

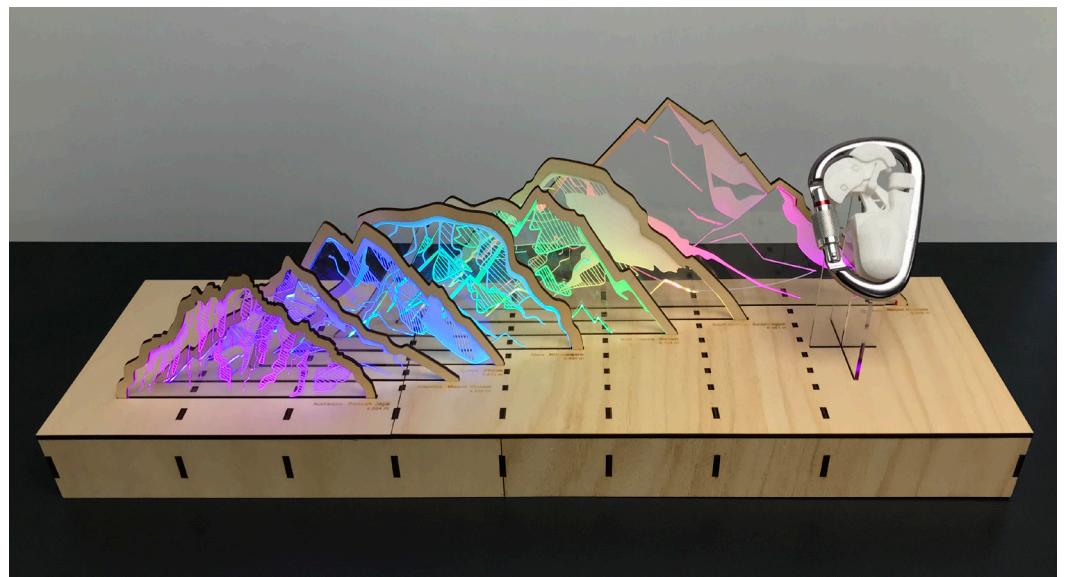
# **Gerard Rutten**

Product Design



South America - Aconcagua  
6,961 m

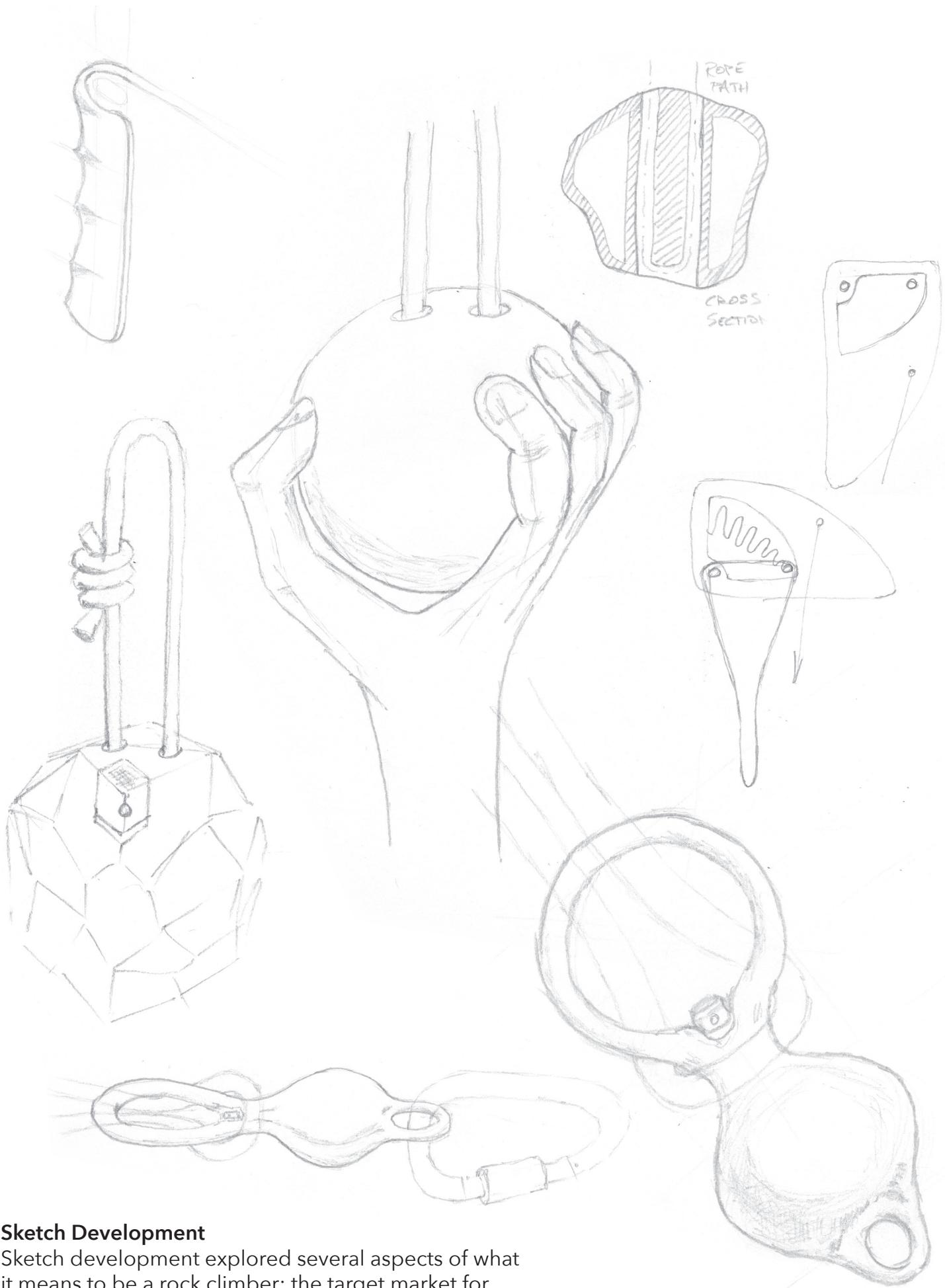
WILLIAM BOND



# 7 Summits

A rock climber's fragrance

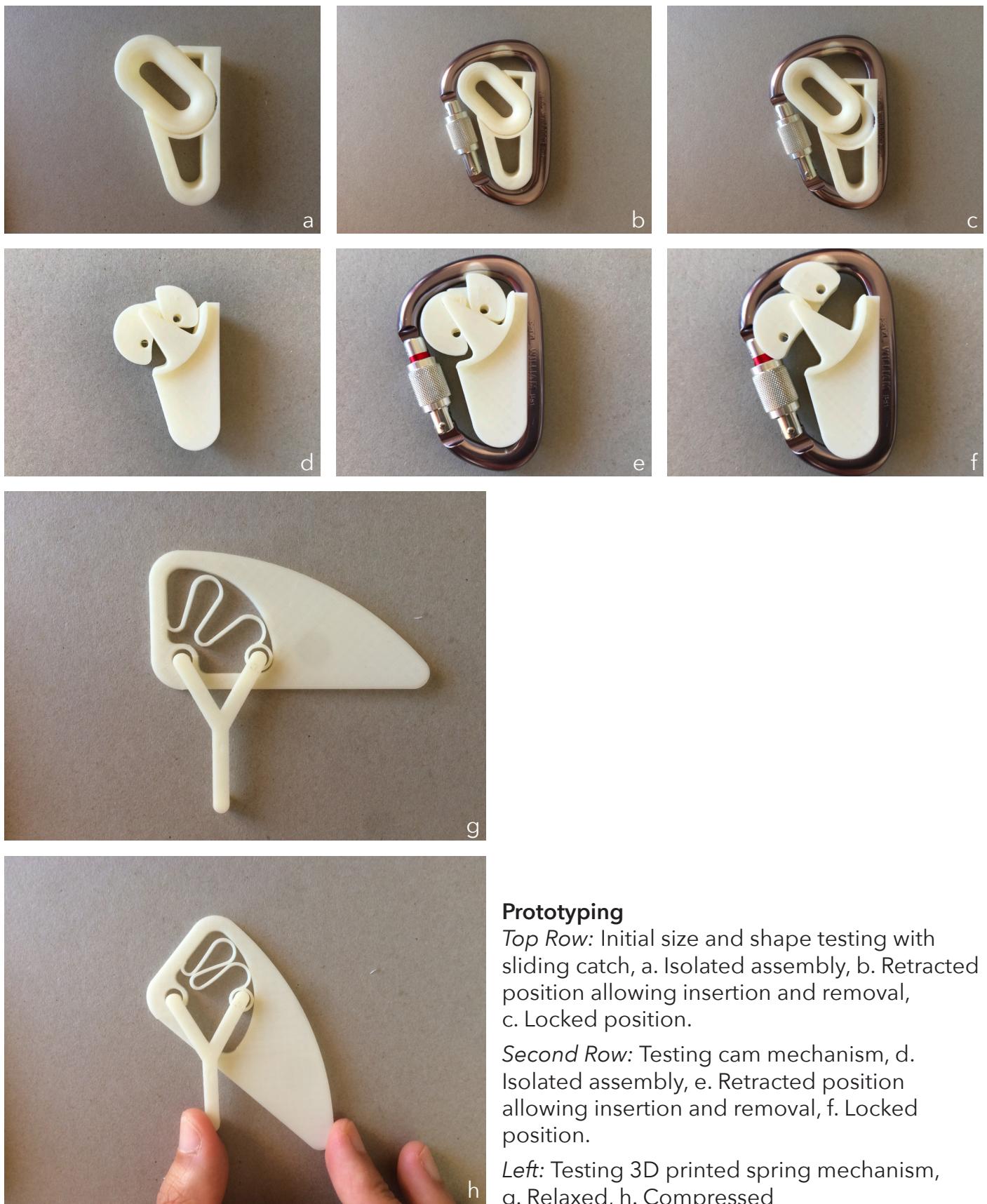
<https://www.gerardruttendesign.com/portfolio/7summits/>



