

# STEAMPUNK

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## THE VICTORIAN ERA

The Victorian Era lasted during Queen Victoria's reign in 1837 to 1901. This was a time for peace and prosperity for Great Britain. Particularly, it was an era of great progress in technology. Steam ships and railways were invented that vastly improved the communications and industry of the country.



## STEAMPUNK ON MATERIALS

Steampunk is a sub genre that often appears in science fiction or fantasy. It is a theme that is inspired by industrialized western civilization during the 19th century and the Victorian era. Actual steampunk style has no guidelines. It is a combination of modern style that is influenced by the Victorian era. When it comes to the choice of material, steampunk uses a lot of copper, brass, leather and wood. Those materials are very common and cheap in the Victorian era. Steampunk also uses fancy cogs, springs, sprockets, wheels, and hydraulics.

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## STEAMPUNK ACCESSORIES

The steampunk theme utilizes the aesthetics and materials found in the objects from the Victorian era. In modern day, we see artists and hobbyists working with this aesthetic for art pieces and props for costumes.

Steampunk uses wood texture, leather, copper, and brass to create the vintage look.

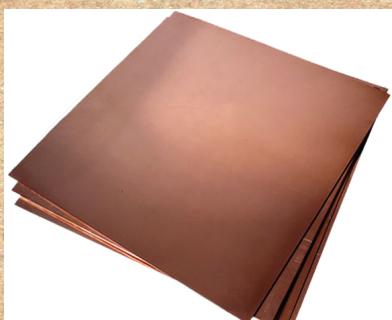


## MATERIALS

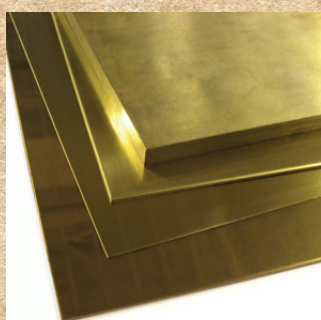
The main materials are sheets of copper, brass, leather and plastic. The main focus for the flashlight is for the aesthetics. These materials are used to make the main structure, because it is durable enough for the user to carry around. It can also show the user's personal taste. Leather is used mainly for easy grip and when the flashlight is at a standing position, the leather allows it to stand more stable on the floor without sliding. All these materials are to fit into the steampunk theme. Plastic is used for the covers of the light.



