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Shoe Horn



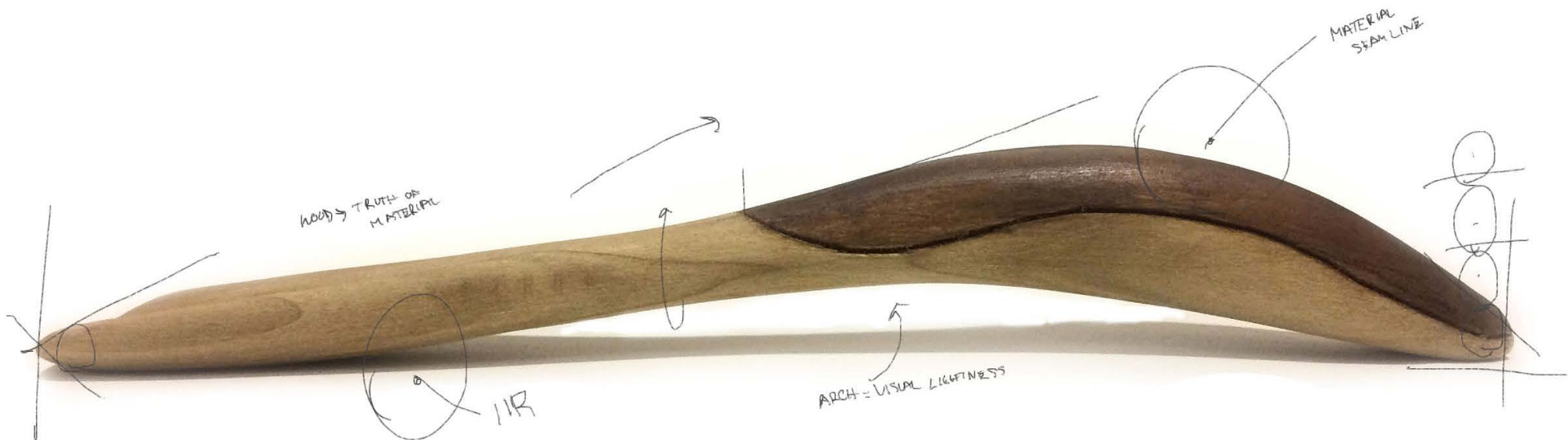
Top Guage

# Brief

## Shoe Horn Redesign

The shoe horn has been in desperate need of a redesign.

The mainstream products on the market simply don't consider the object's interaction with its user. This project was a matter of valuing the user experience and creating a shoe horn that people want to hold instead of one that they have to hold.



# Research

What handles are already out there?



▀ Rubber/Silicone handles for ensured grip.



▀ Smooth taper to accomodate complex form of hand.



▀ Natural wood finish fits well into home environment.