### Sketch Development

Sketch development explored several aspects of what it means to be a rock climber; the target market for this fragrance. Climbing gear and training aids were used as inspiration before settling on a fragrance bottle that would nestle within a carabiner - something every climber has in their kit.







i



j



k

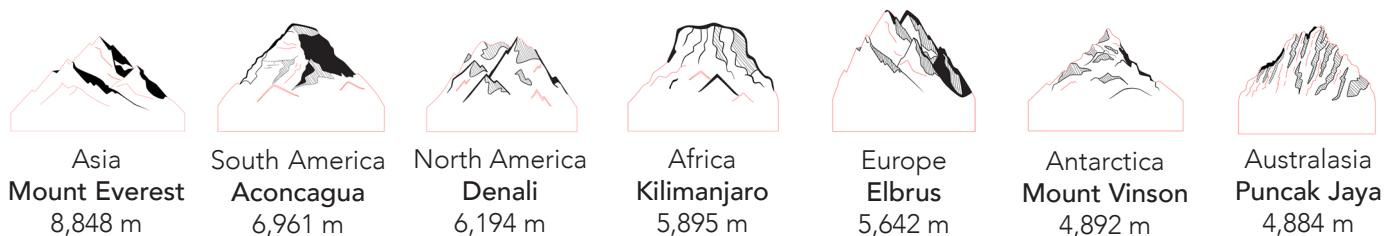


l

*Top Row:* Evolution of the Internal spring design made with identical locating lobes to fit a jig for consistent evaluation.

*Above:* Final Design, j. Section view showing internal 3D printed spring that extends the locking cams, k. Fitted to a carabiner, nozzle locked to prevent accidental operation, l. Angled view showing concave edge profile.

*Below:* Laser cutting line work used to create the edge-lit acrylic representation of the highest summits in each of the seven continents.

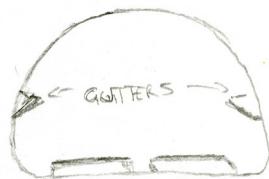
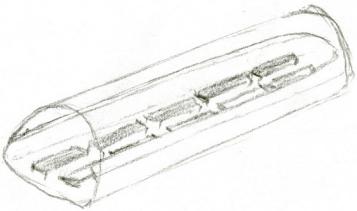




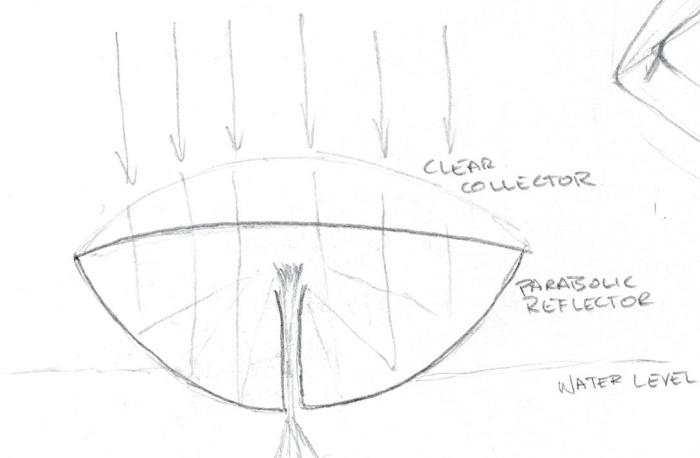
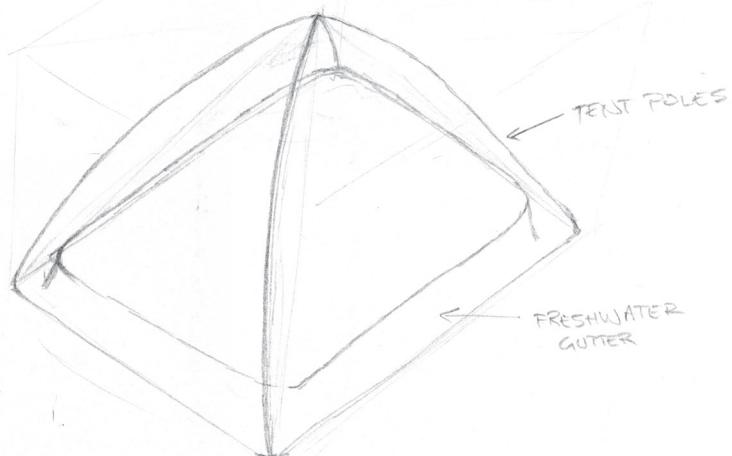
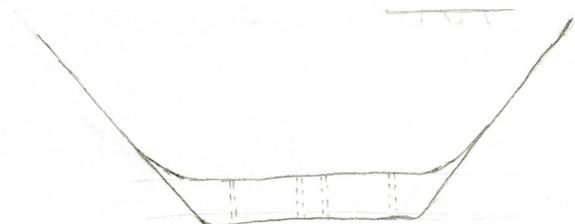
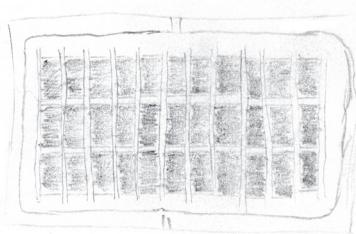
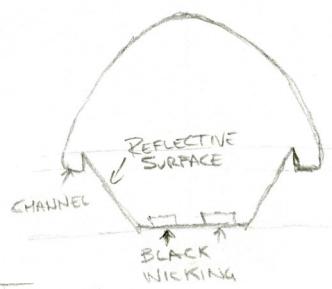
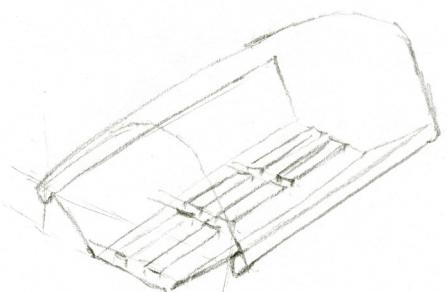


# Solar Desalinator

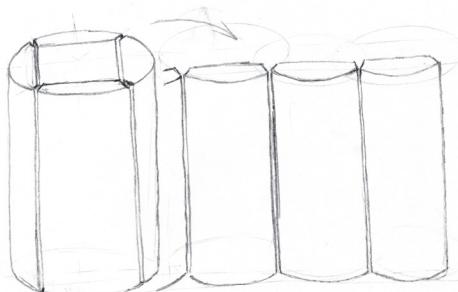
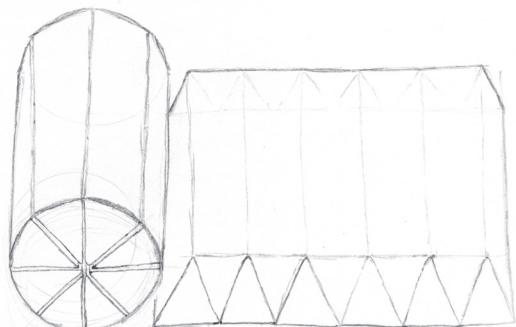
A portable solution to clean water  
Shortlisted for 2019 Lexus Design Awards

