



MONOTOOLS

A project that explores the design of household tools, created for one purpose only

AGNES SJÖBERG
2018-2019



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UNIVERSITY



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**A project that explores the design of
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2018-2019

Degree Project for Master of Fine Arts in Design
Main Field of Study: Industrial Design

from Lund University
School of Industrial Design
Department of Design Sciences

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Print Year: 2020
ISRN: LUT-DVIDE/ EX--19/50441-SE

ABSTRACT

By exploring household tools created with one purpose, this personal project also allows me, as designer, to explore my methods and processes when making decisions. The project includes, and puts focus on, agonizing parts of the design process (which is individual) and forces me to endure and learn how to handle them. The process also reveals that some parts I thought were difficult for me, actually weren't that bad. The project physically results in a set of 6 objects that visualizes a mutual concept; but also a mental realization and better self-understanding about me and my role in the profession as designer.

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INTRODUCTION

This project builds upon two keystones:

MY PERSONAL AND PROFESSIONAL METHODS & PROCESSES AS DESIGNER

This mainly regards decision-making; next step in the process, choice of materials, deciding form, size and how to present the product or project. "Dare to fail" is something I need to practice. I am so afraid of presenting a bad idea that it limits me in my process. I need to learn that it is OK to fail and, most important, that it is not even sure you will fail if you take a risk. I have put some time into thinking about gut feeling during the project. I wish I could have a strong gut feeling that can guide me in the design process. Maybe it is possible to practice and learn to understand how my personal gut feeling works? Enabling me to use it. Both within my profession but also in life in general.

CREATING SET OF PRODUCTS THAT VISUALIZES A CONCEPT

During some years I have found a family of products that gives me a strong feeling of excitement. Starting this project, I didn't connect my lack of gut feeling in design processes to the strong feeling these products give me. But somehow, I probably subconsciously saw that I could use the latter to practice and work with my problem. In hindsight, even though it is complicated, I can see the logic. By going through the process of creating a set of objects, using the mentioned family of products as inspiration, I am able to challenge, practice and explore my methods and processes within the design process. I can also shape the project in a way where I have to focus more on the parts that I am afraid of or feel uncomfortable.

BACKGROUND ABOUT RESEARCH

The research phase in my projects is usually very thorough. I dig deep and I aim to find a solid and sparkling core – what is it all about? I do the research by reading articles, books, talking to people and asking them about things that surrounds my topic. I might do surveys or get people to test and try things I want to find out more about. I feel comfortable knowing I can do this kind of “by the book”-research. Therefore, in this project the research is a bit fluffier and takes shape in a different way. *The research* - the background facts and information I need in order to pursue

the project will be based mainly on my experience and what I have learned at IKDC through the years. In extension the project itself is a researching project where I experiment and try different methods to perform a design project. The research is about me learning more about myself in the role as designer. That is not possible to answer by reading books or making surveys. I have to go through the process and it is not even sure I will get a definite answer, especially since I am only in the beginning of my professional carrier.

VISUALIZING

BACKGROUND ABOUT VISUALIZING

Since I feel comfortable in the process of research, I have shaped this project to avoid that comfort zone (in which I also tend to stay for a long time) and instead put myself in situations that I find difficult and challenging. The phases I find scary to go through are for example when producing mock-ups and sketches and when making decisions based on aesthetics. I have through my earlier projects had major problems making objects and products that I think look good and are finished. This is due to different things; I have troubles knowing what I like and find beautiful; I don't have enough time left to spend on styling and details; I feel like I don't know HOW to make something look good.

When you sketch or build a 3D-mockup it gets real and visual. It becomes something that other people can look at or touch and have an opinion about. It is scary and I am afraid to be judged and criticized. This makes it difficult for me to even get started. I need to dare risking making

something that is ugly and that will be criticized. I have to learn that the critique is for the object, not me.

It is important to let out the first ideas so that new ideas can build on top of them (ideas create ideas), evolving the process and in the end become a developed object. This way those first ideas turns into a tool for creativity and development. However, I often find myself sketching and building the same or similar thing over and over again. Is this because it feels safe and familiar? I want to challenge myself to step out of this "comfort zone" (which isn't that comfortable at all actually) and dare to sketch and build other things, allow other ideas to get some space. Maybe even ideas that I don't believe in or that feels too advanced. I understand this might not be a way to work professionally, but I want to try and see if I learn something from it. In some parts of the process I tend limit myself too much. I delete early ideas based on my personal ability to produce or build something.

BACKGROUND ABOUT DECISIONMAKING

I have had problems making decisions for as long as I can remember. As child and teenager I could never pick ice-cream, clothes, opinion in discussions etc. If I was between two choices I often took both if I could.