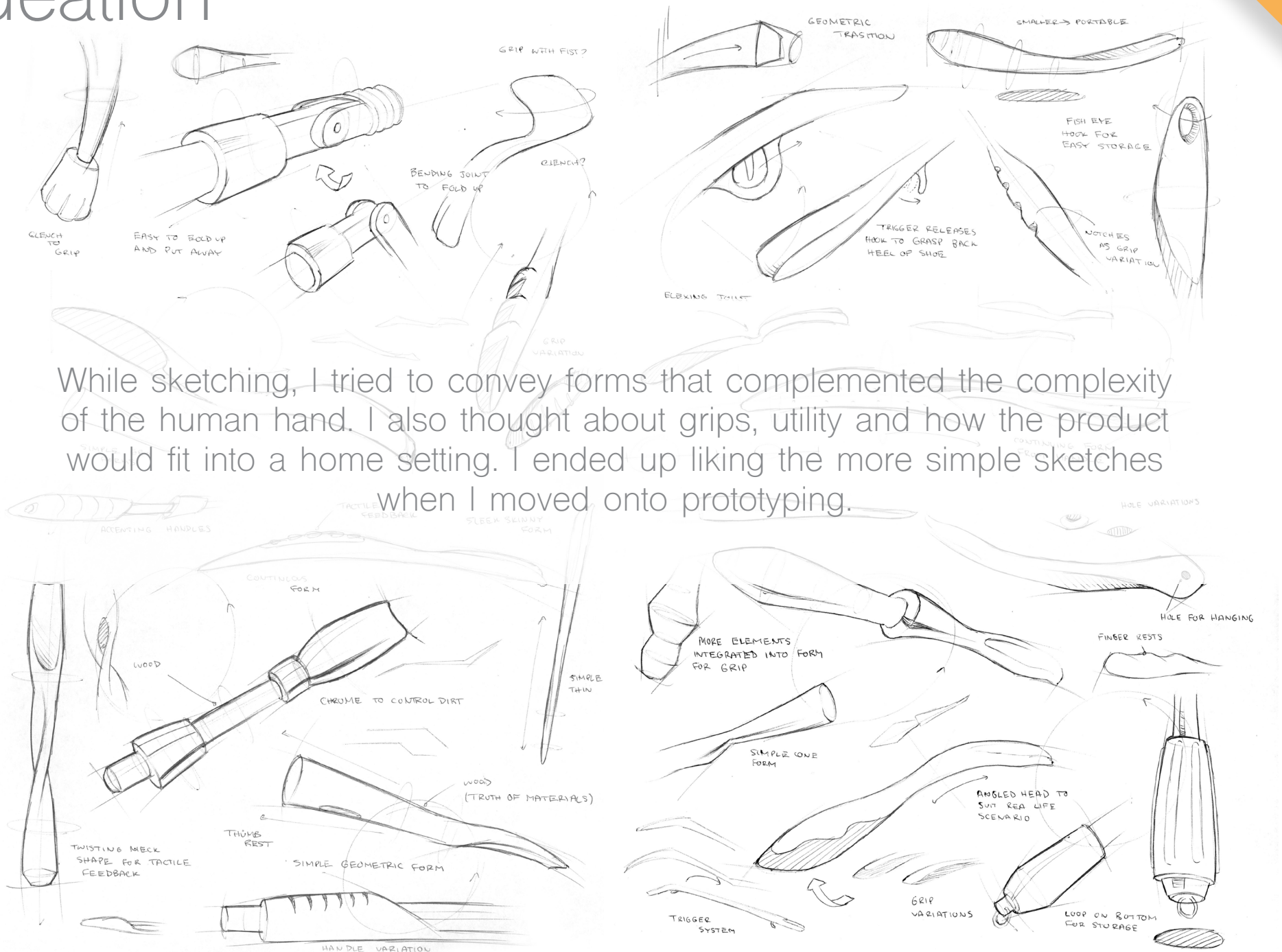
▀ Handle dictates placement of fingers.



▀ Hands rest more comfortably on objects with more surfact area.



# Ideation



While sketching, I tried to convey forms that complemented the complexity of the human hand. I also thought about grips, utility and how the product would fit into a home setting. I ended up liking the more simple sketches when I moved onto prototyping.

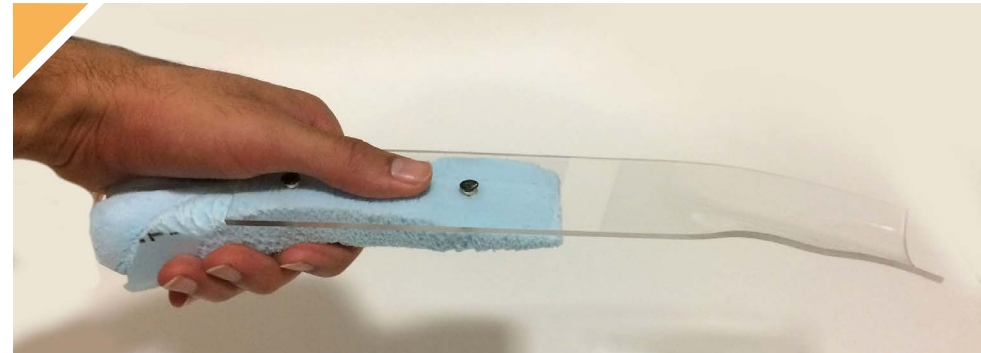


# Concept Development

Most successful  
prototype for hand  
comfort.



