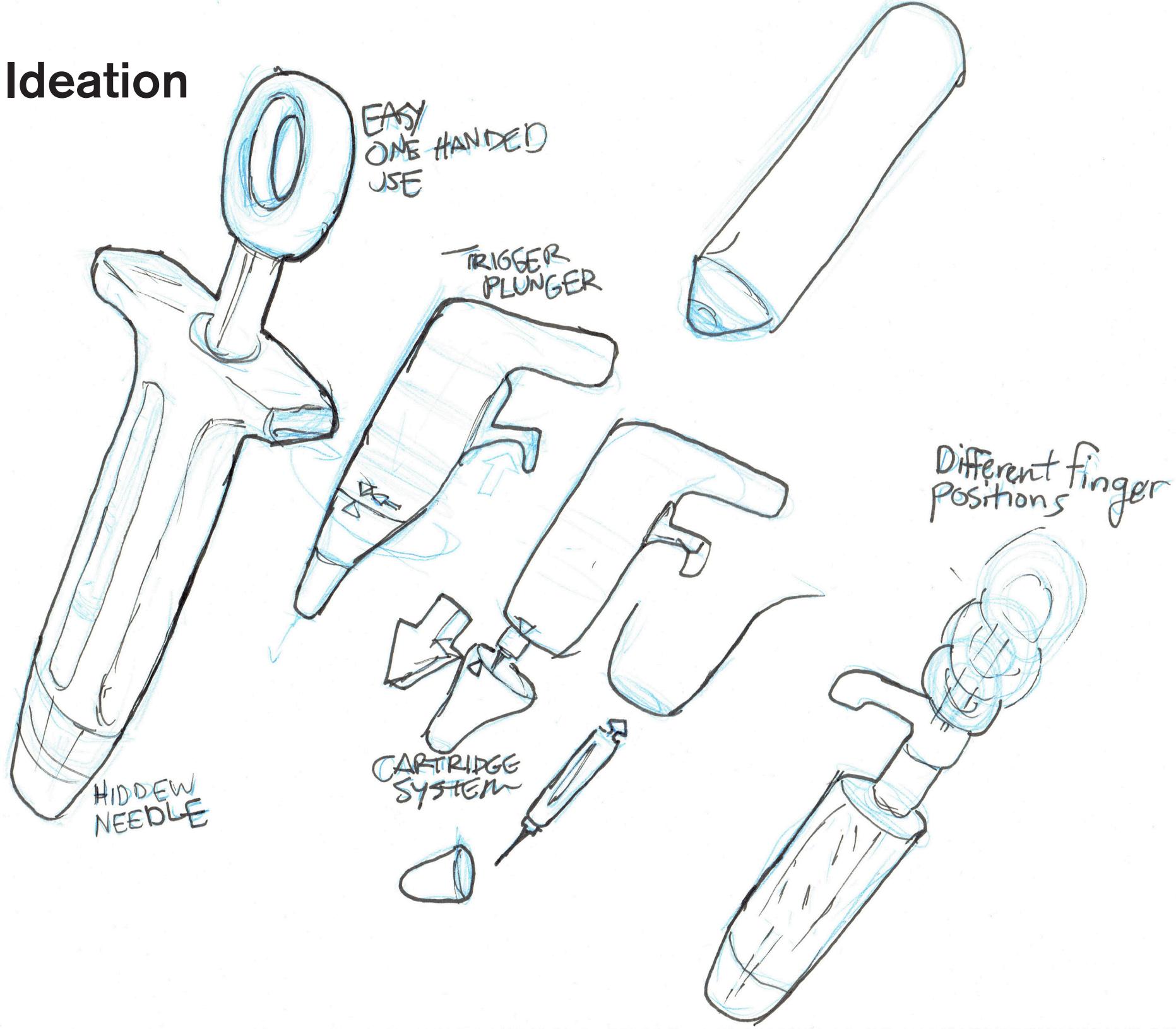


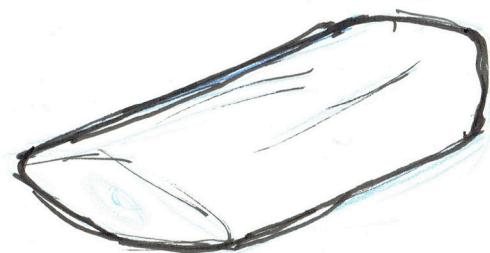
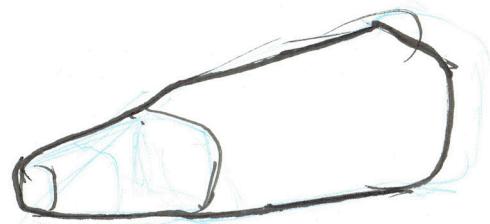
Assignment 5