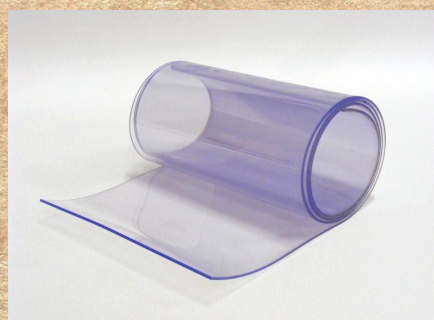
Leather



Copper



Brass



Plastic

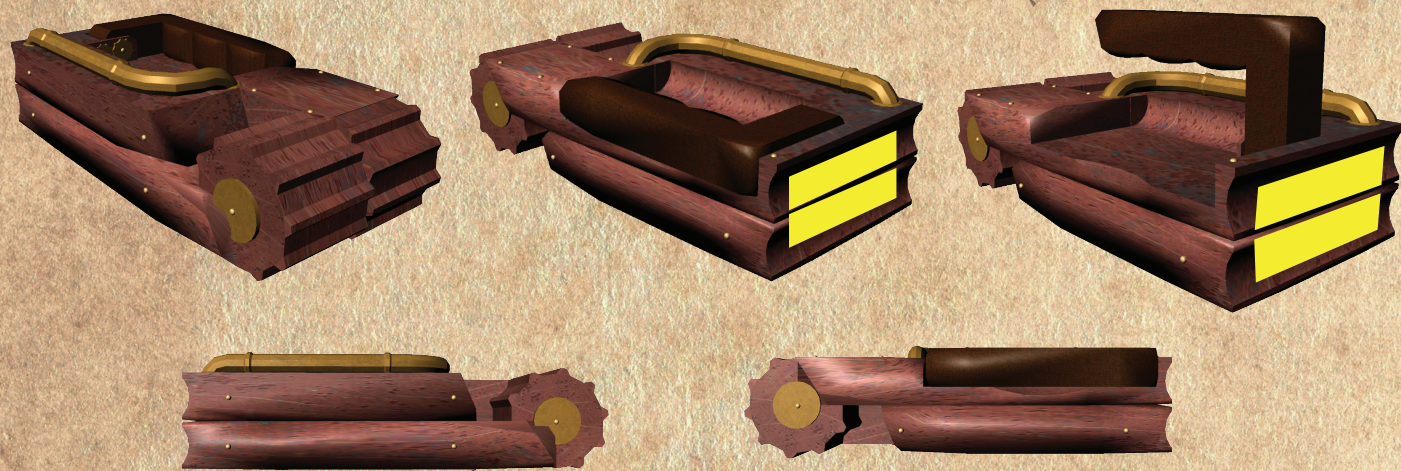
Jason Bergunder  
Lam Kwan  
David Li

# STEAM LANTERN

## THE PRACTICAL FORM

Some of the features that make the flashlight practical are the size, shape and it's aesthetic. The main joint on the end is to make the flashlight modular. It can be transformed into different forms: flashlight, lantern or flat.

**Flashlight** is like a spotlight. It lights up the direction that it is pointing towards. Users can either hold onto the handle or they can hold the flashlight on the side with the handle folded down.

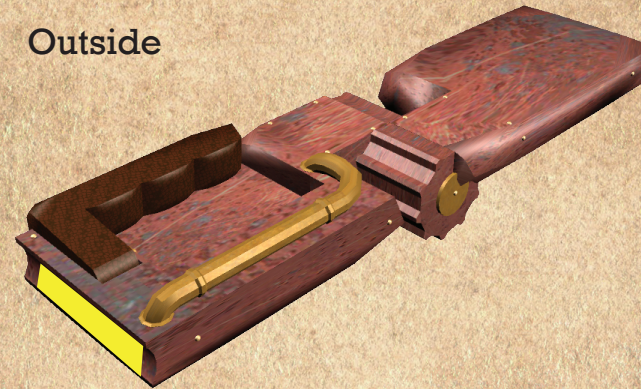


**Lantern** is where the light is standing tall into a triangle shaped. The light is shining outwards light up a bigger area around the light. With this, the users does not have to hold onto the flashlight, they can leave it on the floor while working. However, there is a wire handle that allows the user to carry the lantern around easily.



**Flattened** is very similar to the lantern form. However, the flatten form can be flat on the floor or sideways facing one direction. When it is on sideways, the handle can also be used as support. This allows users to see above or any direction the light is facing without holding onto the light.