Multiple materials for  
comfort of hand and  
reduced friction on  
front-end.



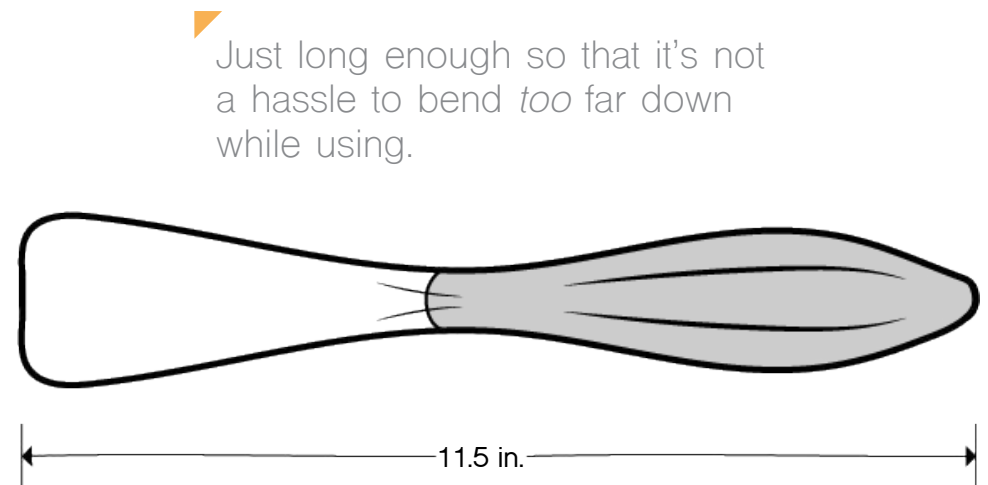
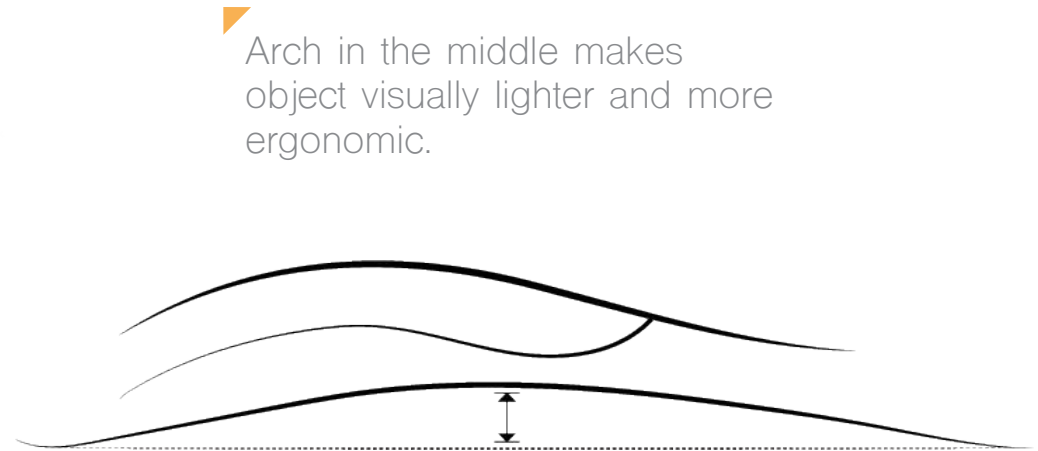