PD 370
Selek, Hale
Group 14
Tracie Jackson, Taro Unterburger, Jared Galloway

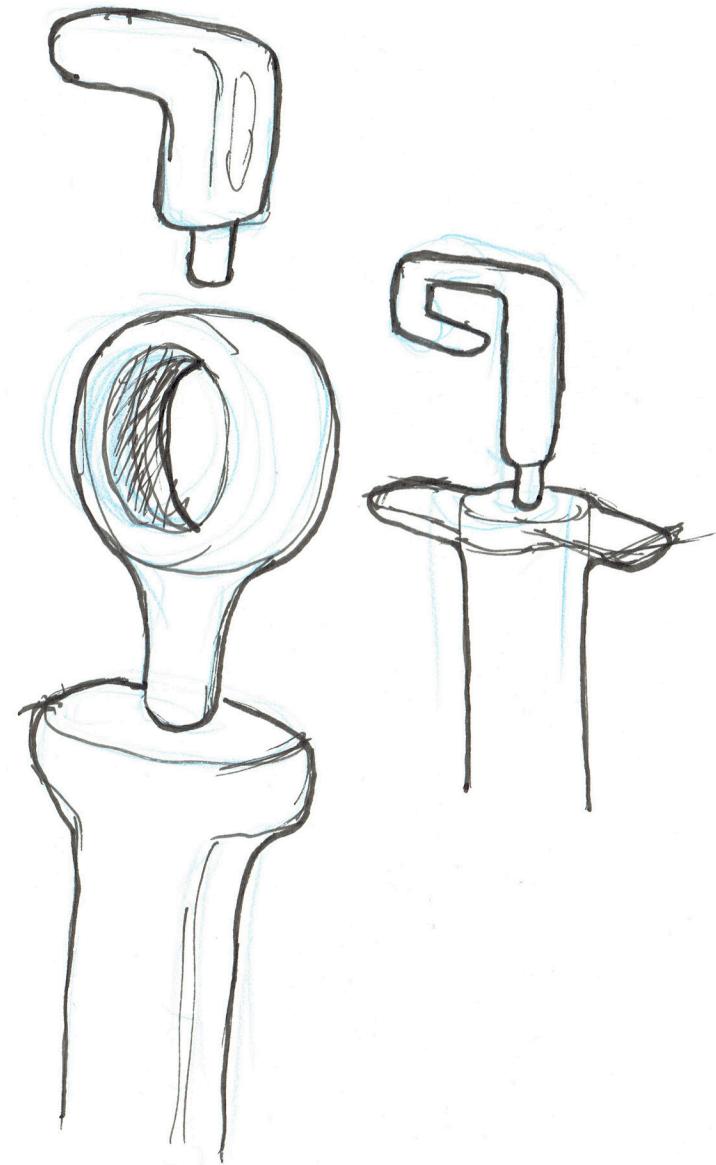
Ideation

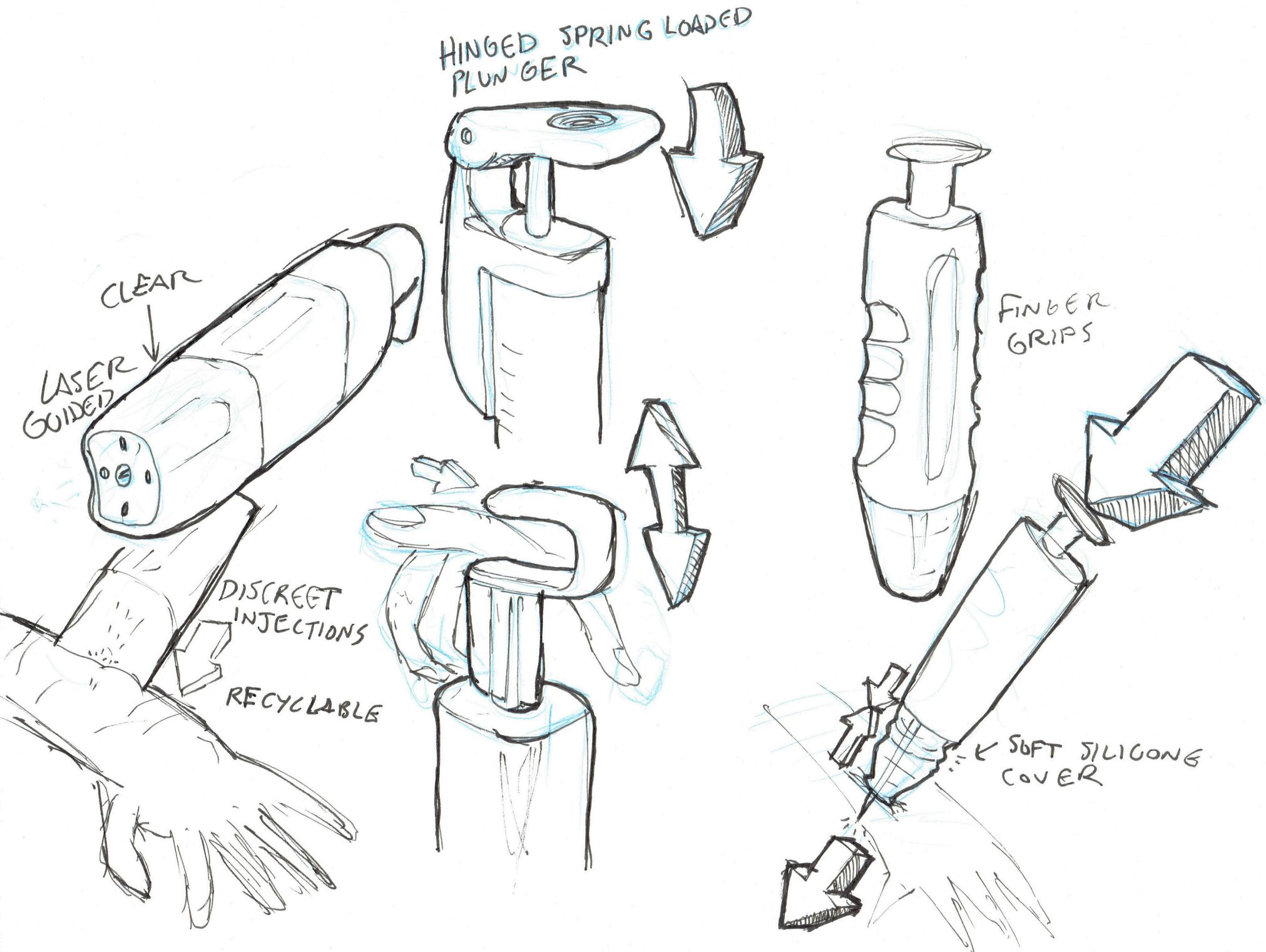


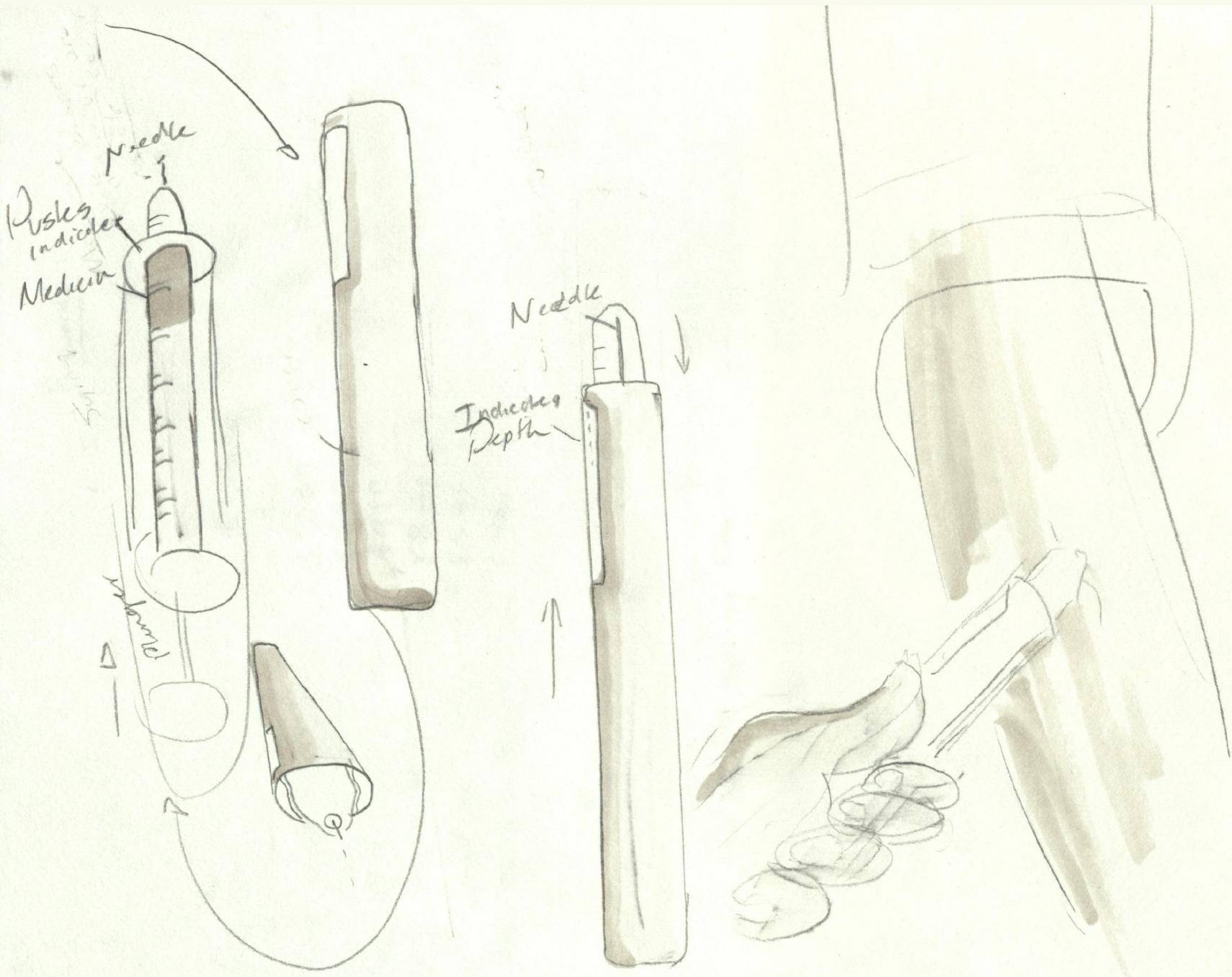
NEEDLE ENTRY

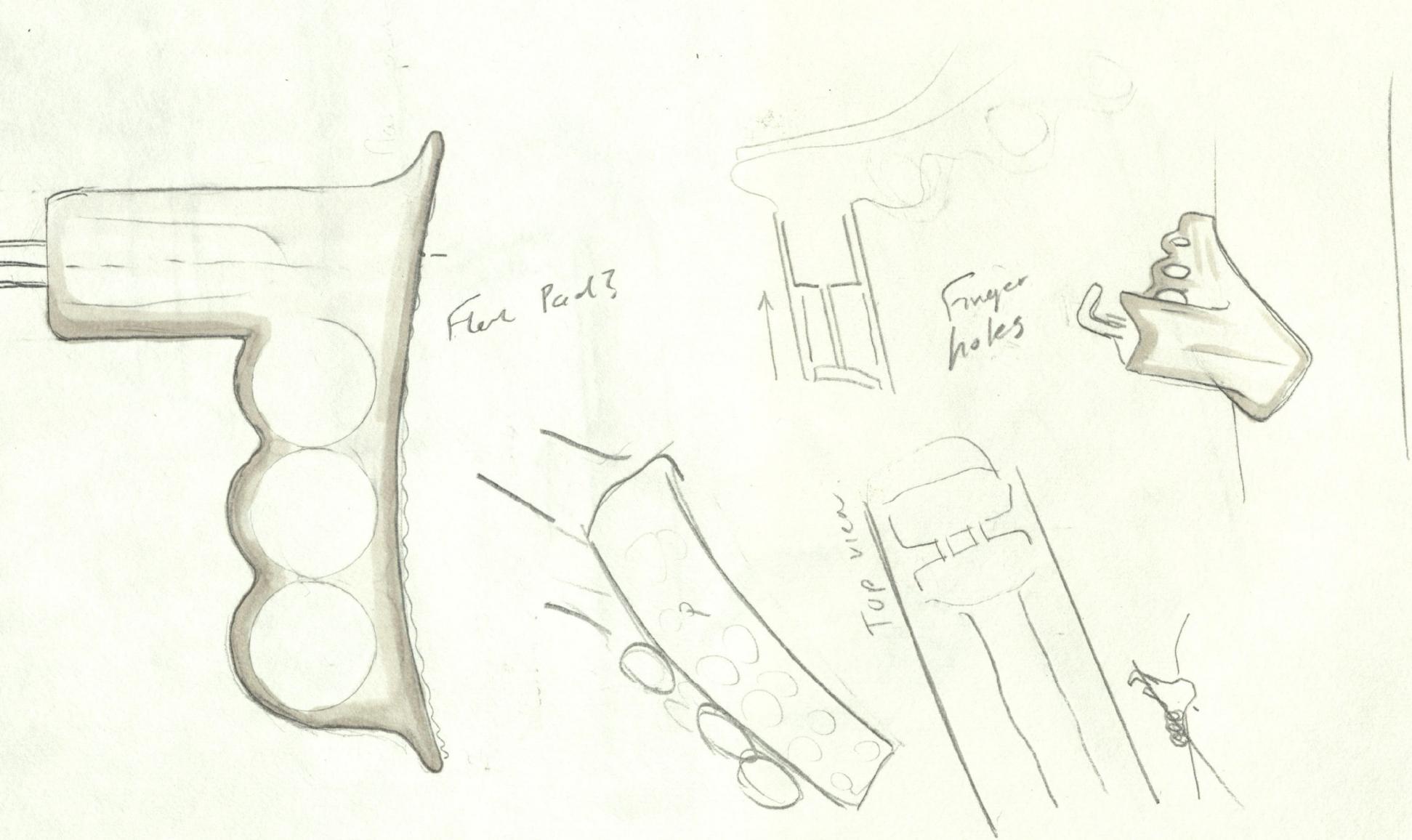