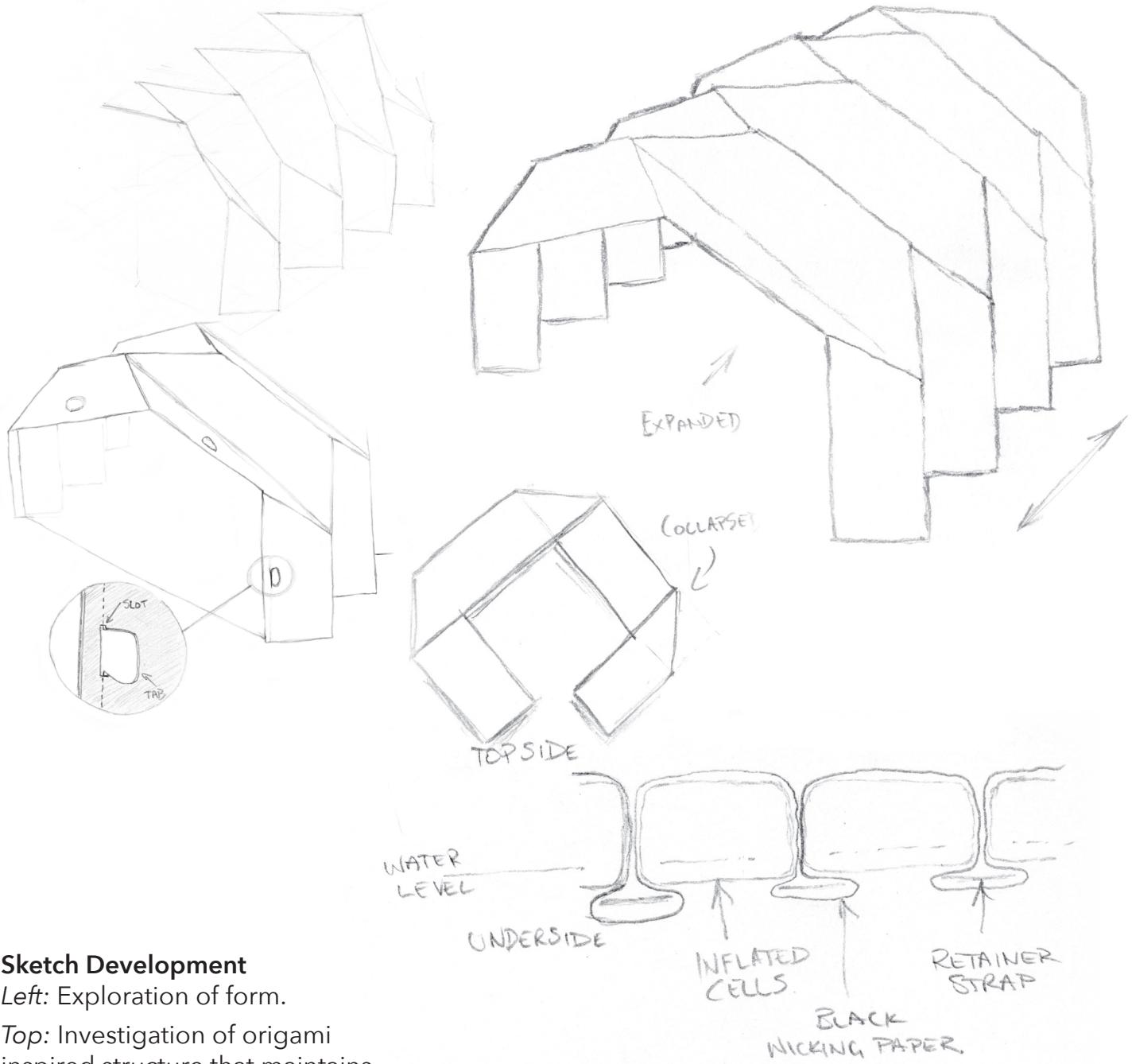


CROSS SECTION.



EVAPORATION BALL CONCEPT.





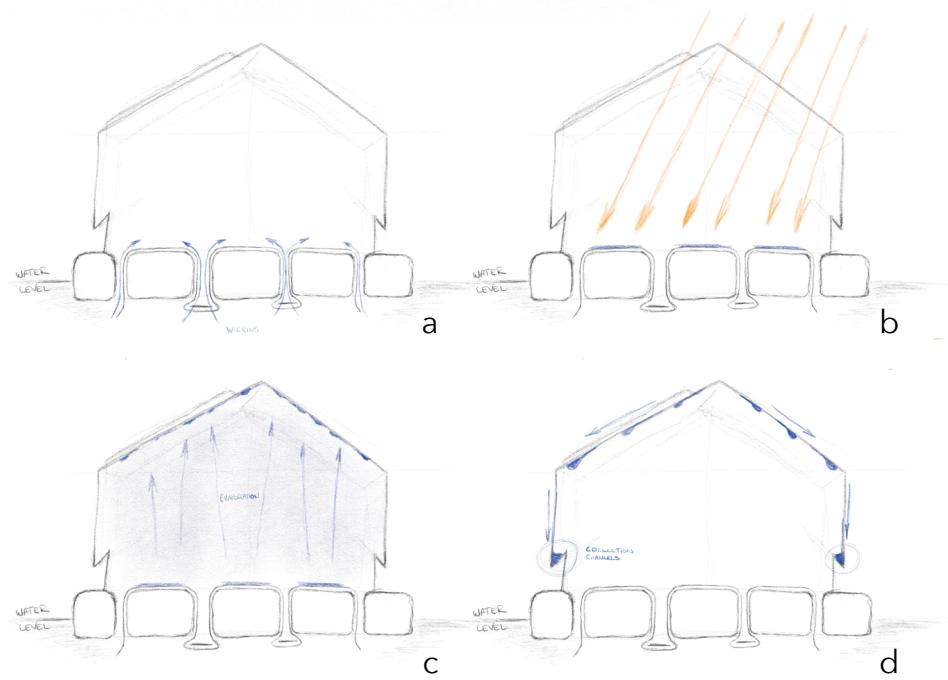
### Sketch Development

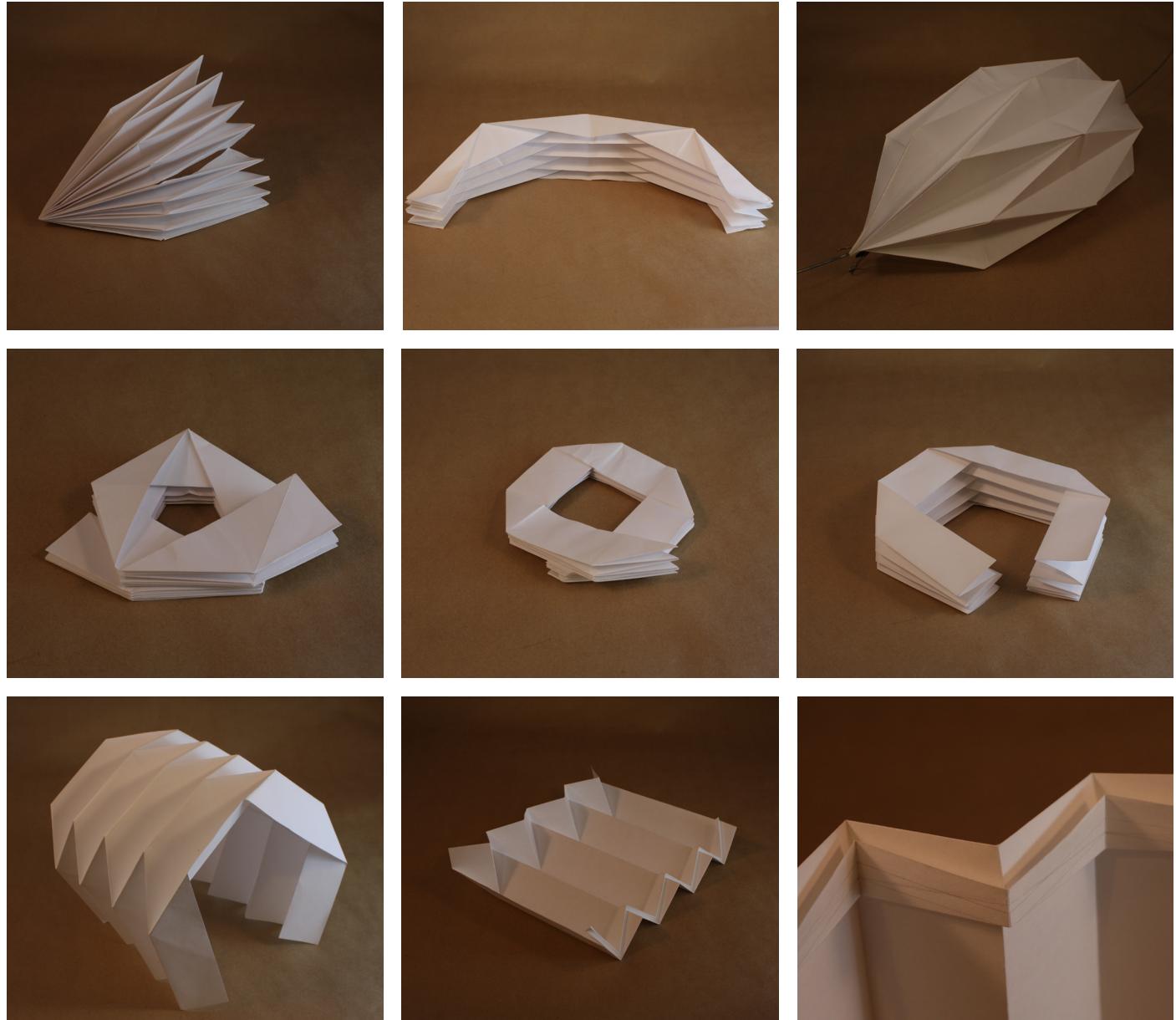
*Left:* Exploration of form.