Outside



Inside



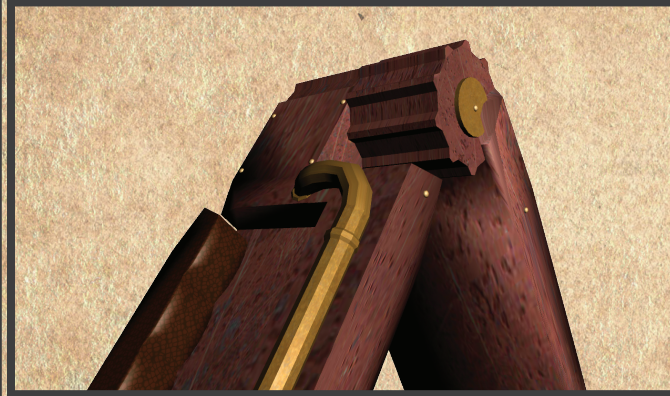
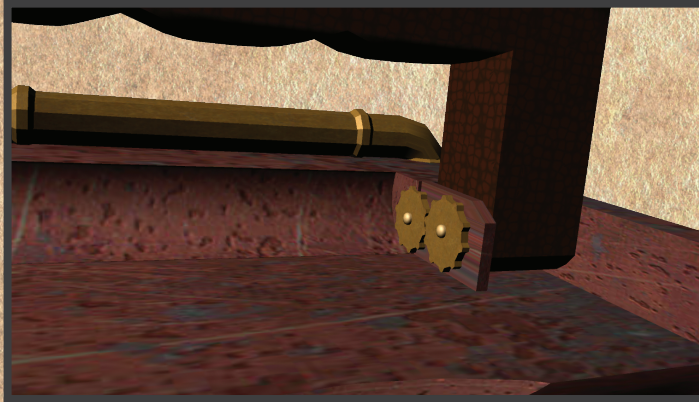
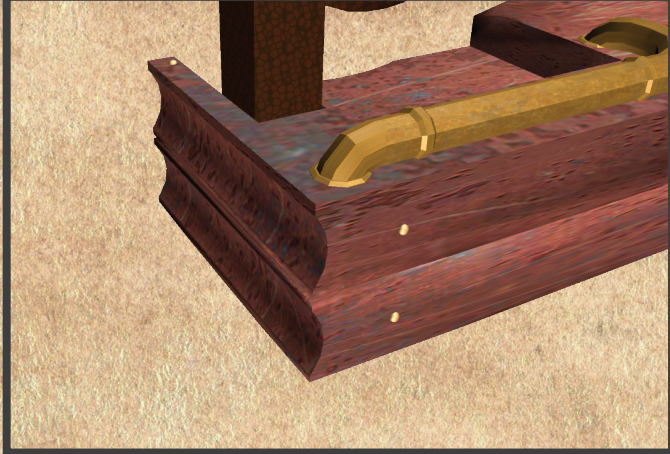
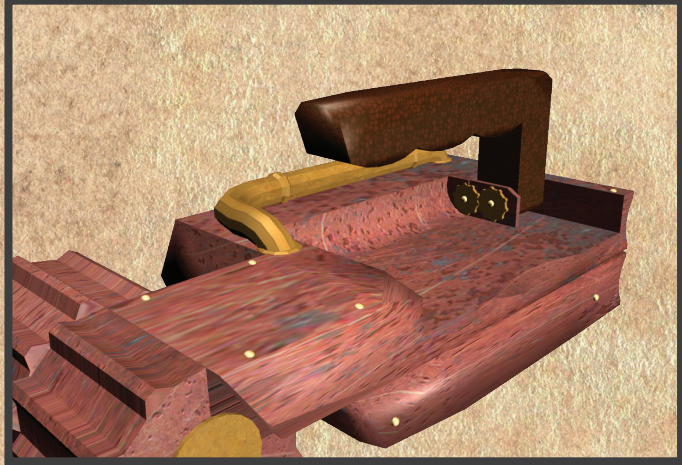
## THE AESTHETIC FORM

The aesthetic form of the flashlight is created mostly by different types of gears, washers, fittings and tubes. The natural colour of the materials also give it the steampunk feel. Most materials used are smooth and shiny with an antique or vintage look.



Jason Bergunder  
Lam Kwan  
David Li

# STEAM LANTERN



## JUSTIFICATIONS

An average glove size for young adults is 3.5” in width and 10” in length. Therefore, we made the handle 5.5” long and thicker for easy grip. The handle can be folded down to save space or used to support the light when it is on it’s flat form. Leather is also used as part of the handle and sides of the flashlight for easier grip. It provide sturdiness when the flashlight is in lantern/flattened form when its placed on surfaces. This also allows the user to change the forms of the flashlight easily. The front area, when it is folded, allows them to use it as a flashlight. When the flashlight is opened, the flat area lights up a larger area.



## AFFORDANCES

The use of leather on the handle and the sides of the flashlight gives the user a hint that they can hold onto the flashlight with a better grip. The roughness of the leather indicates that the flashlight can stand without slipping. The machine aesthetic of the flashlight will give the user the impression of function that will last. The vintage aesthetic that copper provides gives the impression that the flashlight has been used for a long time and will keep working for a long time. The rectangular shape of the flashlight affords laying down the flashlight and not worry that it will roll away. The slant of joint affords the flashlight to open over 180 degrees which also implies that it can stand.

## COLOR CHOICES

Most of steampunk materials are metal, such as copper and brass. The materials that look more permanent. Steampunk subculture is focused on the Victorian Era, when many things are made of copper. So our material choice will be mostly copper and leather, giving the product a vintage feel. Most of the colour would be brown and reddish yellow.