PLUNGER IDEAS

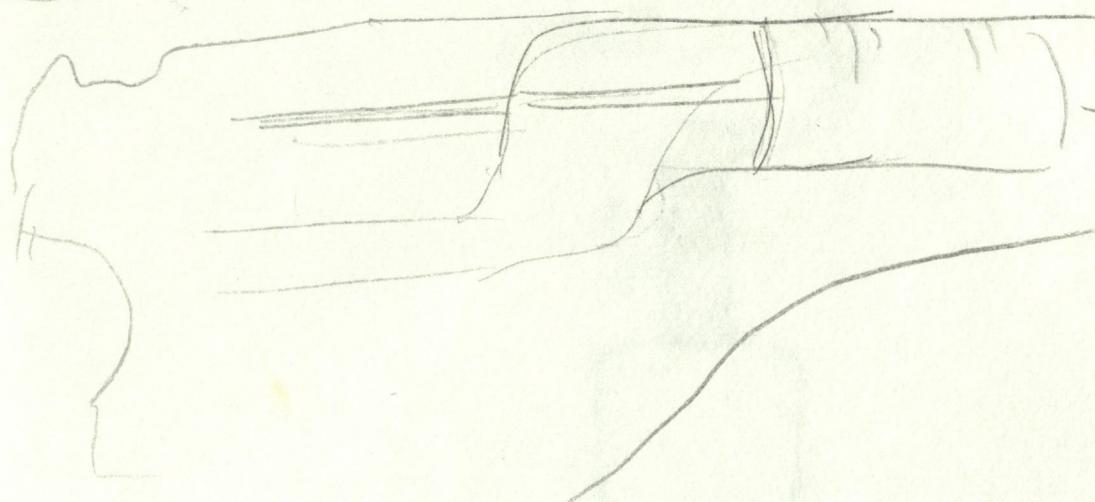
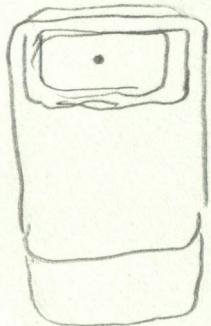
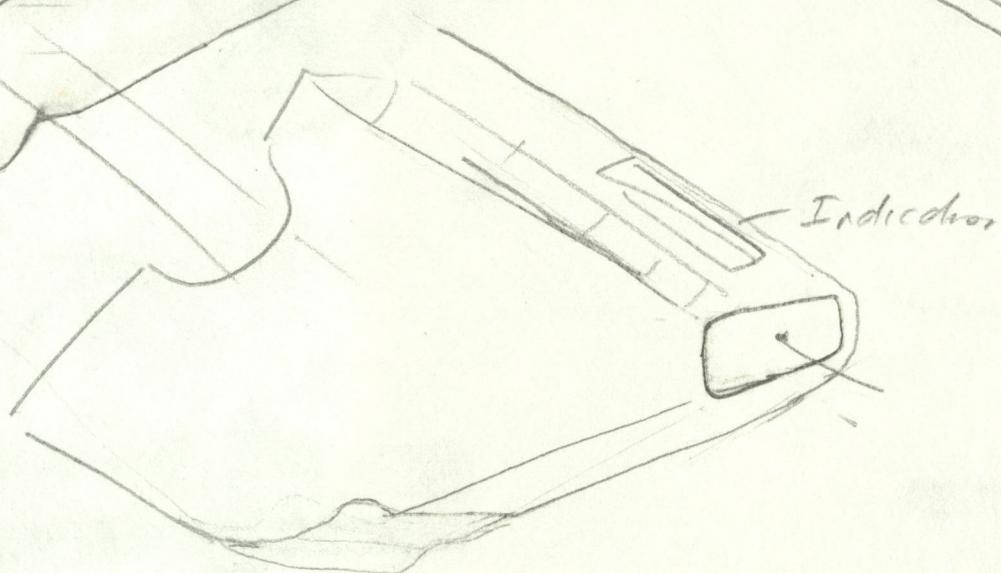
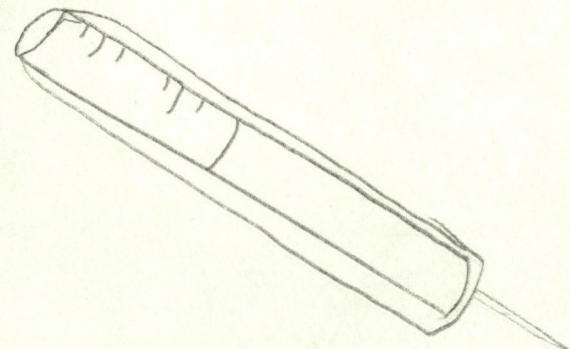
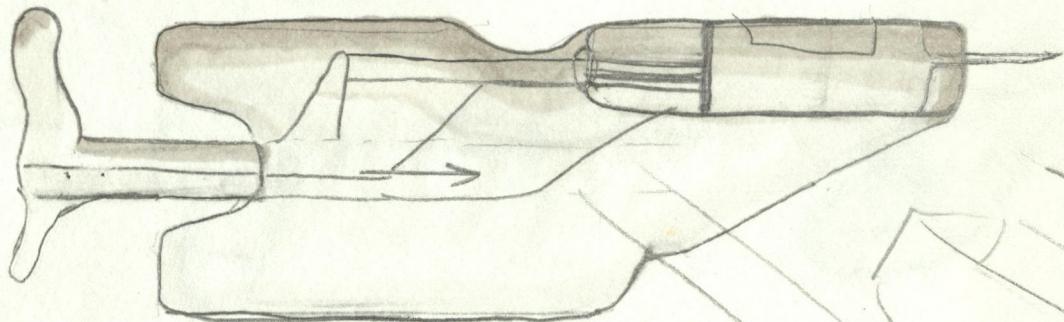