*Top:* Investigation of origami inspired structure that maintains a rigid canopy, yet folds flat when required.

*Centre:* Flotation layer showing inflated cells interleaved wicking paper that draws liquid up from the water body below.

*Right:* Water purification process, a. Water is wicked up from below onto the thin evaporation surface, b. The heat of the sun is trapped in the enclosed space causing pure water to evaporate, c. The evaporated steam condenses on the inner surface of the dome, d. Condensed, clean water trickles down the dome into collection channels.





### Prototyping

Exploring various origami patterns and geometries to achieve the perfect balance of structural integrity with compactness when folded. Final two images show development of the water collection channel integrated into the lower section of the dome walls.



a



b



c



d

## Assembly

- a. Components laid out.
- b. Base inflated, wicking paper interleaved with inflation cells.
- c. Dome unfolded and attached to base, end plates fitted.
- d. Extraction tube fitted to collection channels.

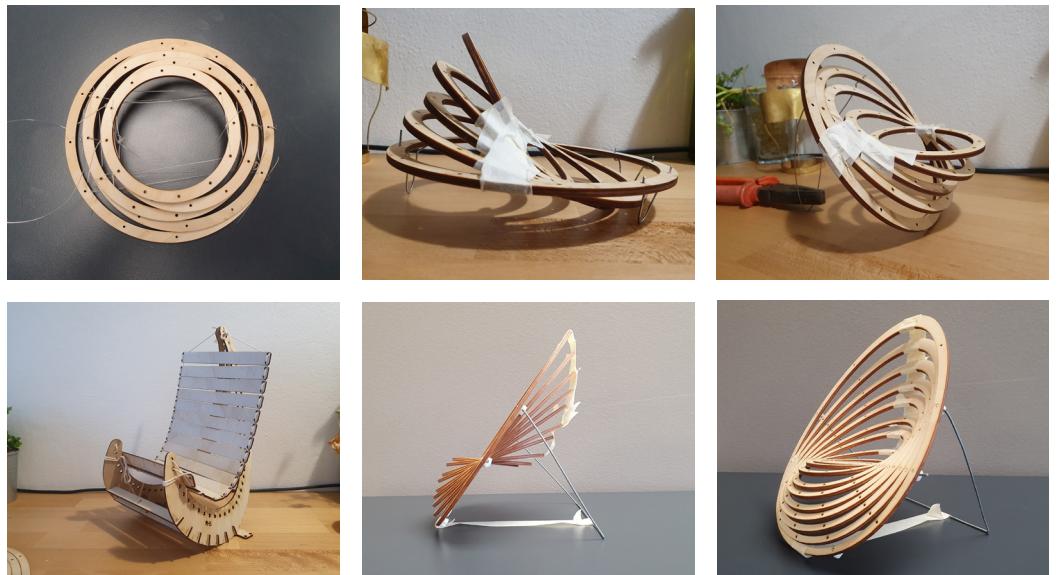




# Concentric Chair

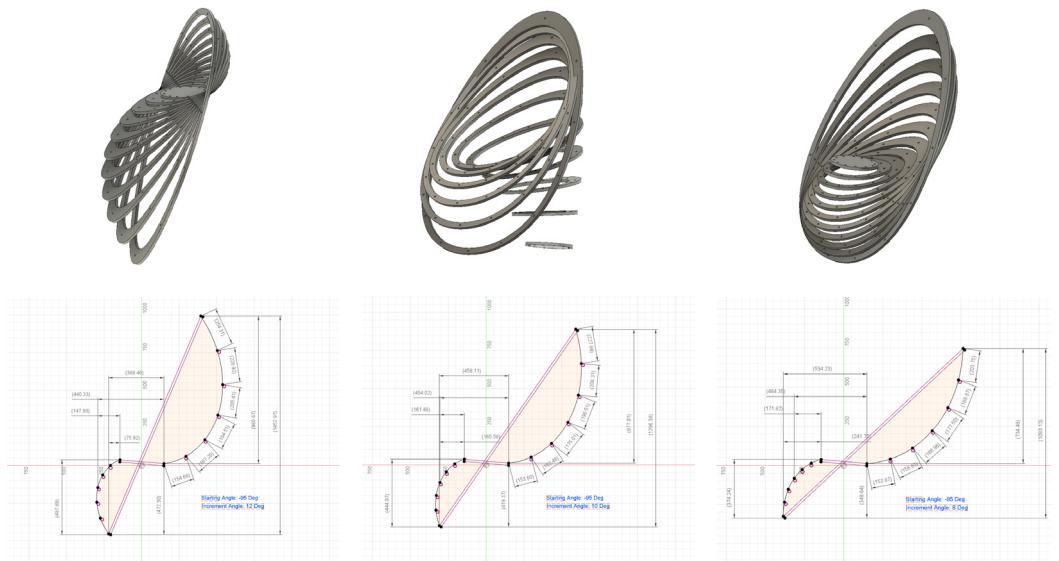
Creating 3 dimensions from 2

<https://www.gerardruttendesign.com/portfolio/concentricchair/>



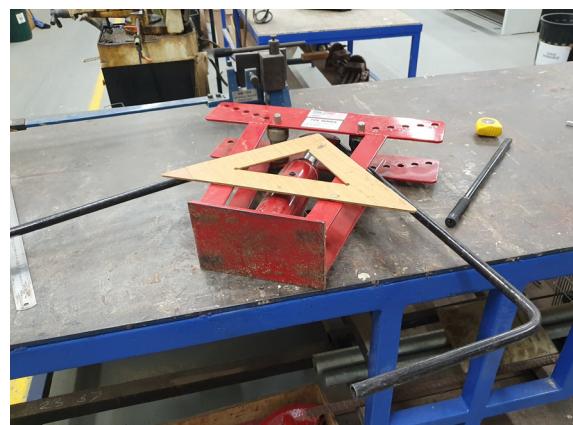
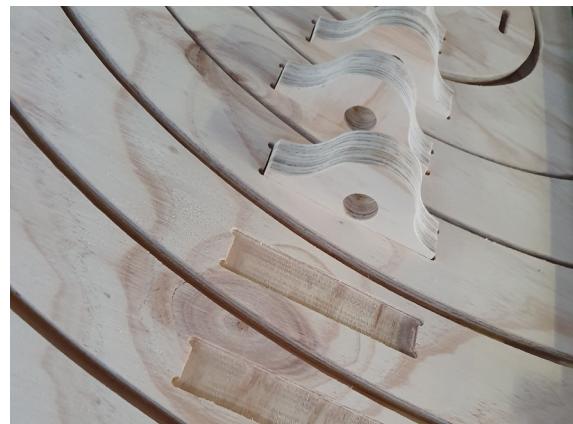
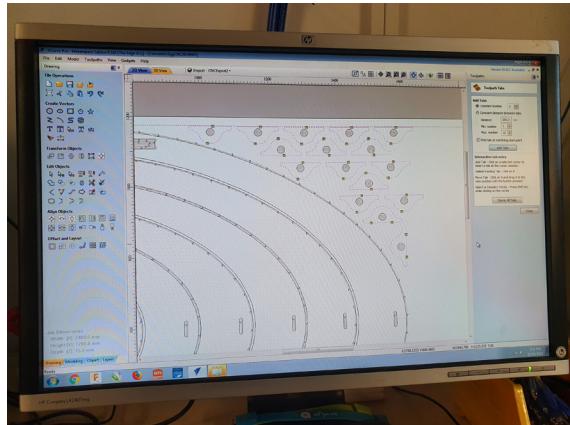
## Physical Prototyping

Developing physical models using laser cut timber to explore the concept.

