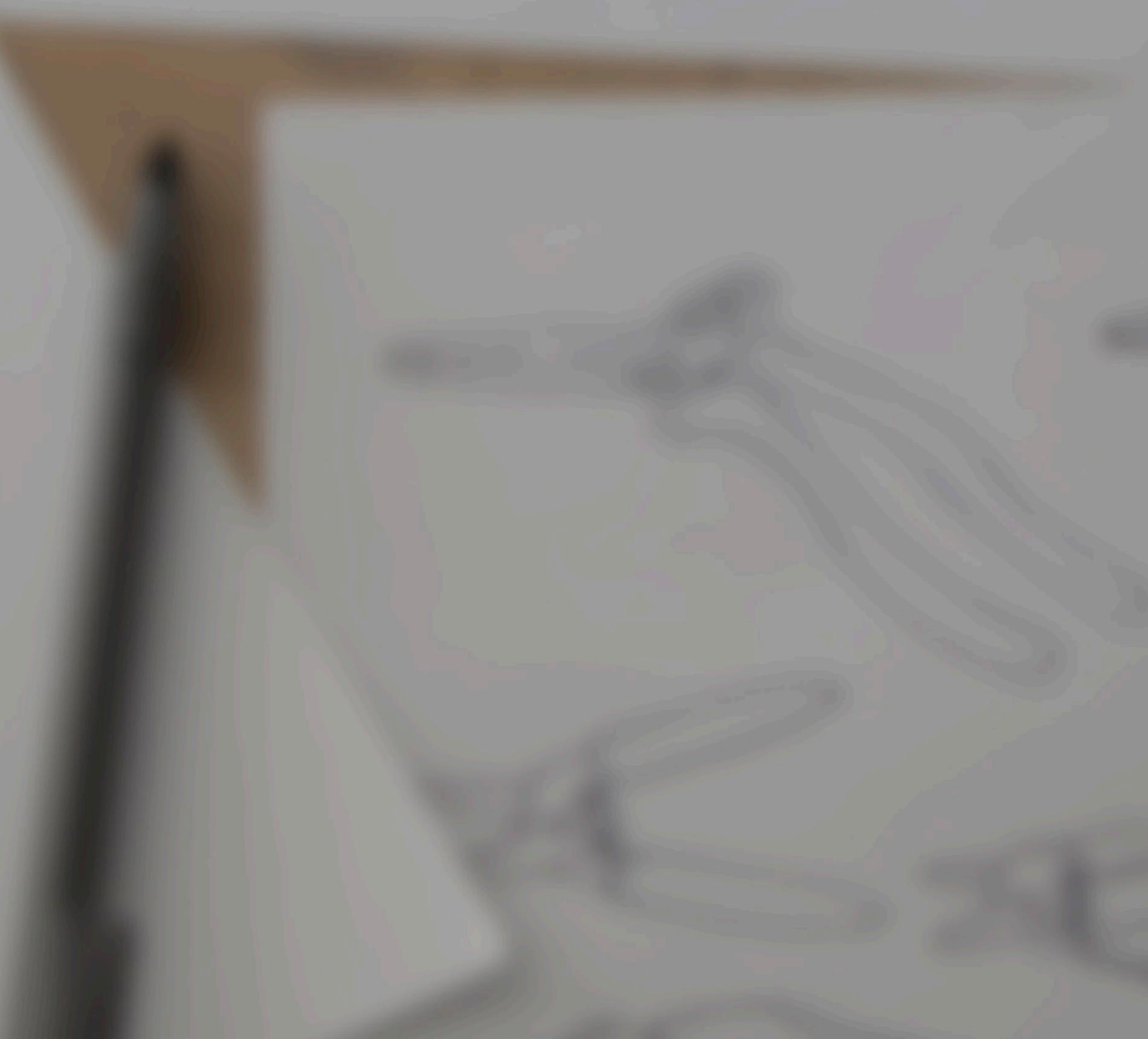
With CAD the concept was quickly modeled and sent directly to the 3D printer.