Two brandt plungers, top to inject needle
- lower to push medicine



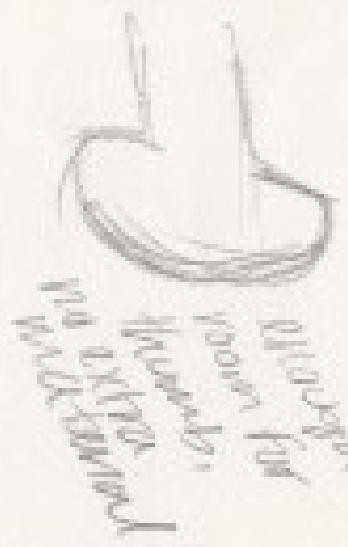
Caps for
Cutter



Caps for
Cutter
West



Outer shell
for pens



Wooden
lid
from
Humb.
Humb
not
ext
wood

Maple case and lid





Handle
Mass
shape



Weight
shape



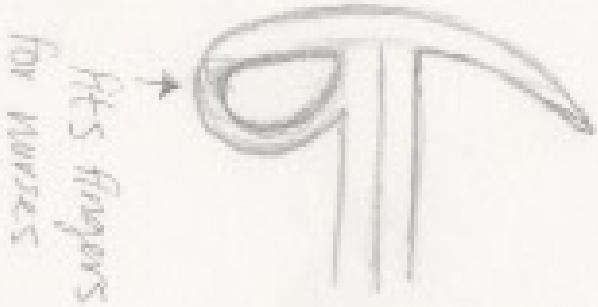
Weight
shape
Fit
length



Weight
shape
Fit
length



Weight
shape
Fit
length



↑
fits fingers
for horses



↑
finger to
make handle feel more natural



↑
handle fits
hand naturally

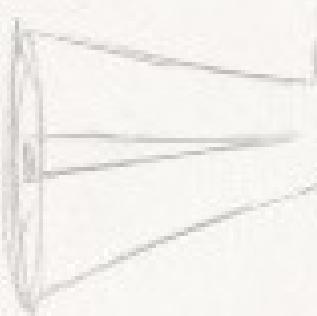


↑