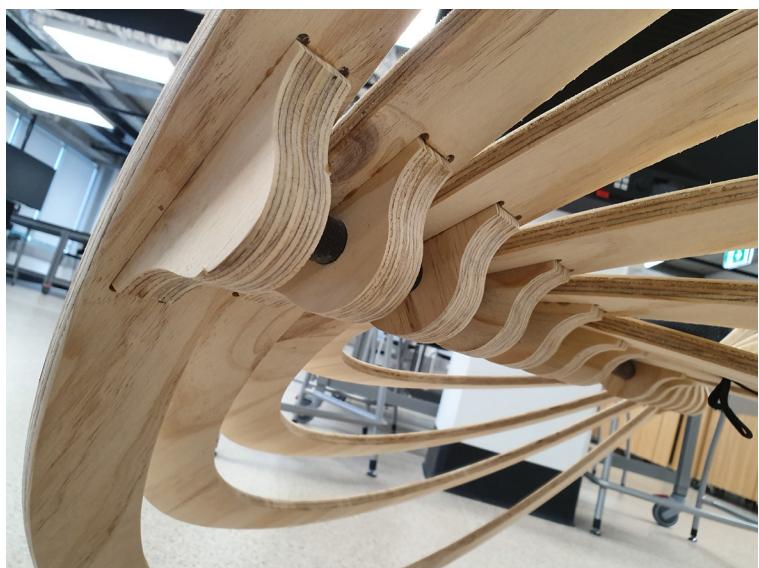


## Digital Prototyping

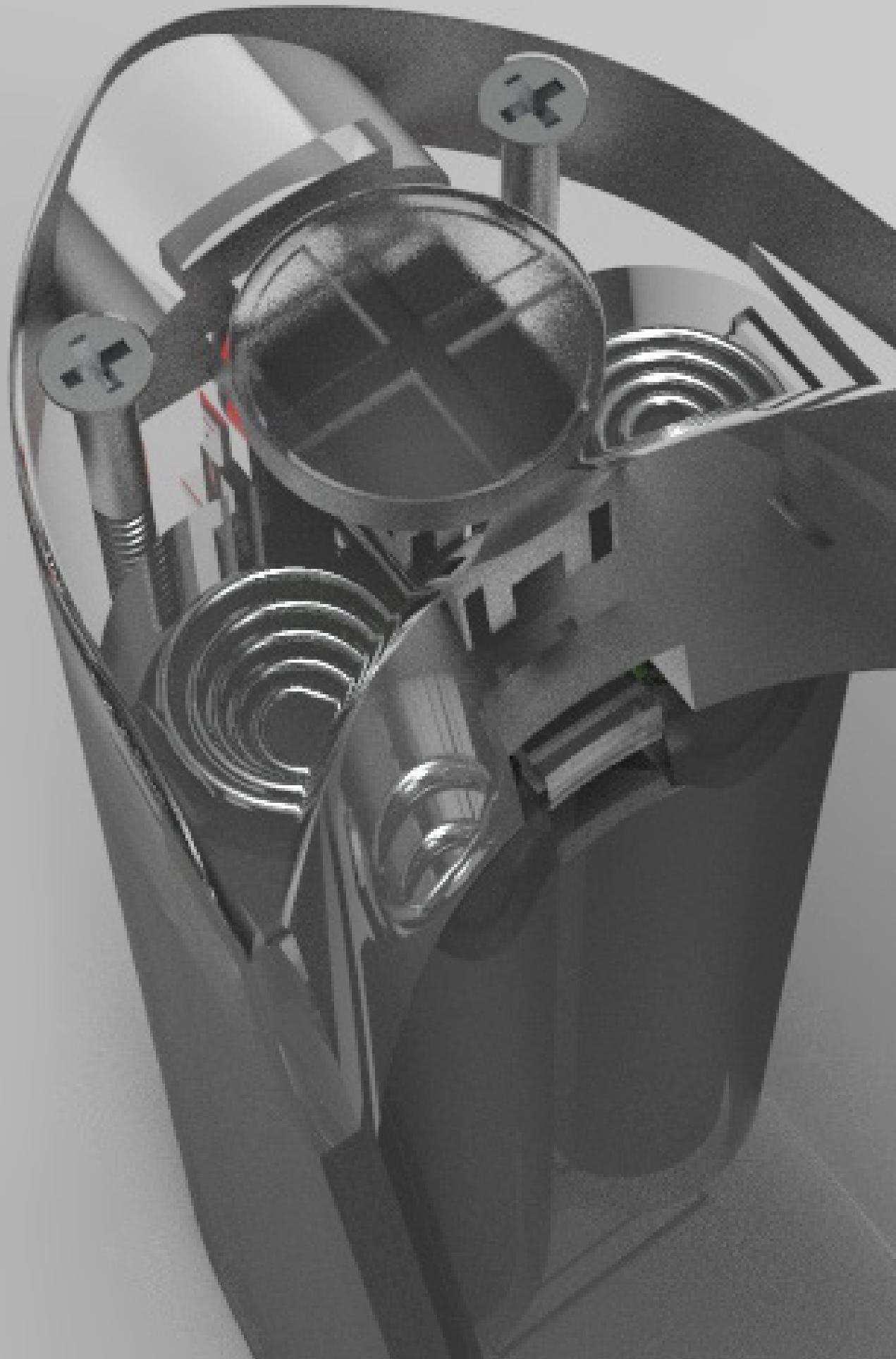
Using parametric 3D modelling software to experiment with different designs and values.