Jason Bergunder  
Lam Kwan  
David Li

# THE USER

## JOHN SMITH

A 21 year old student studying in Kwantlen for an Arts degree. He loves anime and often he cosplays various themes with his homemade costumes. John also frequently attends local and international entertainment conventions, such as Anime Expo and Pax, as a cosplayer. He loves to show off his costumes and accessories.



## CONTEXT OF USE

He wants to take his Steampunk costume to the next level by having a custom-made working steam punk flashlight. Therefore, he commissioned us to make the flashlight for him. Because he will spend so much time and money on the costume, he wants it to be useful even for his everyday life. Part of the constraints are that the flashlight has to survive fast pace and close quarter movement of the conventions.



## HOW IT WILL BE USED

John uses this steampunk flashlight mainly to go with his steampunk costume. He usually wears a pair of tight fitting gloves with that costume. An average glove size is 3.5" in width and 10" in length. When he is walking around in conventions, he can easily flip up the handle and turn it on by pressing the side of the joint. Holding on the handle of the flashlight while walking and direct the flashlight to shine forward.

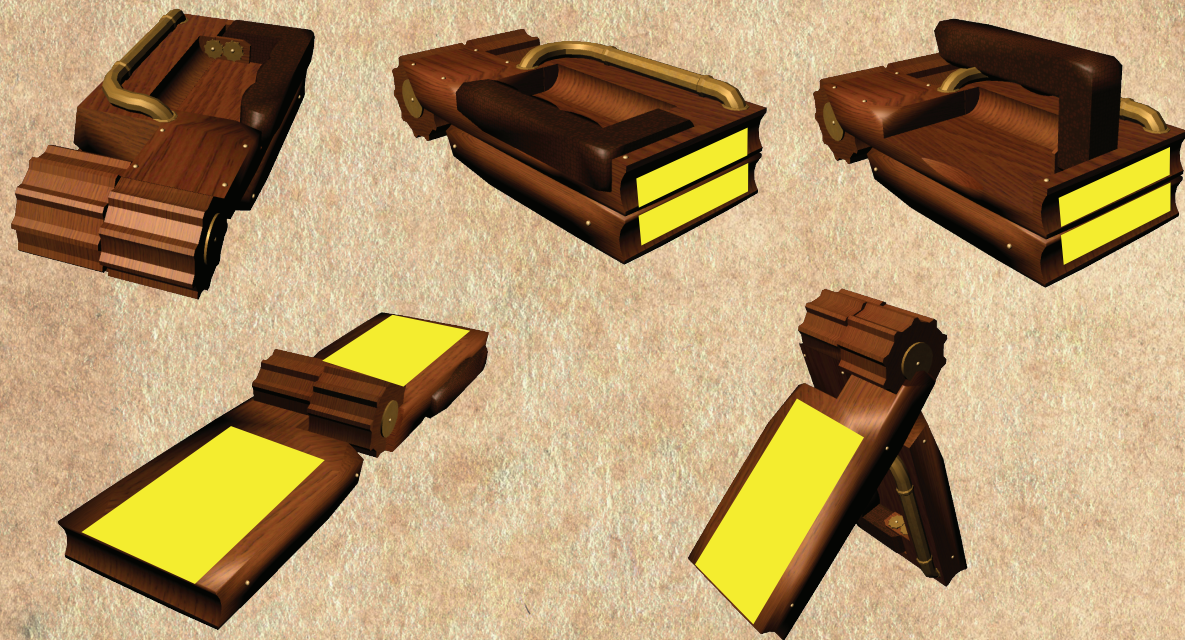
If he is posing for a photo with others, he can set up the flashlight by transforming it into a lantern and show off his working light to have a memorable picture. The light faces outward to provide ambient in a large area. During night time, he can also use his flashlight outdoor and still have a great lighting for pictures.

Jason Bergunder  
Lam Kwan  
David Li

# ALTERNATIVE

## WOOD

Our novel material will be wood, because it is easy to shape. It is also cheap to produce. We can paint over wood easily. However, some constraints of wood is that it will wear out over time and it would be very difficult to insert the wiring needed to make the light work. It also needs to be treated, sealed or stained.