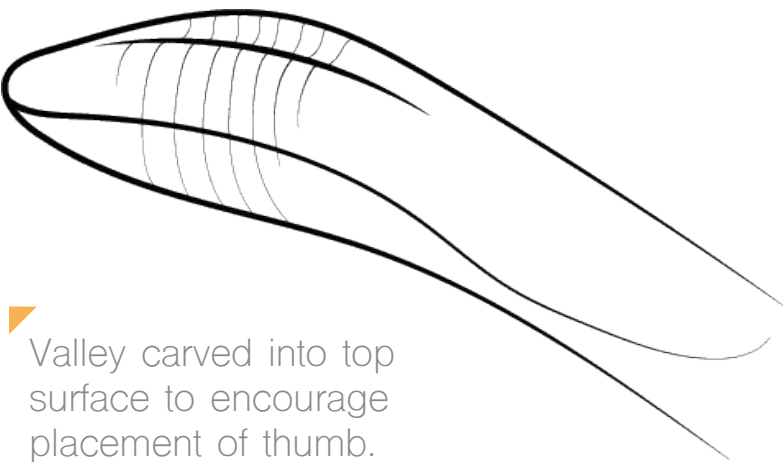
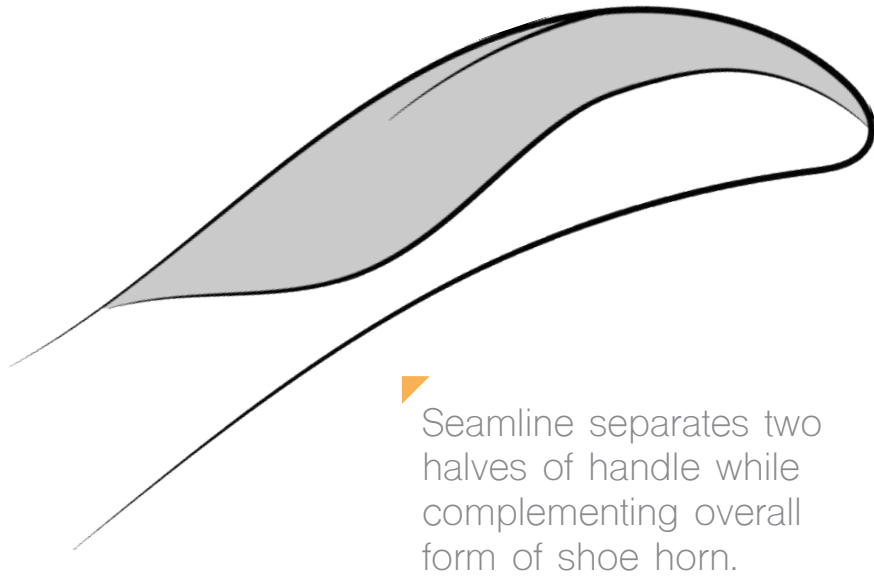
The gradual taper  
makes for varying  
thicknesses to grip.