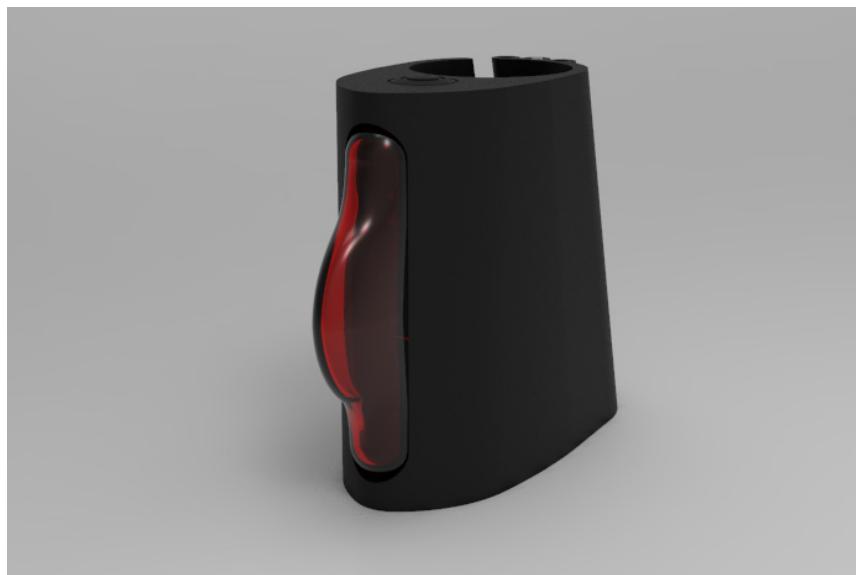


**Construction**  
Using CNC equipment and various hand tools  
to complete the build.





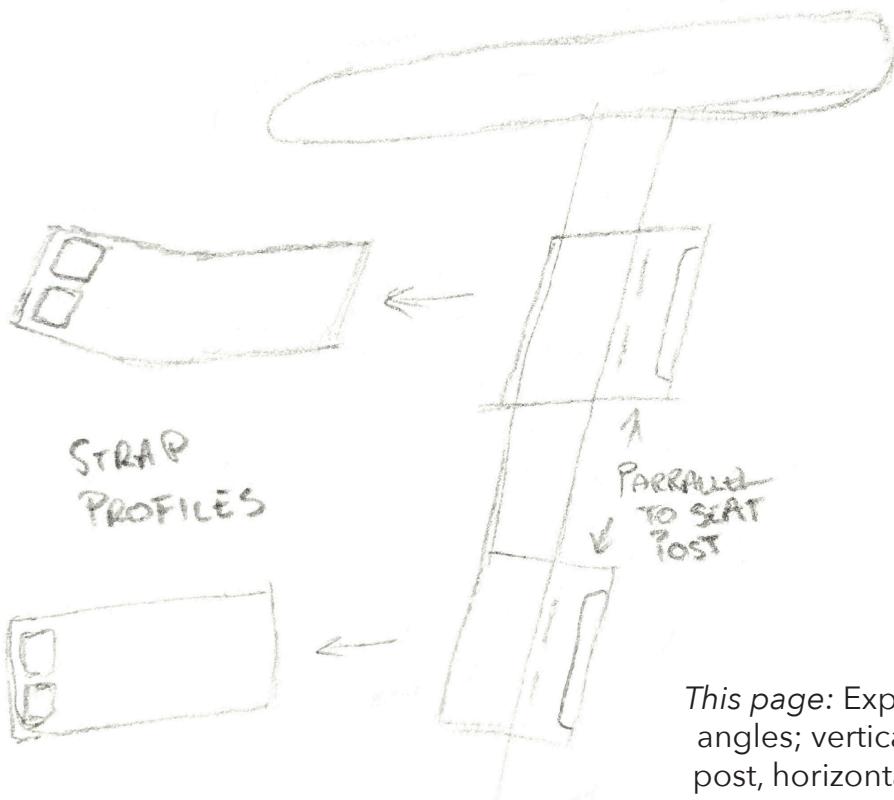




# Bike Light Redesign

Remodeling a bike light based upon the existing internals

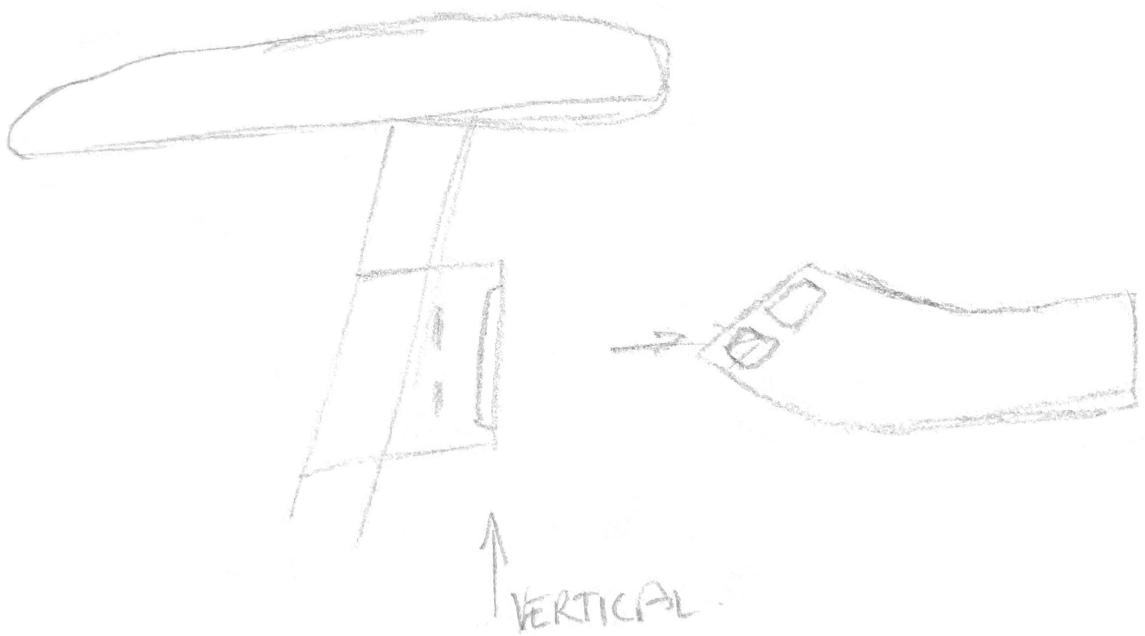
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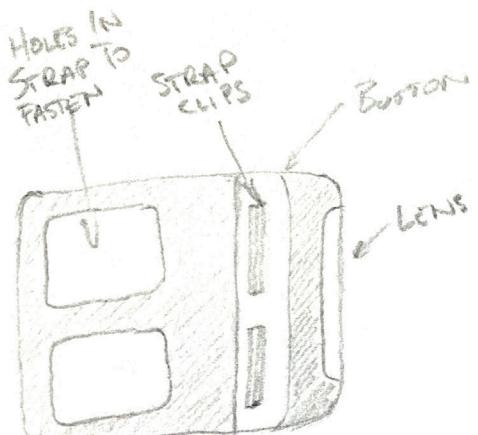


### Sketch Development

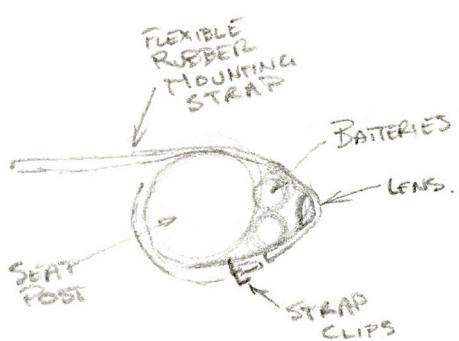
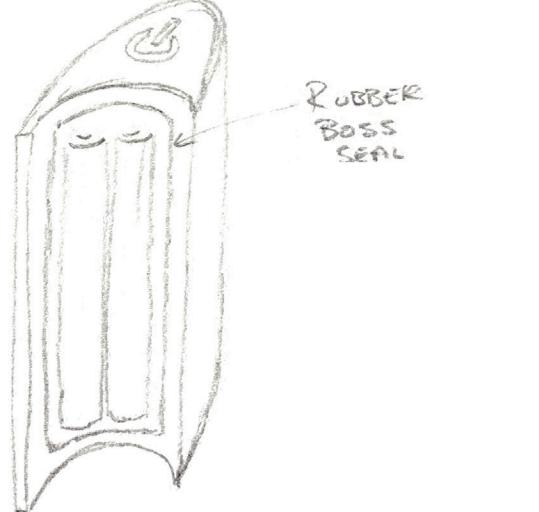
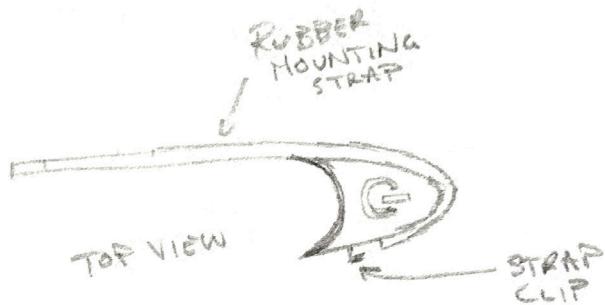
*This page: Exploration of conflicting angles; vertical vs aligned with seat post, horizontal vs perpendicular to the seat post.*

*Facing Page: Ideating strap configurations and internal layout.  
Bottom sketch shows adjustable fixing buckle.*