grip to fit
the whole hand

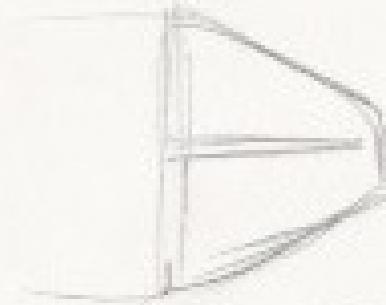
Different tip
different
for casting



Widens it at top
to make it easier
to cast



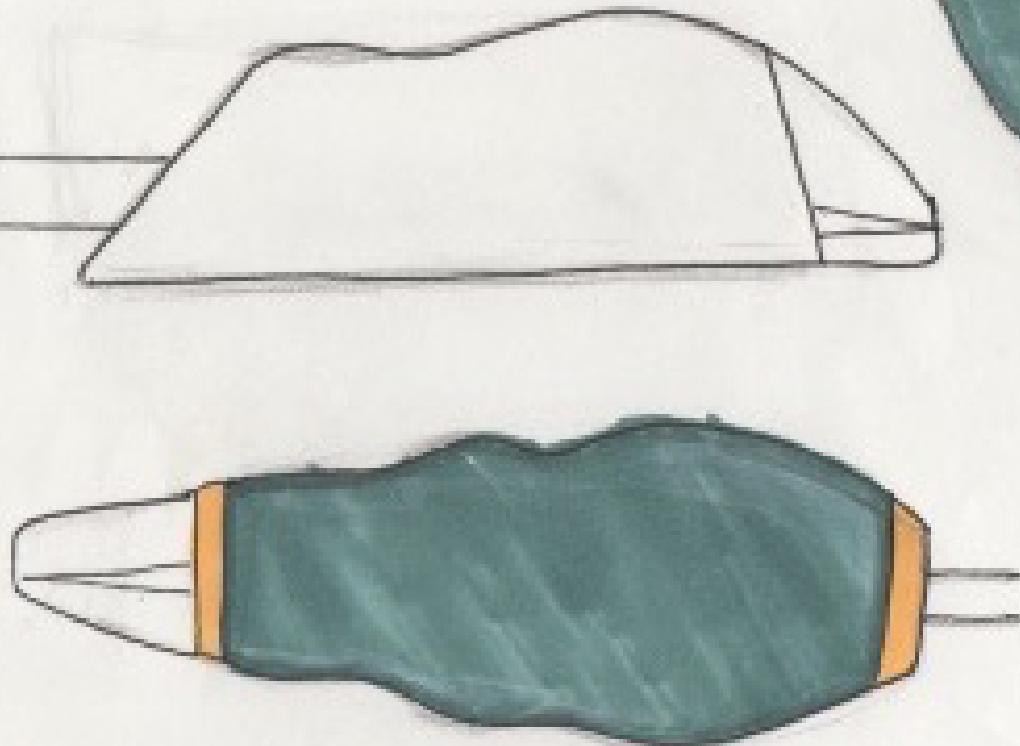
Using to wide
needle

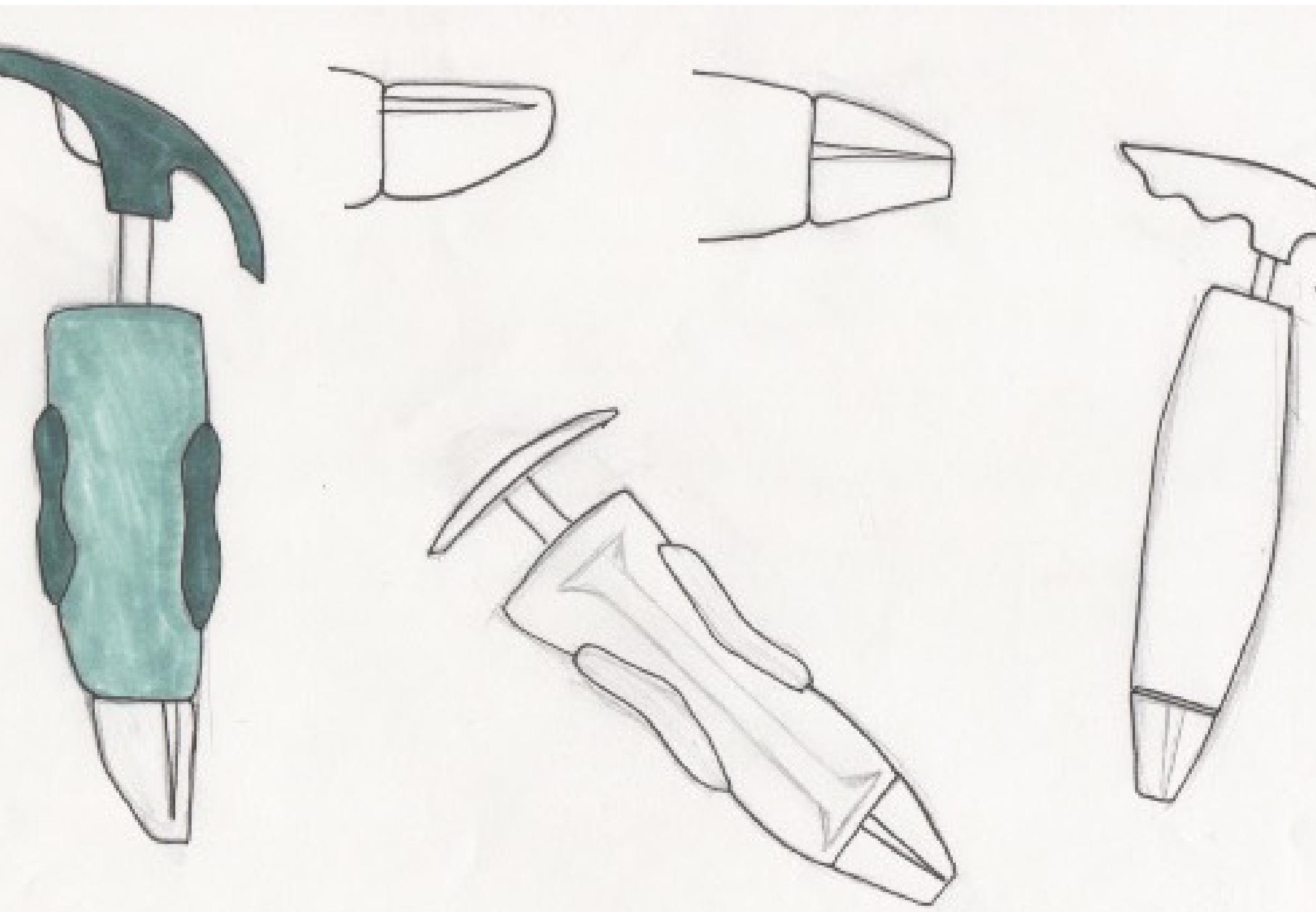


Use to wide
needle



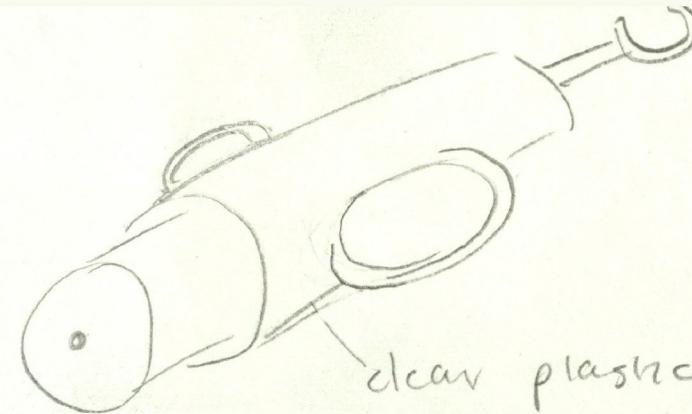
Sketches



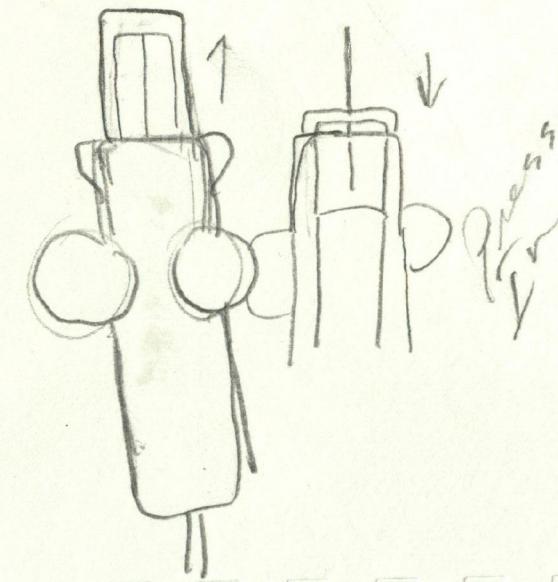
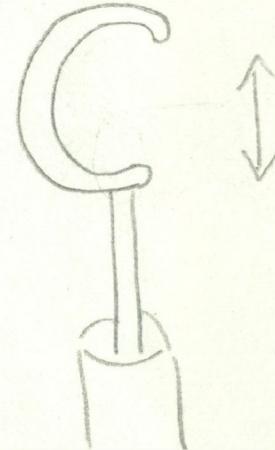
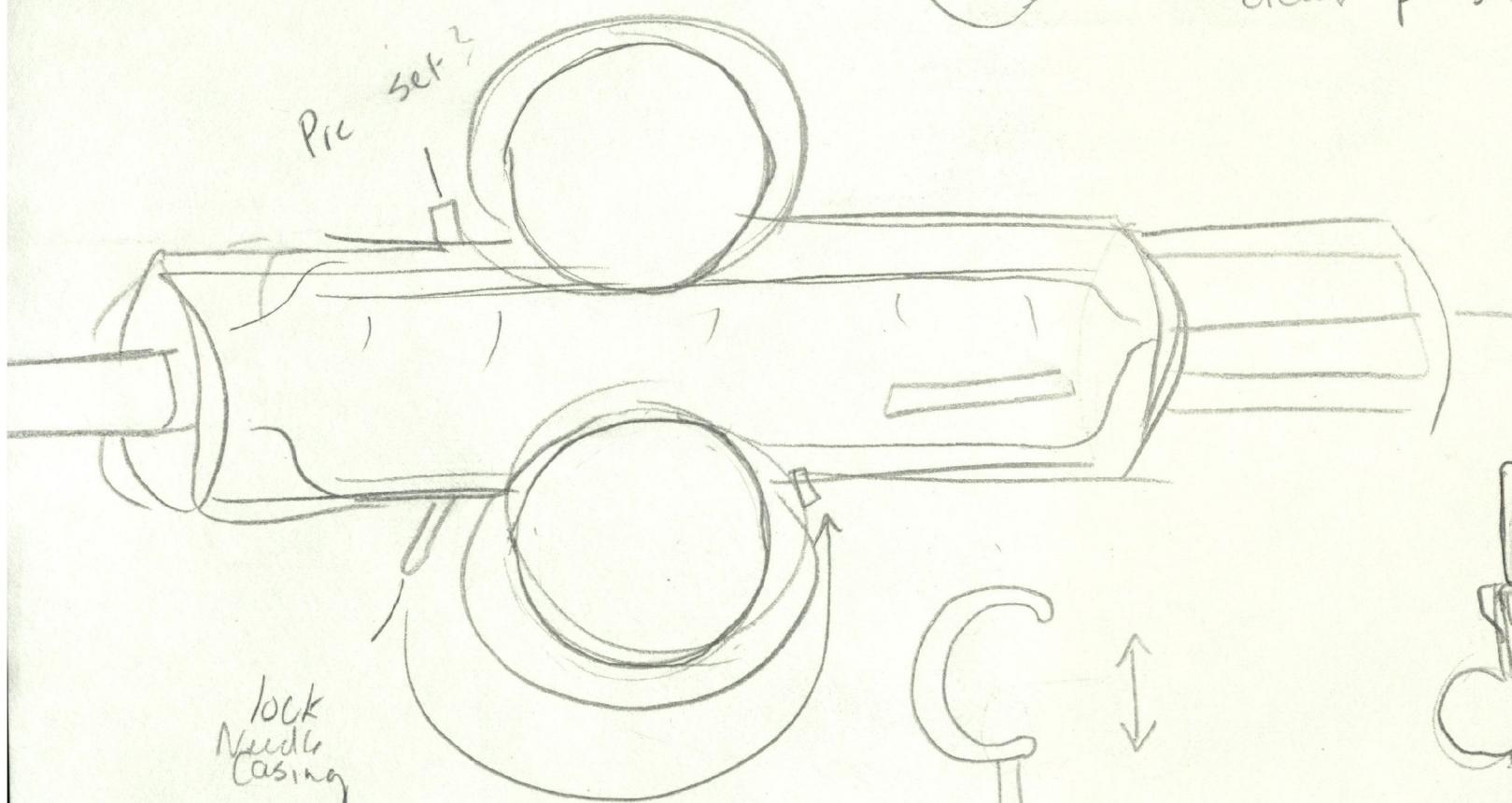


FINAL #1

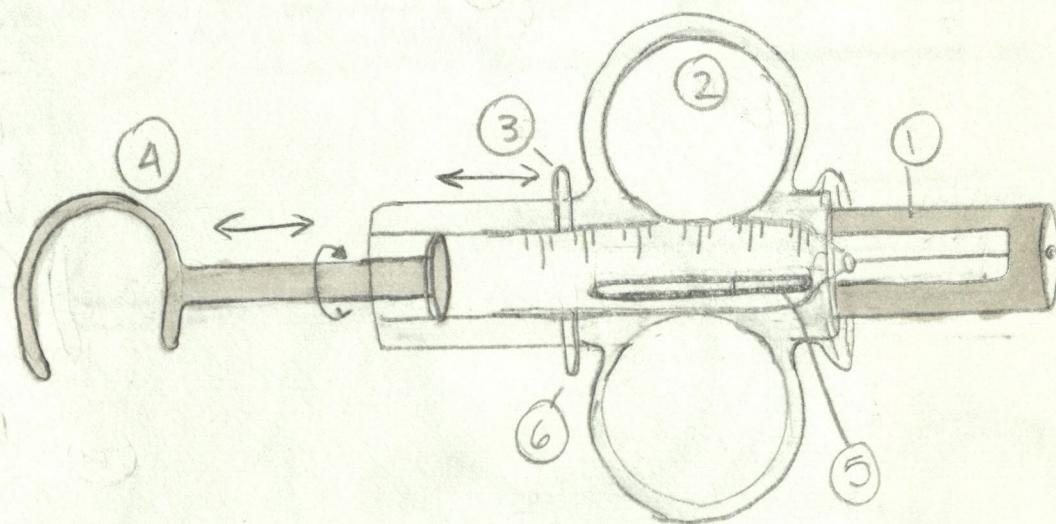
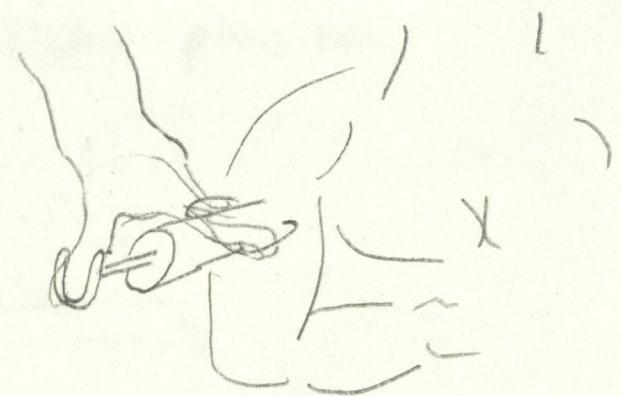
66