## COPPER VS. WOOD

The differences between copper and wood is that copper does not decay like wood. Its natural color and the other metals it is found in is what helps inspire the steampunk theme. Copper sheets are also more flexible than wood. However, wood is cheaper than copper and it reacts better to the change of temperature. Copper gives a feeling where it is more mechanic and industrial, compared to wood which is more natural and organic.

# LEARNING

## WHAT IS INTERESTING ABOUT THE MATERIALS

Copper can be heated up easily. It is estimated that about 80% of the copper we have ever produced is still in use. It will continue to be recycled over and over again without any effect on its properties. Copper is a mineral and an element essential to our everyday lives. It is a major industrial metal because of its high ductility, malleability, thermal and electrical conductivity and resistance to corrosion. It's highly durable, long lasting and can be used in all applications of life.



# CHANGES

## CHANGES FROM PART ONE

- a) Our flashlight has changed from being focused from practicality onto aesthetics.
- b) The aesthetic of the flashlight is changed to fit into the steampunk theme.
- c) We changed the joint and extended it across the flashlight
- d) We added a wired handle that allows user to carry it when it is in lantern form.

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Lam Kwan  
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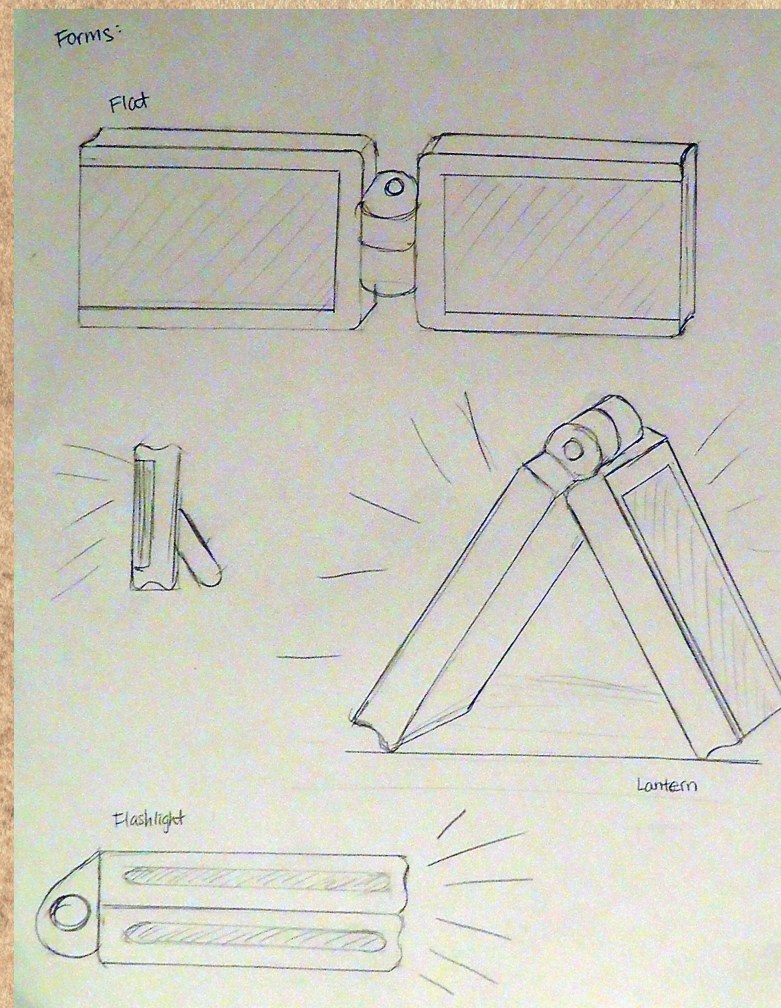
# PROCESS