Simple and elegant  
cylindrical handle.



# Refinement









# Brief

## Tire Pressure Gauge Redesign

The tire pressure gauge is a device used all over, from ordinary home use to everyday auto shop use. How can this product be redesigned for easier application in any setting so it can be conveniently utilized to take accurate pressure readings?



# Research

Todd spoke most animatedly about easy of use, accuracy, and durability in the work environment. When evaluating the three types of tools used, we began to like the simplicity and intuitive nature of the pen gauge.



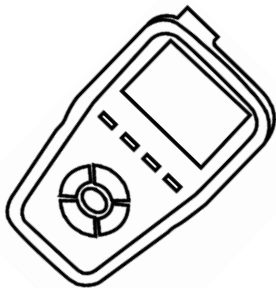
## Pen Gauge

Quick checking...first thing used when a car comes in...pocket friendly...easy to use...ballpark accuracy...



## Inflator Gauge

Checks pressure and inflates tire...bulky...used in winter (temp. effects pressures)...accurate readings...



## Pressure Monitor

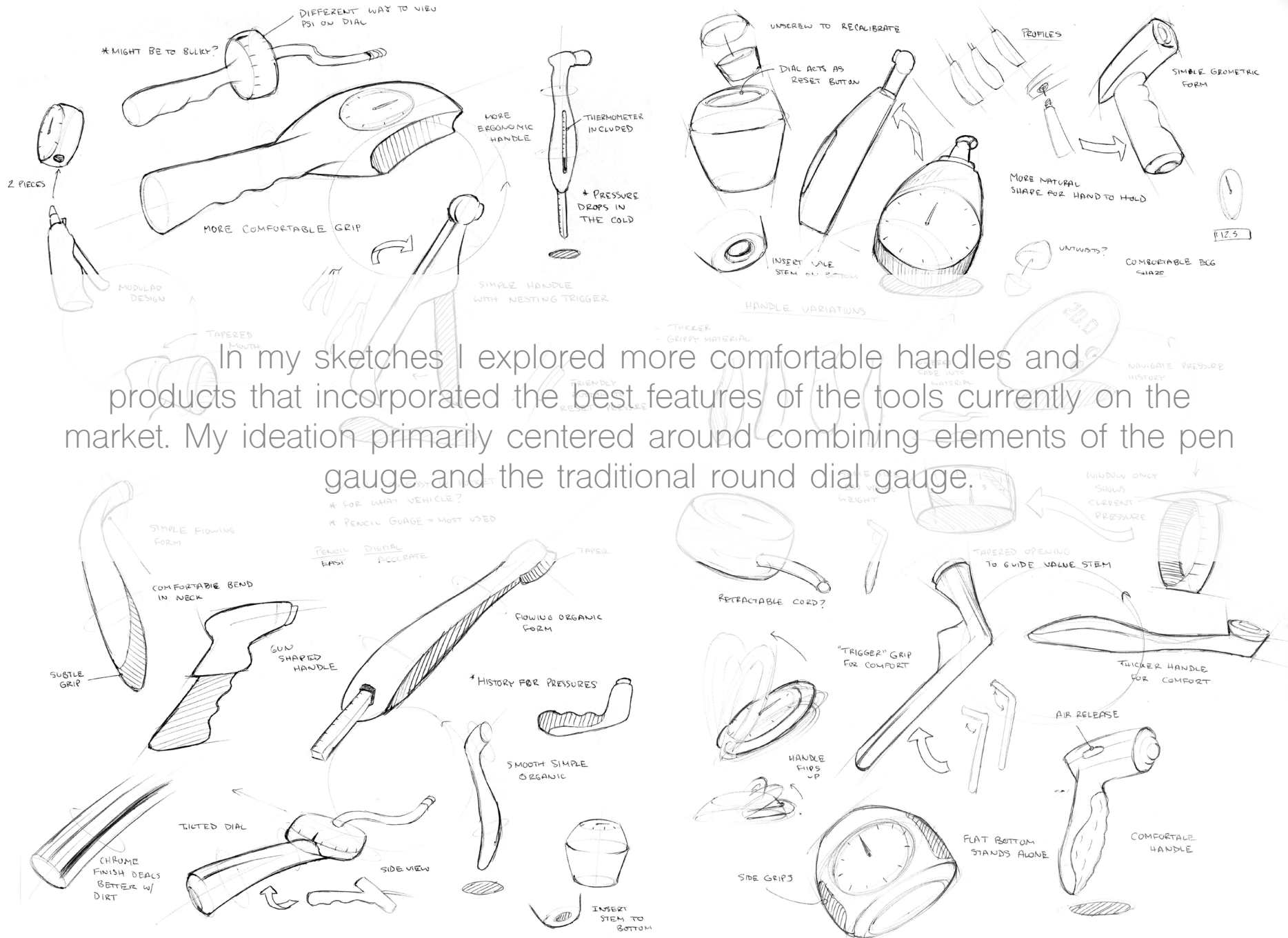
Wireless pressure readings from car system...can log history...can be used with almost any car...bulky...not quick...