In my design projects through the years at IKDC my decisions have often been limited due to lack of time. I have waited so long to make a decision that I have been forced to come up with an emergency solution. If I had made a decision earlier, I would have had time to produce something that is worked through. Instead, most of my projects ended up in a square paper mockup or something like that.

Maybe I am being harsh to myself, but that is how I have experienced most of my projects and after each project I have been annoyed that I put myself in this situation, again. When I face a decision situation, I tend to analyze and think a lot about the different options. Which is good to do, but in a reasonable amount of time. In some cases there is a list of requirements that will sift out options, but there are also situations where all options are quite good and it's OK to choose either. It will make you move forward. But I choke and in the moment

don't understand how to make the decision. I am afraid of making a bad decision that will create problems that I can't solve and then everything will end up bad.

Firstly I need to practice decision making to make my insecure part understand that it means there will be a result in the end. And it is a *result* that is the main task to accomplish. If I don't make any decisions I will most likely end up without any result. Together with this I need to teach myself that if I make quick decisions early in the process, I will probably have time to correct and change things if I turn up in a dead end or with something I am not happy with.

I also want to understand the "gut feeling", which from what I understand is based upon personal collected experience and knowledge. The gut feeling can help in decision-making situations. Especially when it comes to aesthetics and making something look good. I want to find out if I can work with this and if there is a way to practice the gut feeling. At the moment I don't know if I have a gut feeling. As explained I usually don't feel very strong for any options.



METHODS I WANT TO USE AND PROCESSES I WANT TO GO THROUGH:

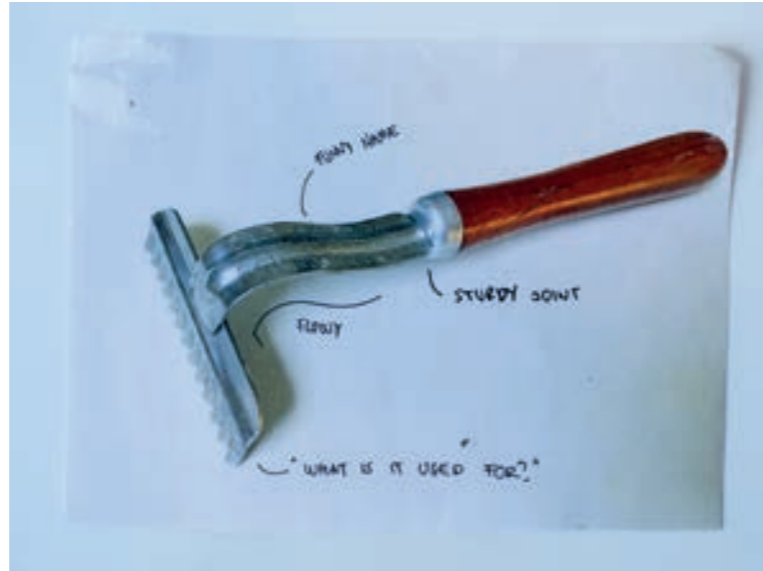
I wish to work in an experimental way and not limit myself by thinking about production-abilities in the beginning of the ideation process. I am not used to this and I am not sure how well it will work. I understand it could be a good ability to consider production when developing a product, but I know there are a lot more production methods than I can imagine. I tend to limit my ideas to what I know I can do by hand in the workshop. In the end that could be the factor that will make the final decision for me, but I don't want it to steer the part where I try to create a lot of ideas.

The objects I produce in this project need to feel worked-through and finished. To accomplish that I require time for working with details after figuring out the function. Form will follow function, but I also hope to get the chance to work with shaping and styling, where the function doesn't risk being affected or compromised.

All products will together become a family, but it's not a criteria or a top prioritized part of the brief for me. When working on each individual project I will not try to make them fit together or match each other. They will be their own products with separate processes and the starting points exceeds from their own function-criteria. In the end, they might look like they belong together. Although, I have chosen to work with the same materials for all objects - materials that I understand and find beautiful - and that will probably create a coherency. I also have some shapes I tend to come back to, but I will try to not make squares and circles out of everything. In the end of the project a friend of mine said: "You can tell that all objects are made by the same person". It was very nice to hear - it's a confirmation for me that I can have a form language as a designer, without trying hard.