## SUMMARY OF COMPARISONS

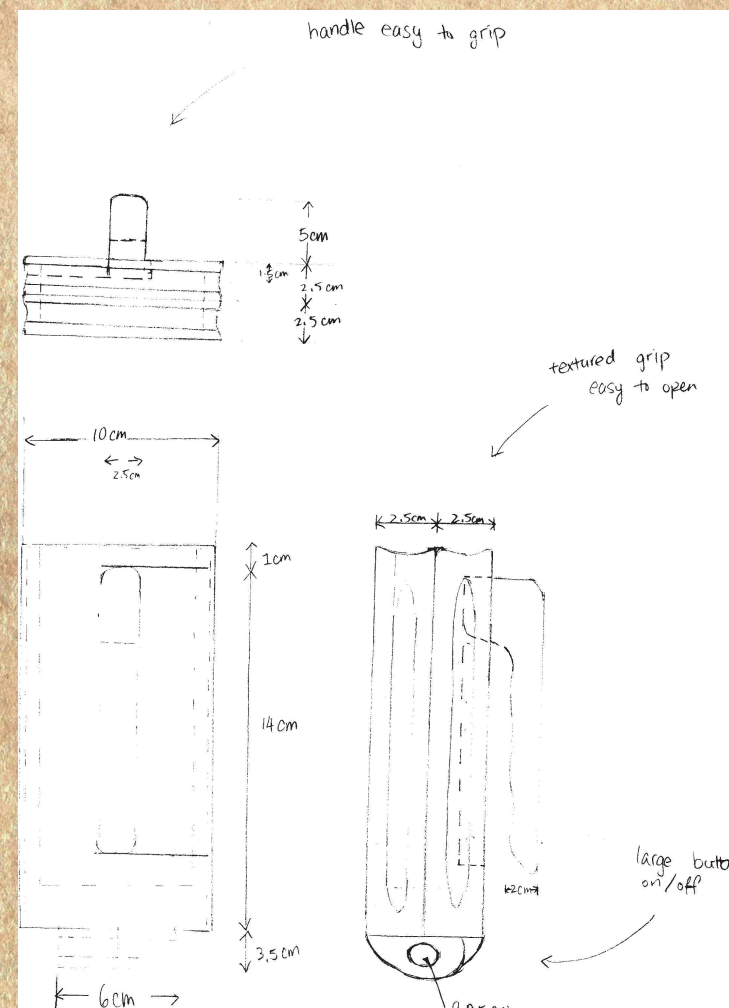
**Our Construction worker's flashlight is mainly focused on the functionality, and durability. It is more complex than the one we designed for the other two contexts. Construction worker can transform the flashlight light depends on the situation he is in, thus more practical.**

As for our second design for the arthritis patients, we are very careful with their needs, and we want the flashlight to be comfortable and as easy to put on as possible. It is very inconvenient for arthritis patients to use their hands and wrist. We want to limit the movements that is required to wear the bracelet. Our arthritis elder's flashlight is lighter than other ones. They also do not need hold on the flashlight. They can wear the flashlight on their arm like an bracelet.

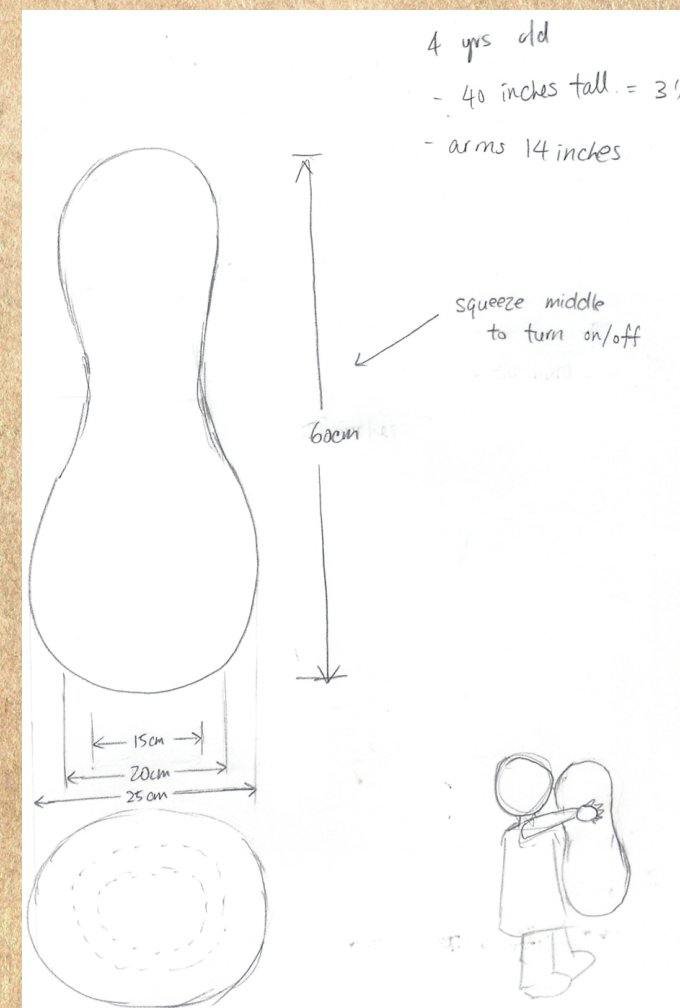
Our context for the children flashlight is when they want to go find their parents in the middle of the night, we could possible provide a flashlight giving them sense of security. This flashlight is the largest we designed. Because we want the flashlight to be huggable and gives comfort the the child to make them feel safer.