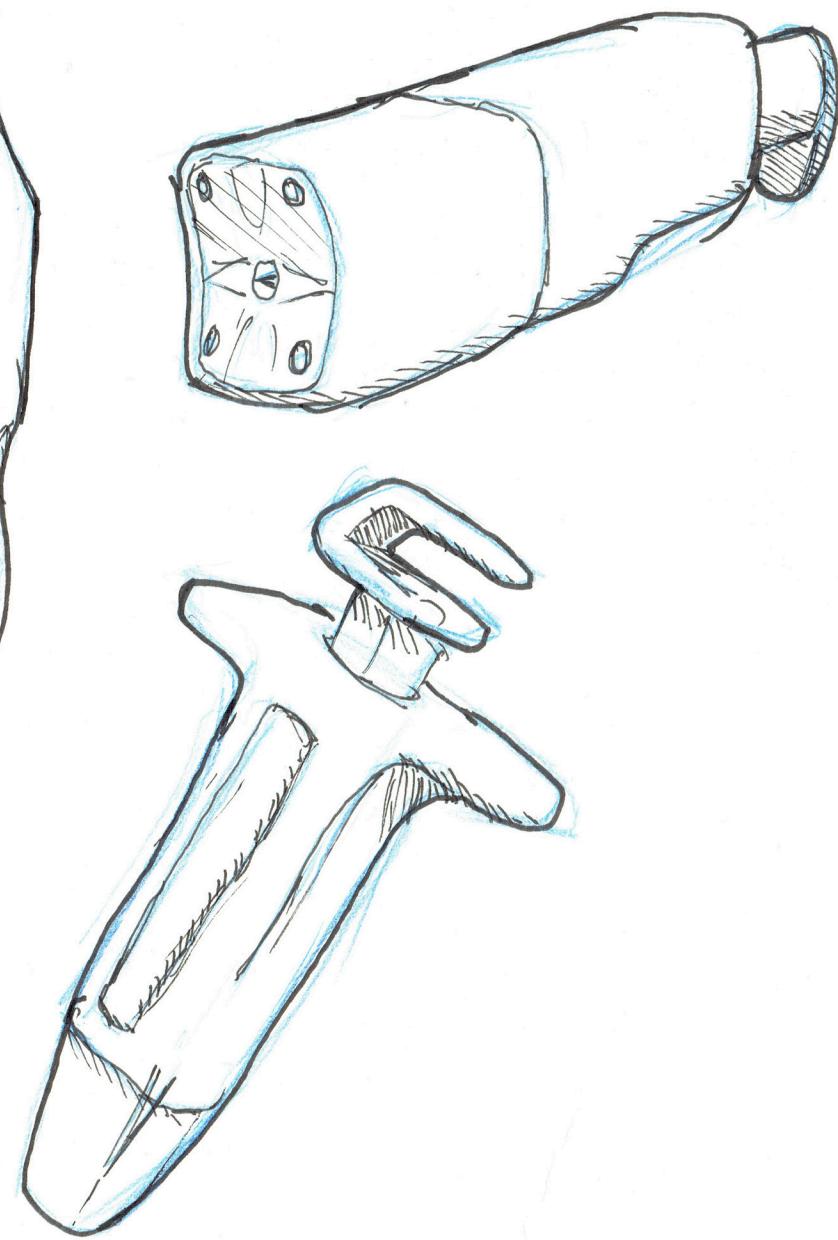
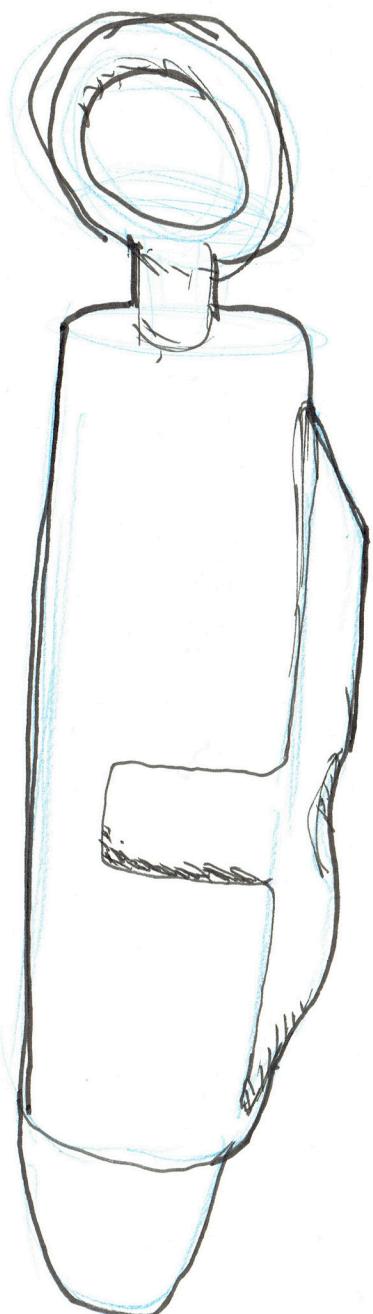
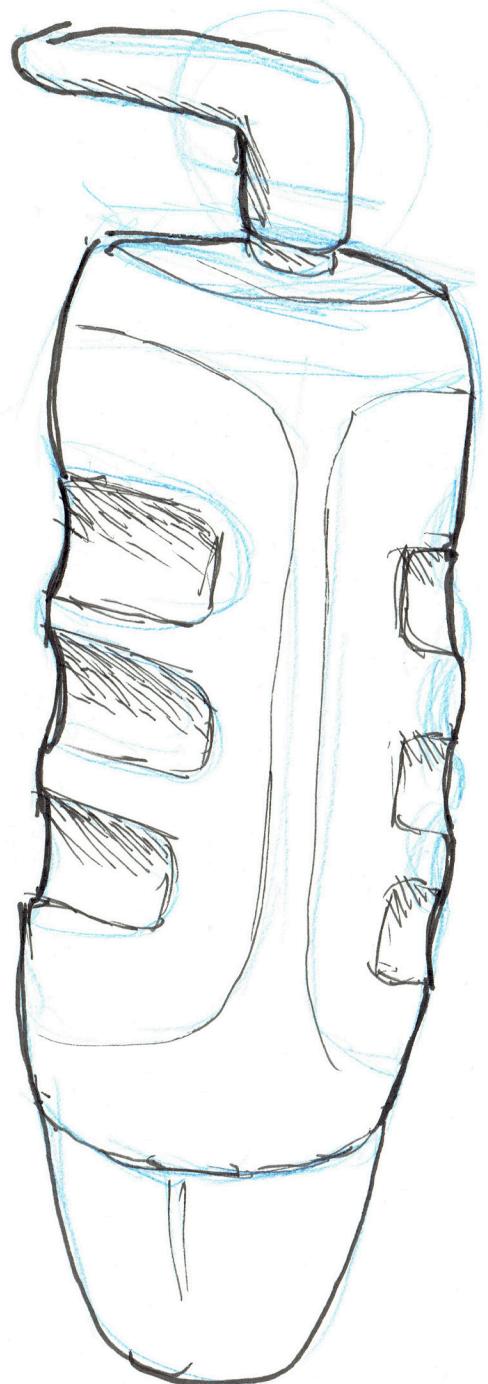