Todd

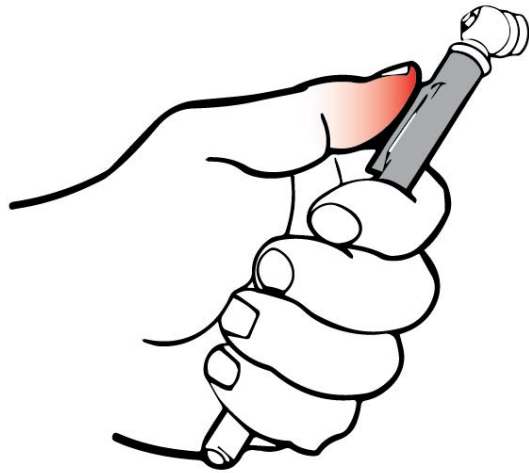
Owner of Shamrock  
Auto Service

# Ideation





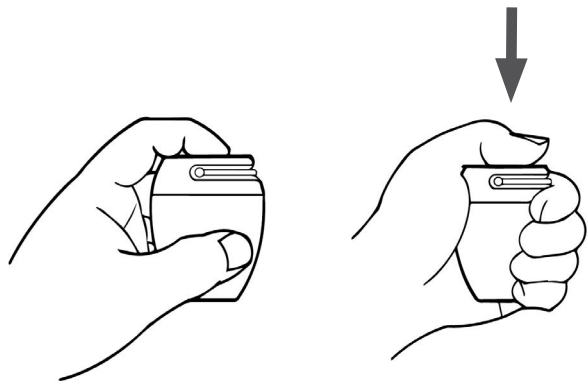
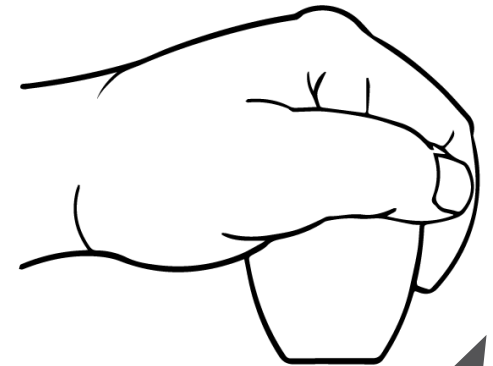
# Concept Development



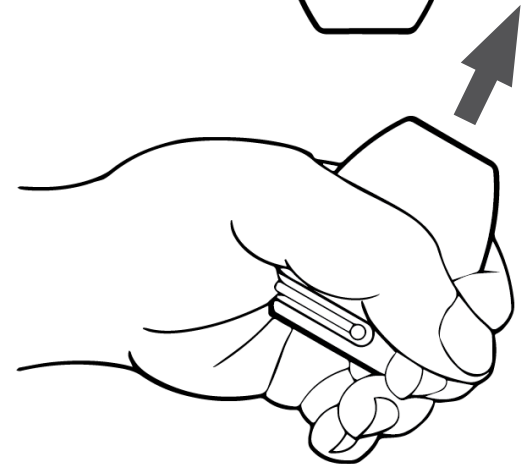
We began to narrow down our ideation and shape a concept that was easy to hold and to operate. Also, redesigning a reset button which wasn't painful to press was a priority.

◀ Skinny/cylindrical form of the pen gauge was what made it so uncomfortable to handle.

◀ Egg-shaped form allows for easy gripping and control.

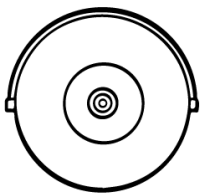
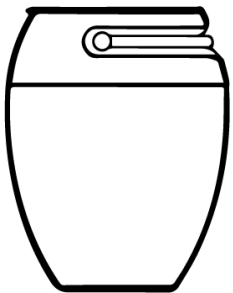
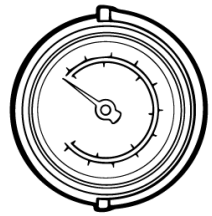


◀ Here, the reset button *is* the dial on the top of the gauge.

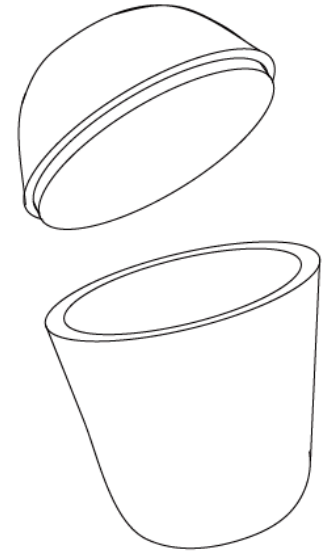


# Refinement

- Simple, compact egg-shape with minimal visual weight. Mechanisms and entry points are kept out of sight.



- Two halves easily unscrew for simple replacement of parts.



- Convenience of handle replaces the need to fit inside pocket.

- Bottom tapers into coupling to guide in valve stem. Dial face serves as pressure reset button.