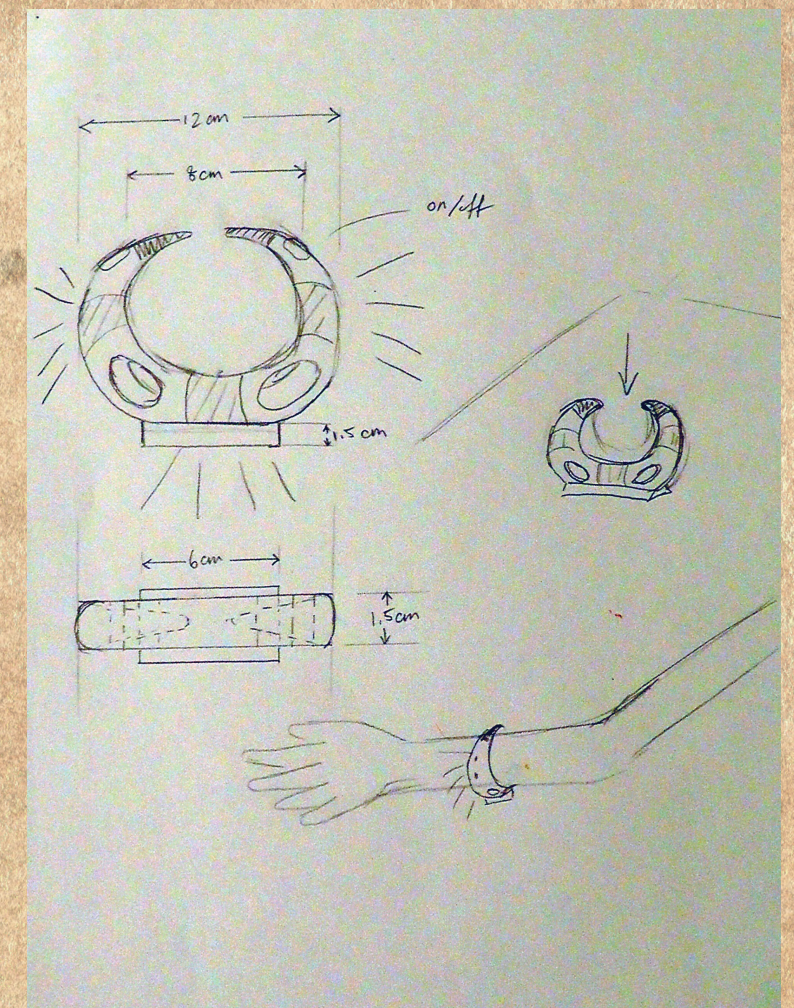
## Modular Lantern - Construction Workers's flashlight



## Modular Lantern - Construction Workers's flashlight



## The Peanut - Child's flashlight



## The Bracelet - Arthritis flashlight

# PROCESS



The Peanut



The Bracelet



## CHOSEN FORM

We chose the Construction Worker's flashlight to continue iterating and eventually came up with the Steam Lantern that it is now.