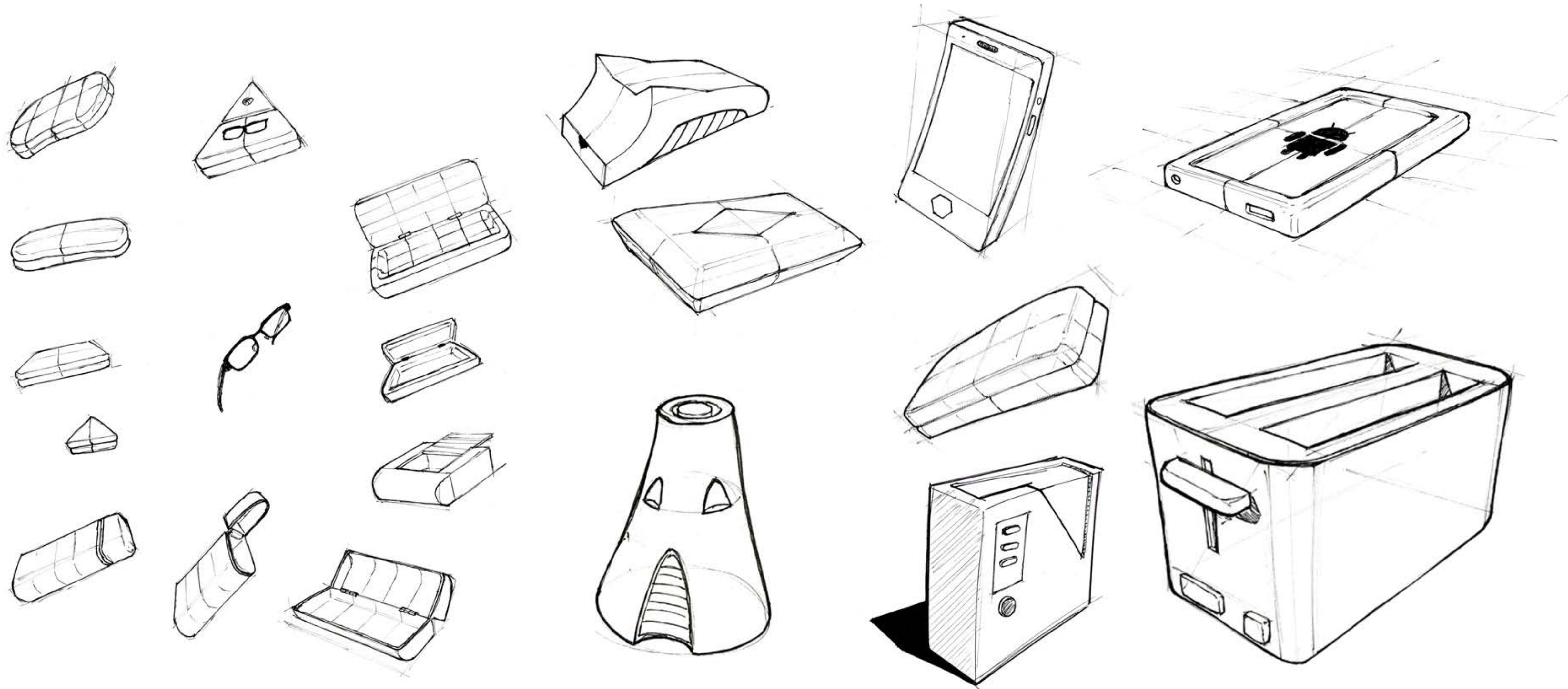
FINAL MODELS



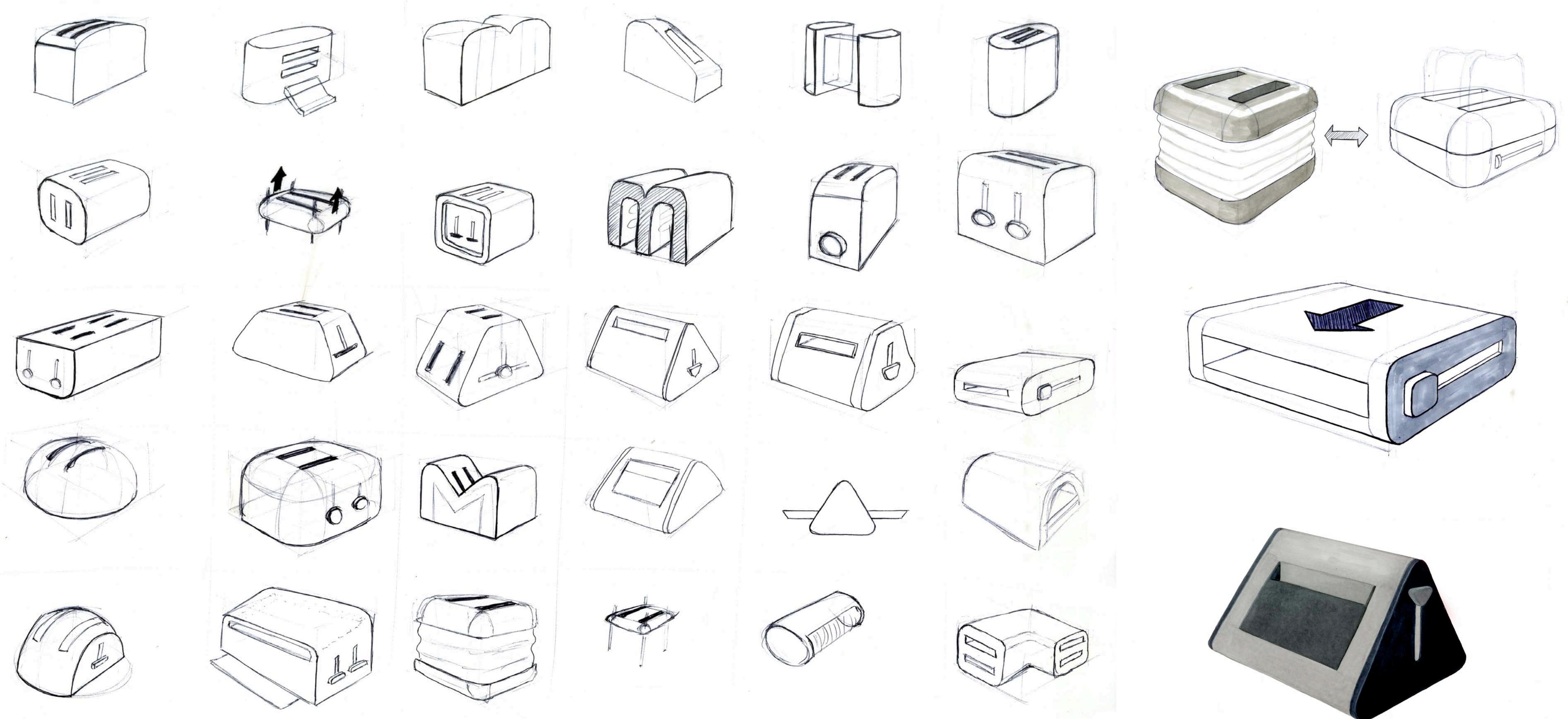
SKETCH PAGES



SKETCH PAGES



SKETCH PAGES



THANK YOU

D'Van Howard
dvanhoward@gmail.com
(502)298-4418