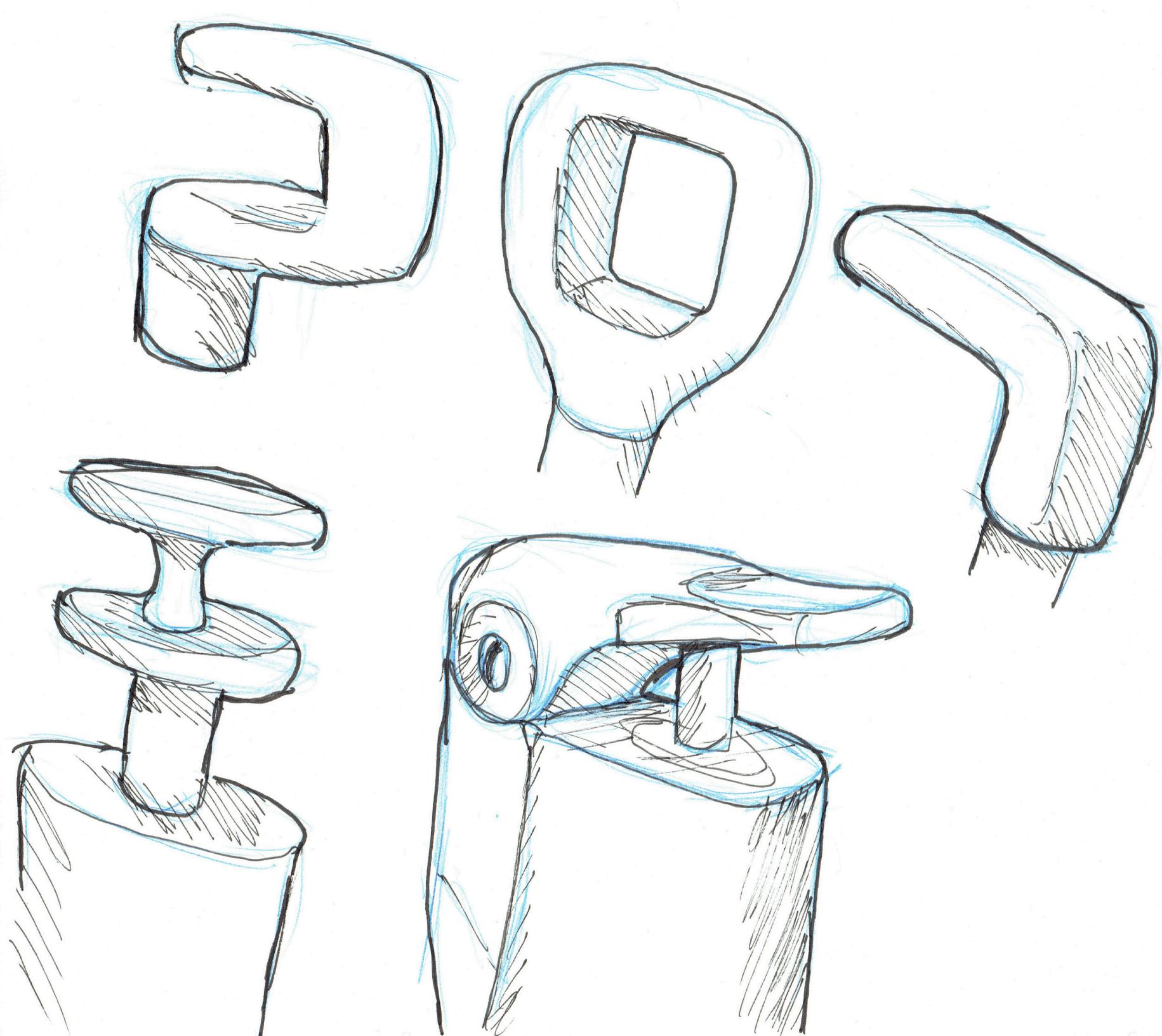
Pic set⁷



FINAL #2

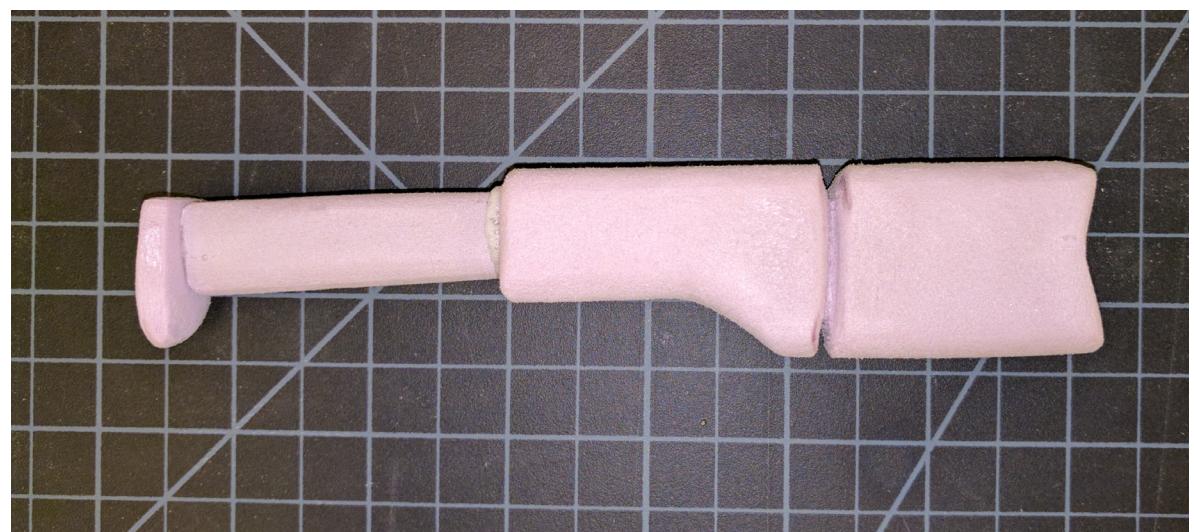
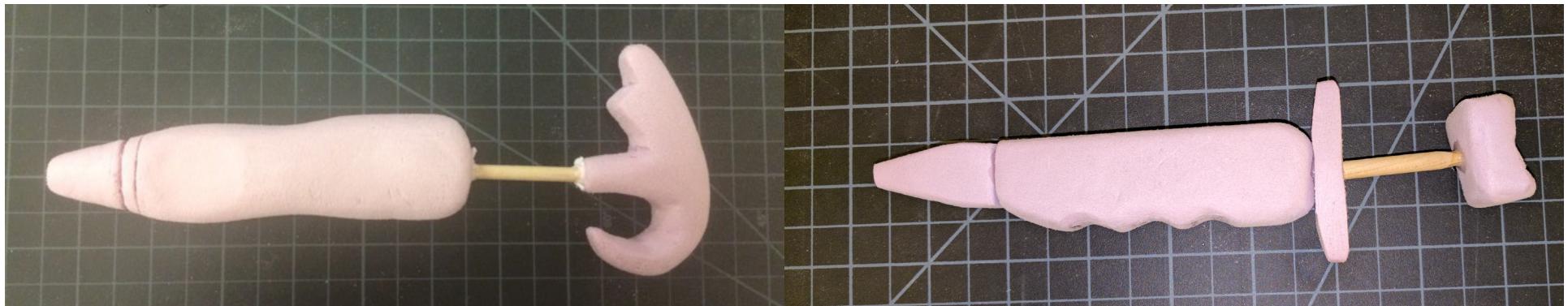






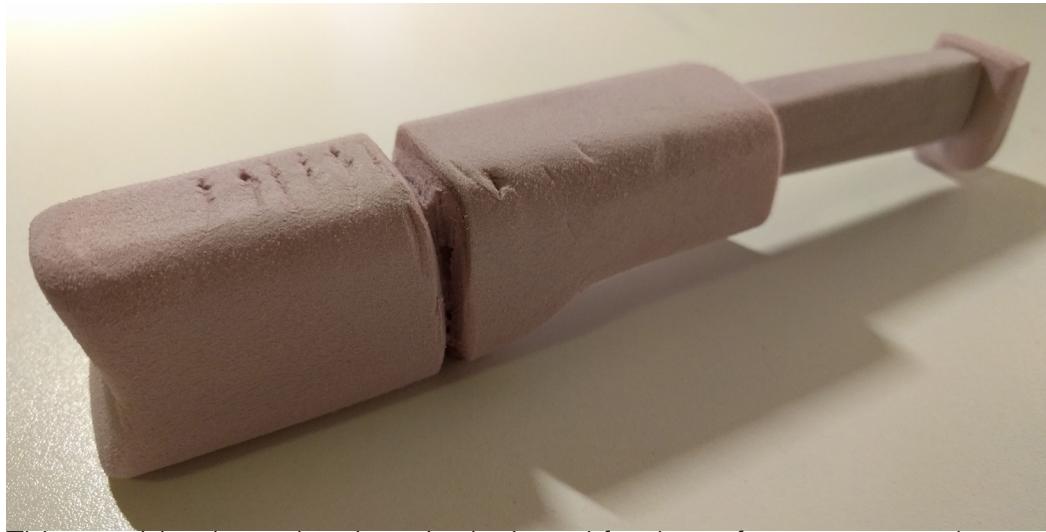
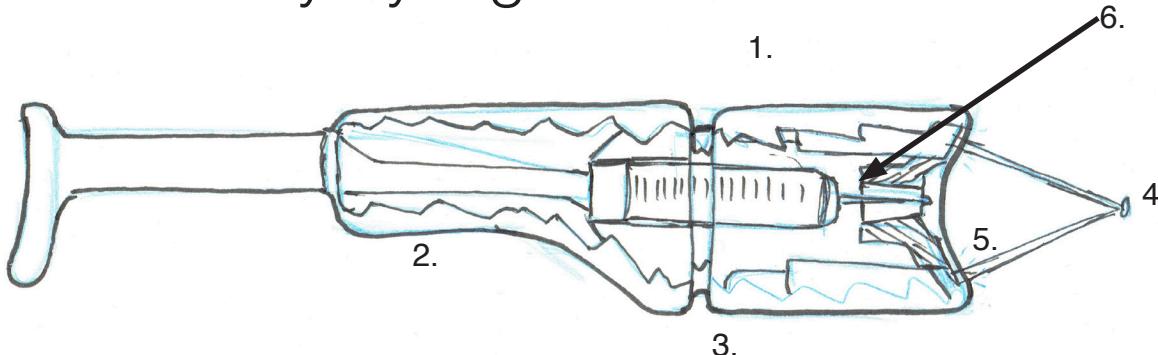
Models