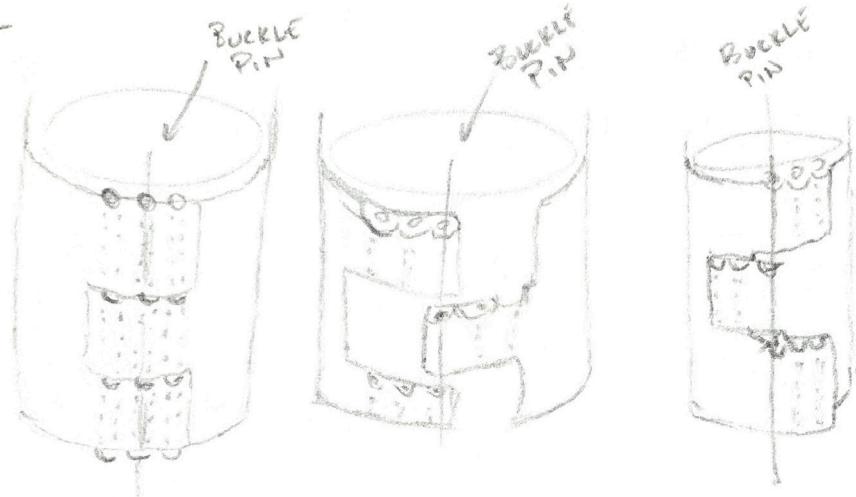


SIDE VIEW



TOP VIEW

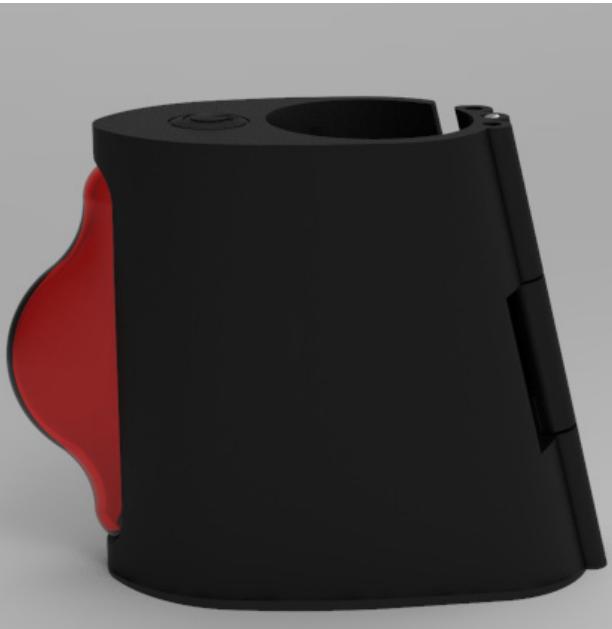
SECTIONAL



NORMAL  
DIAMETER  
SEAT POST

LARGE  
DIAMETER  
Post

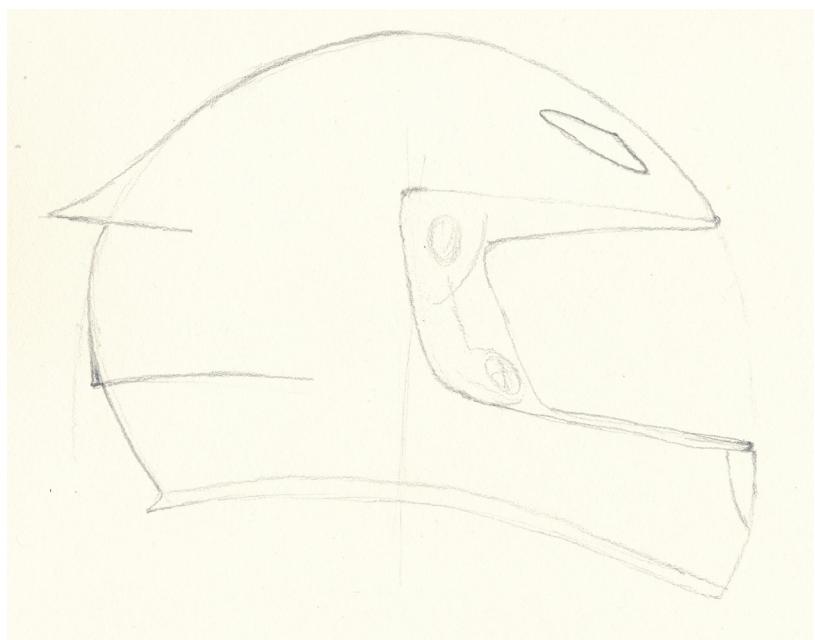
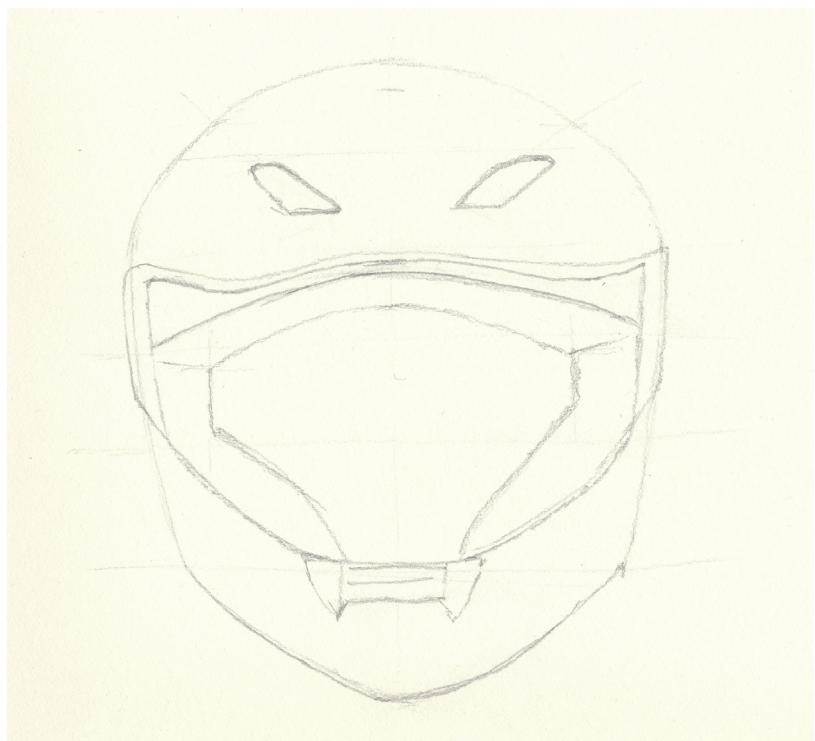
SMALL  
DIAMETER  
Post