OBJECTS:INSPIRATION



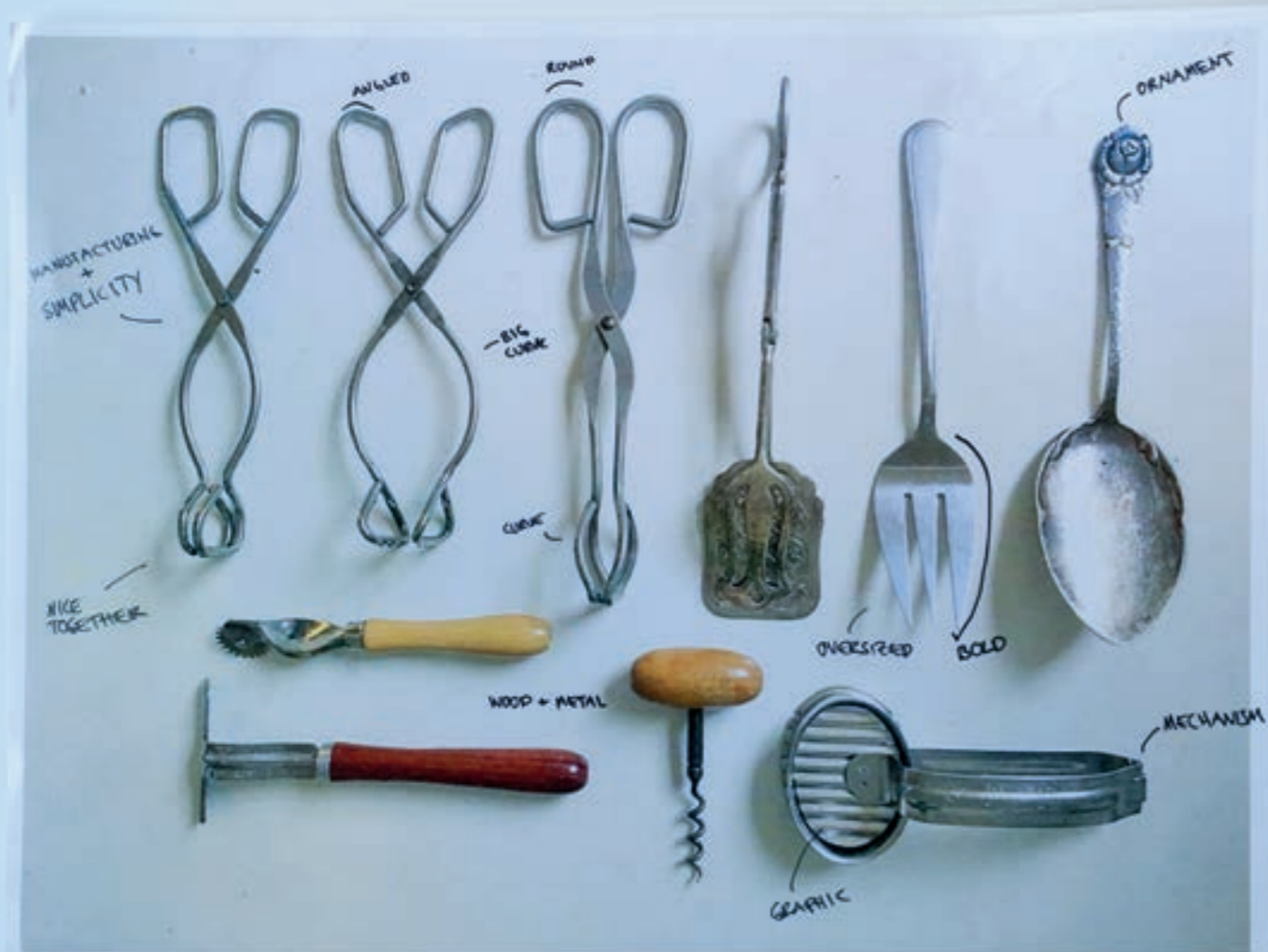
A COLLECTION OF OBJECTS = STRONG GUT FEELING

I have a collection of objects that I have found at flea markets and second hand stores. In the boxes at flea markets, I quickly sort out the things I like from the things that I don't like. Most objects I pick are tools for the kitchen or the home of some sort, from the early 1900's. There is something about these objects that appeal to me. I have tried to analyze what it's all about:

My first thought is that it is about the form language. When I place all objects next to each other it's clear that they are a family. They are made in wood and metal, or only metal. The shapes are bold, looks ergonomic and functional, but at the same time with ornamentation and details. It looks like it's the same person that have designed all tools.

Secondly: I find tools that I at first sight don't know what they are used

for. Tools for situations that doesn't appear in contemporary homes due to technology development such as refridgerator, freezer and electrical tools. But also due to changes in behavior and advancing industry when it comes to for example cookies, desserts and preserving food. It is fascinating to study these tools and imagine that someone, sometime, had use for them. For the person using the tool it was probably obvious how and when to use it, but for me and my contemporary eyes it can be hard to imagine the necessity of the object. One thing we don't know is for how long the object was in use and how widely spread it was, but the fact that it exists tells a story about the situation or behavior. The tools indicates activities and situations that urged for an extension of the hand. I call these "Storytelling Monotools".