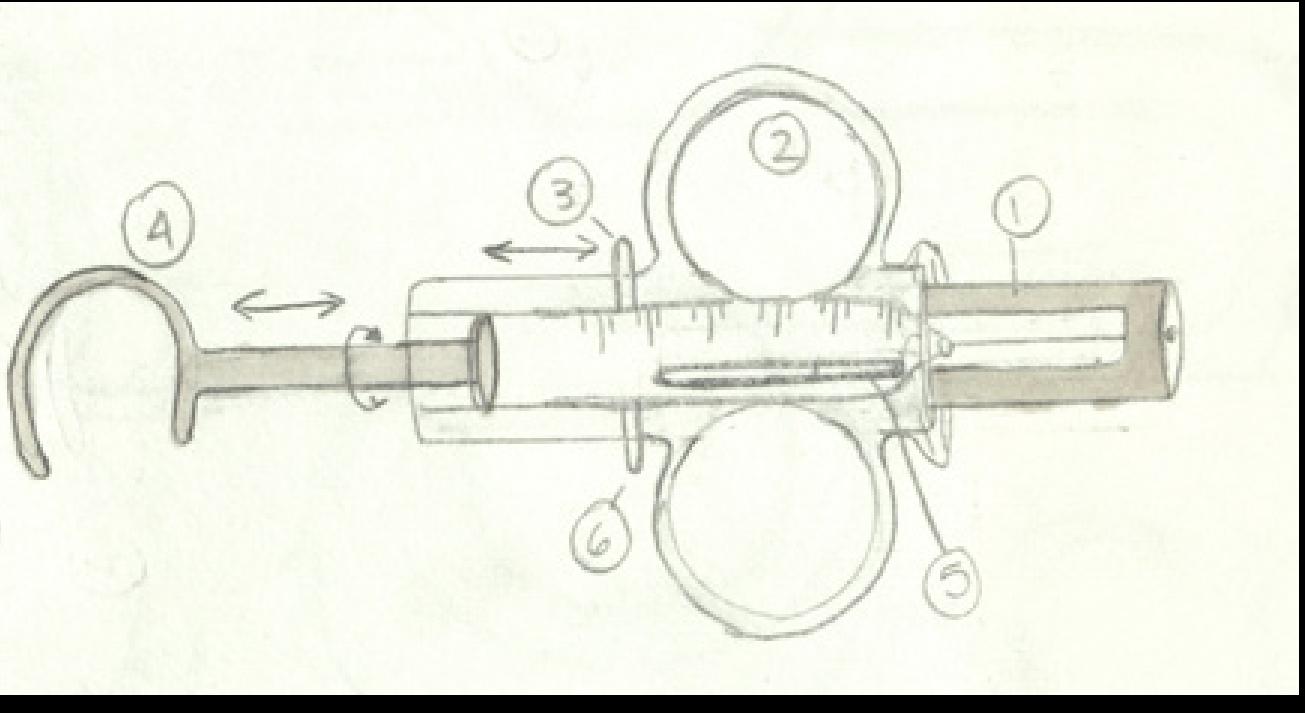
Final Concept

LASER Guided Safety Syringe



This cartridge based syringe is designed for the safest, most non-threatening operation of the injection procedure for the patient. Its quadruple microlaser targeting system ensures the precise location of injection. A retracted syringe is safe from foreign contaminants, while the curved silicone front rests on the skin perfectly. And thanks to the partition, the front half comes off for easy disposal, leaving the lasers and plunger lever intact.

1. Cartridge based system enables quick and easy operation, with no need to sterilize equipment before procedure.
2. Form is easy to grip, making injections less strenuous on caregiver.
3. Cartridges come in predetermined sizes, or a special fillable one may be used for non-standard vaccinations or different dosages of vaccinations.
4. Laser system is calibrated to accurately target injection site accurately every time.
5. Front is contoured to match rounded shapes of the human body, ensuring snug fit when contact is made.
6. Needle is free from being contaminated thanks to the cartridge's enclosed design.

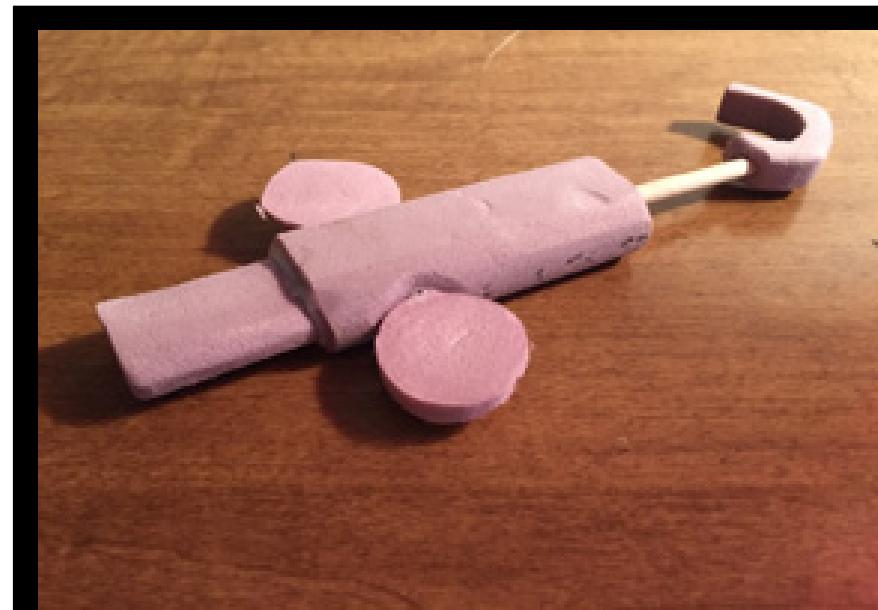


1. The Casing around the needle hides it from patients, While a lock keeps the needle from injecting anybody but the intended person.
2. The fingerholes give the medical professional a good grip on the syringe for safety and accuracy
3. A sliding switch lets the user pre-set a depth depending on how deep they would like the needle to penetrate before the casing locks and stops.
4. The Indented fingerhole on the plunger allows the user to use one hand when pulling up to check if they hit a vein, and push down to give medicine.
5. A small indication bar allows the user to see just how far they've penetrated to use judgement on depth.
6. A lock switch keeps the needle retracted to keep the user, patient, and any waste workers who might come in contact with the syringe after disposal safe from being pricked.

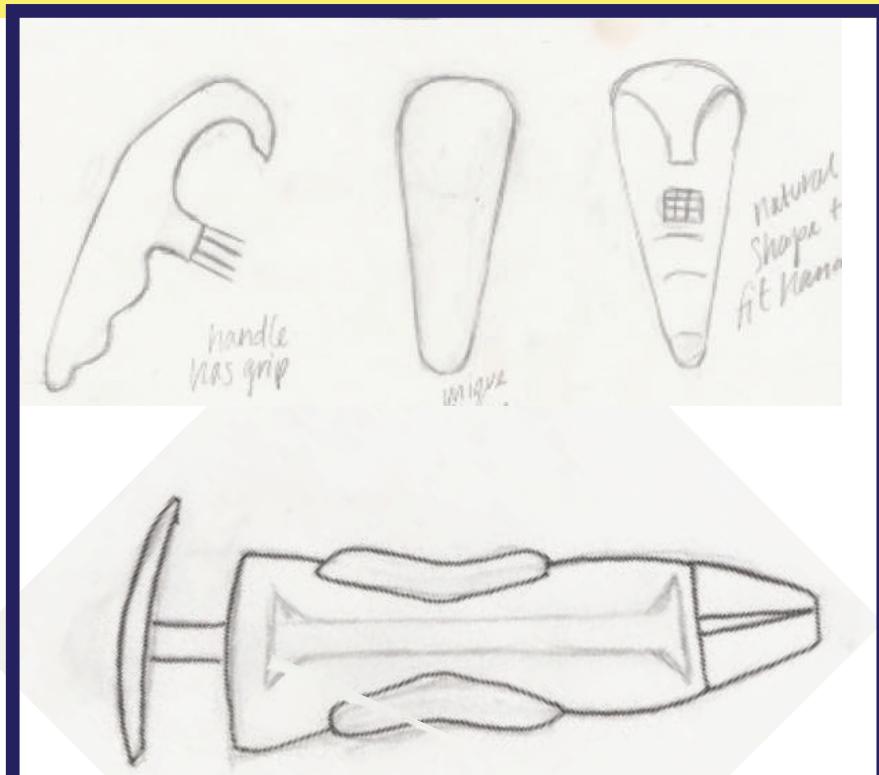
Final Concept:

Pressure Injector

The Pressure Injector is an ergonomic, safe, and simple design that allows medical professionals to use one hand. Having one hand free allows physicians to comfort distract and efficiently inject a patient in need. The casing hides the needle from patients who get nervous looking at it while allowing the person giving the injection to pre-set a depth that the needle will retract to.



Fit Me Syringe



The Fit Me Syringe is designed to fit any users hand comfortably. It has a grip handle to help nurses/doctors control the syringe better. On the other end of the syringe there is a casing that hides the needle to. This syringe has a friendly design to appear less intimidating to patients who don't like needles or have a fear of them. With the friendly design it will make getting shots less scary to patients and with the grip handle it will give doctors/nurses more control of the syringe.