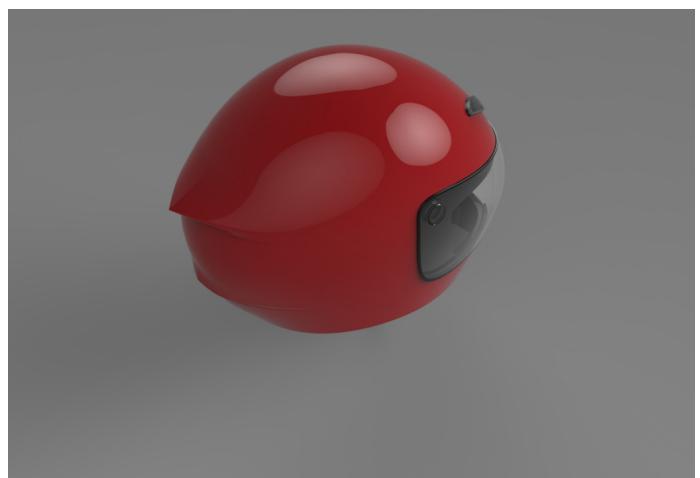




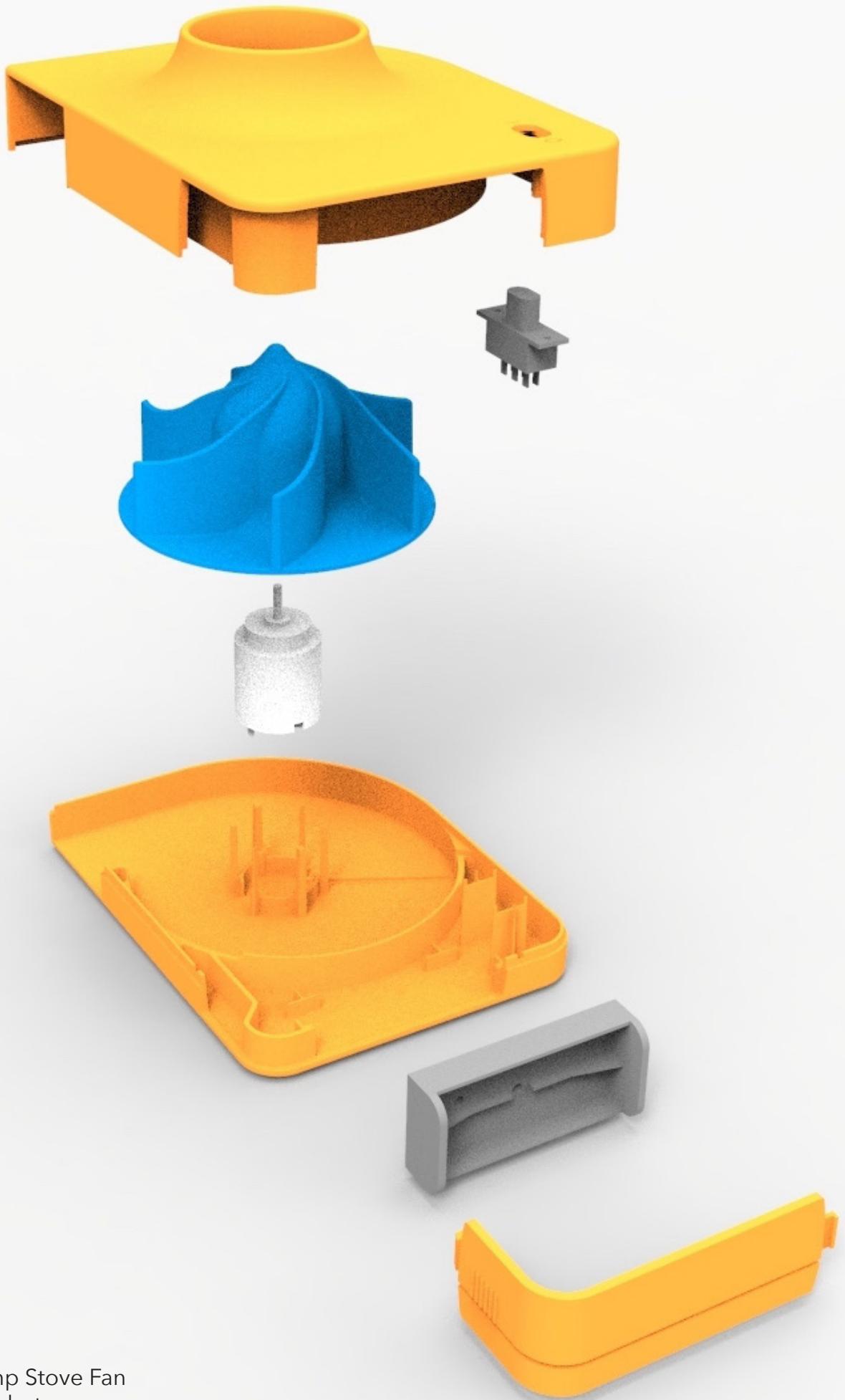


# Other Designs

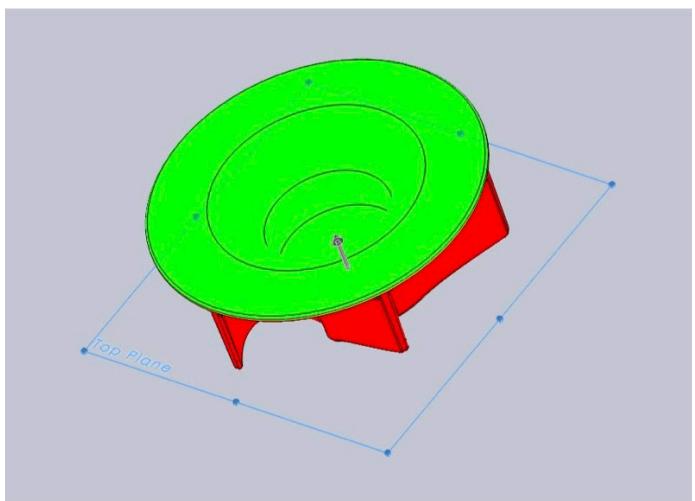
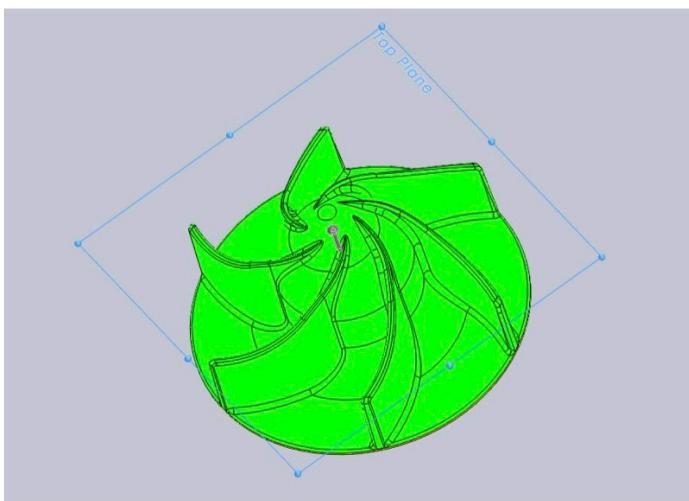
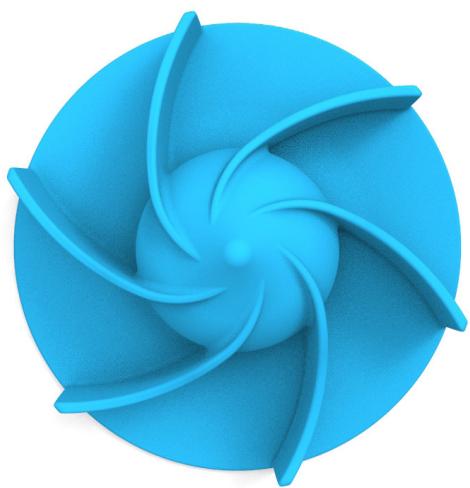
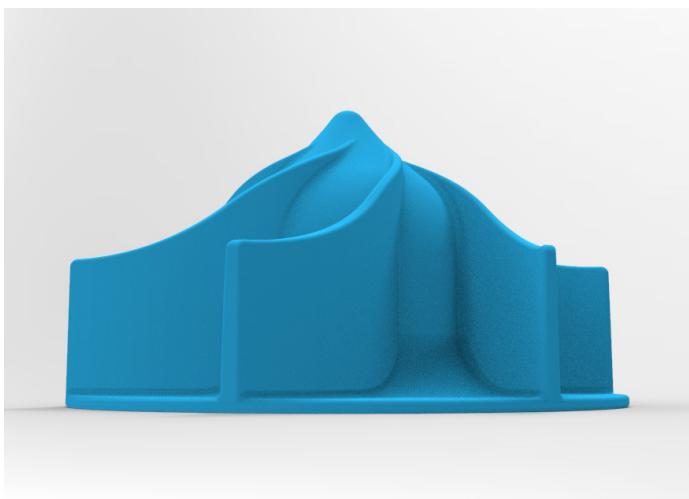
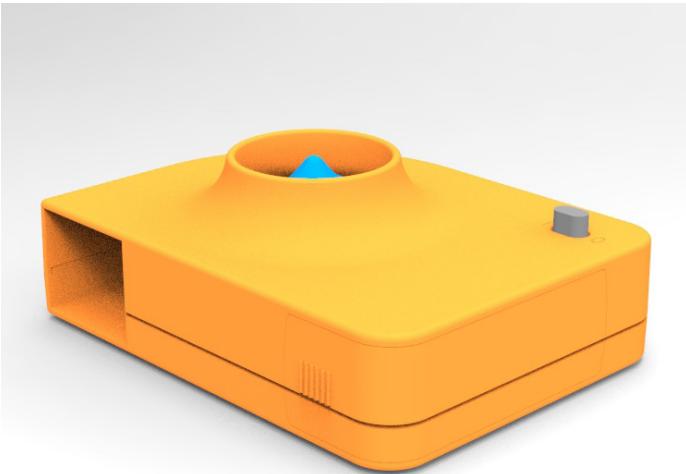


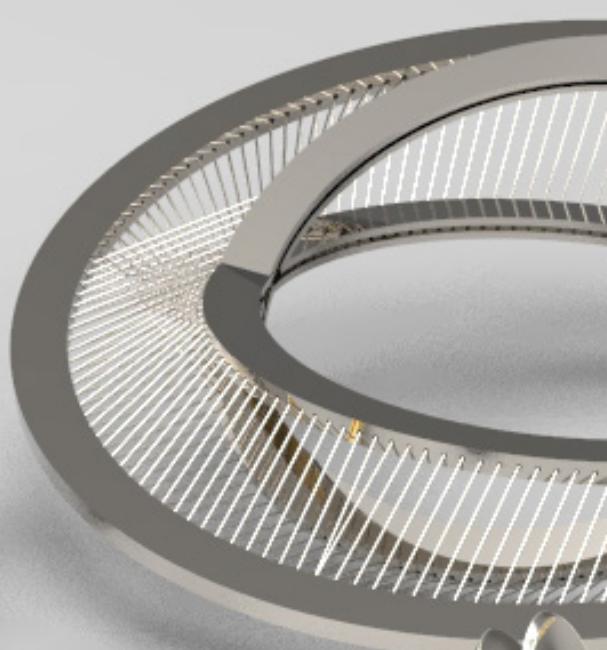


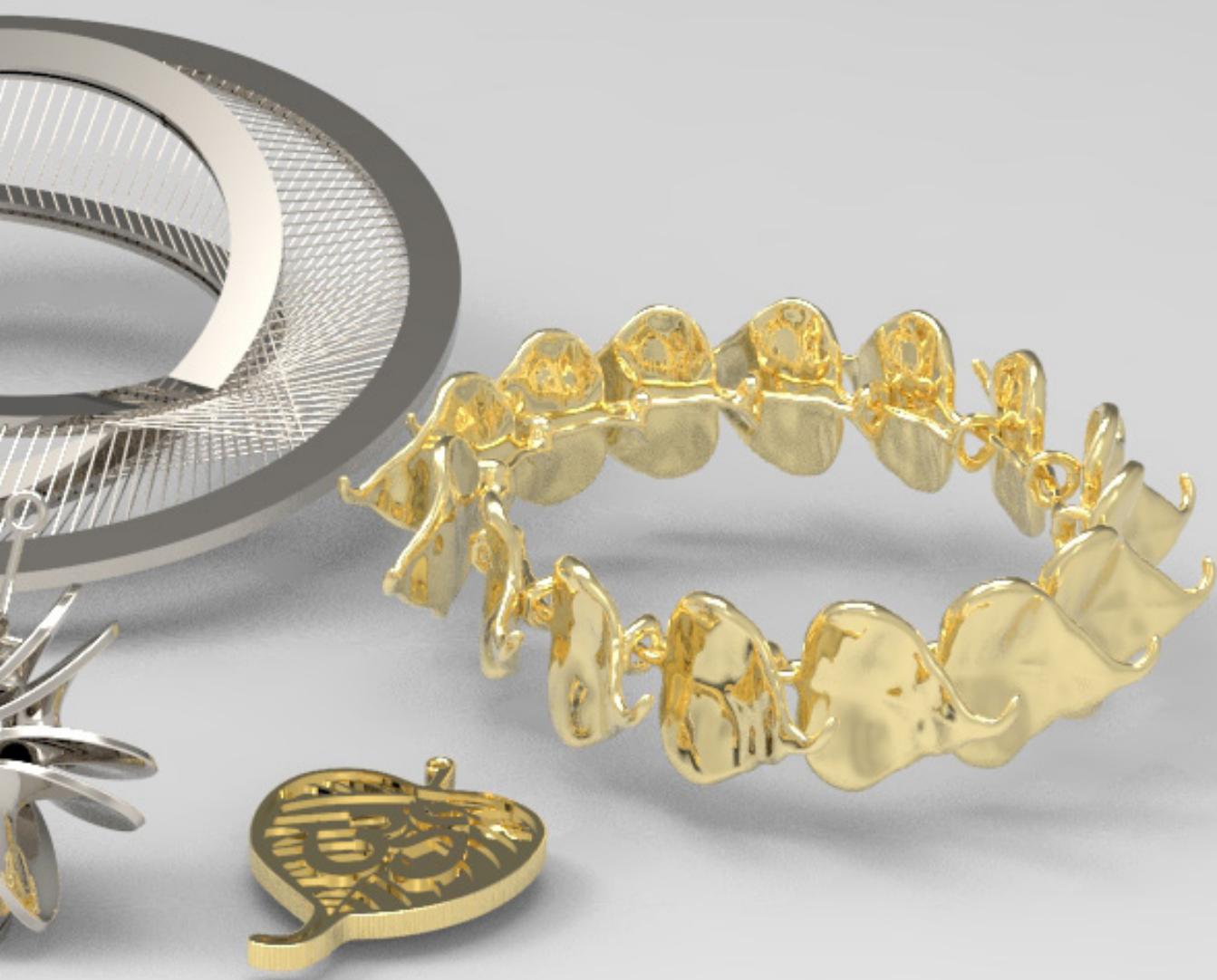
Motorcycle Helmet  
Solidworks, Keyshot



Centrifugal Camp Stove Fan  
Solidworks, Keyshot







Digital Jewelry  
Rhino 3D, Keyshot

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