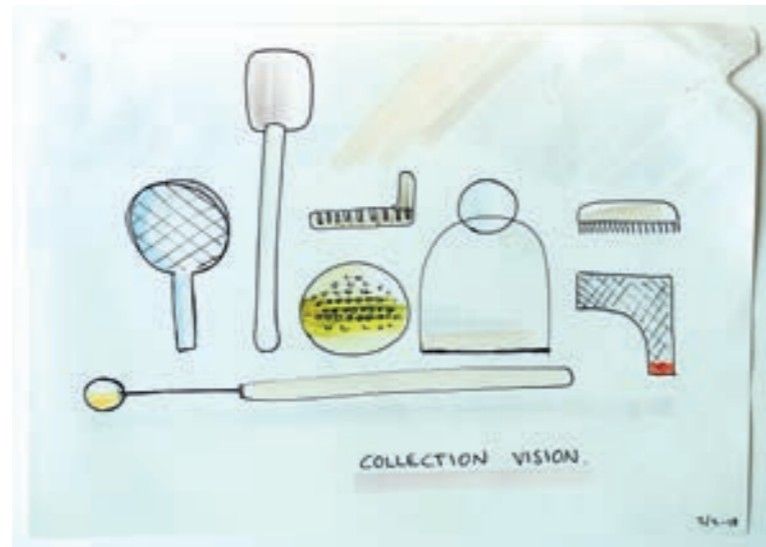
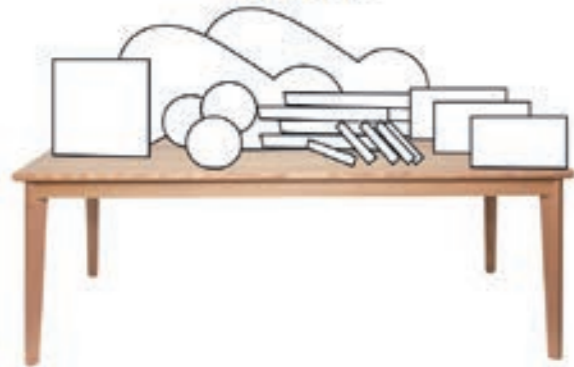


APPLY CONCEPT OF STORYTELLING MONOTOOLS TO CONTEMPORARY SITUATIONS, ACTIVITIES AND BEHAVIOR

I will explore the phenomenon by going through the process of creating Storytelling Monotools myself. I will identify contemporary situations and activities that can have use for a specialized tool. Maybe they will be

able to tell a story about the time we live in? The tools will be created with a purpose to make something easier for the user, and maybe they do, or they just turn into items to collect.

GOAL PICTURE MY DESK



2 GOAL PICTURES

In order to "force" and motivate myself to take action and create physical objects I have a goal picture that my desk should be covered in mockups and prototypes in the end of the project. Might seem like as a "weak" goal for a masters degree. However, for me, this is a difficult task and a huge challenge.

The other goal picture is a vision for how I wish the objects should look together. I want all tools to look different from each other, but still form a family.



MY HOME & KITCHEN

FIRST QUICK DECISION: SITUATIONS, ACTIVITIES AND BEHAVIOR IN MY OWN HOME

I don't want to get stuck in research or in choosing situations to work with. Neither do I want to rank the situations or activities in "more important" vs "less important" so I will go with the first ones that comes to mind. My final products

are only visualized examples of the concept and could result in hundreds of objects. To easy understand the situations, I have chosen things in my own home, that I find annoying or disgusting.

IT ALL COMES BACK TO HANDS

After investigating, sketching and prototyping for a couple of months I discovered that all my objects put the spotlight on the problem with wet and dirty hands. When I cook, clean and take care of my plants I find myself constantly washing and drying my hands. My tools purpose is

to minimize these annoying actions. Apparently, this is an old phobia for me. My mum told me that when my parents put me on the grass as a baby, I held my hands away from the ground and refused to touch the grass.



BRIEF PUT TOGETHER

Visualize the concept
of Storytelling Monotools:

Create a set of 3-10 examples that is based on contemporary situations. The objects processes should put focus on and challenge parts of the design process that I find difficult.

As I have been mentioning before, this means that I will shorten or modify the parts of the process that I know I usually do without problems and I feel comfortable in.

How many objects I actually will finish will be clear once I get closer to the deadline. After a couple of objects I will see how long I actually need for a short project. My thoughts in the early beginning was to make 1 project/week. Meaning 10 weeks = 10 objects. However, I was aware other things might come in between and issues within the project might arise. Therefore, I set the range to 3-10, to give myself some space and release pressure.

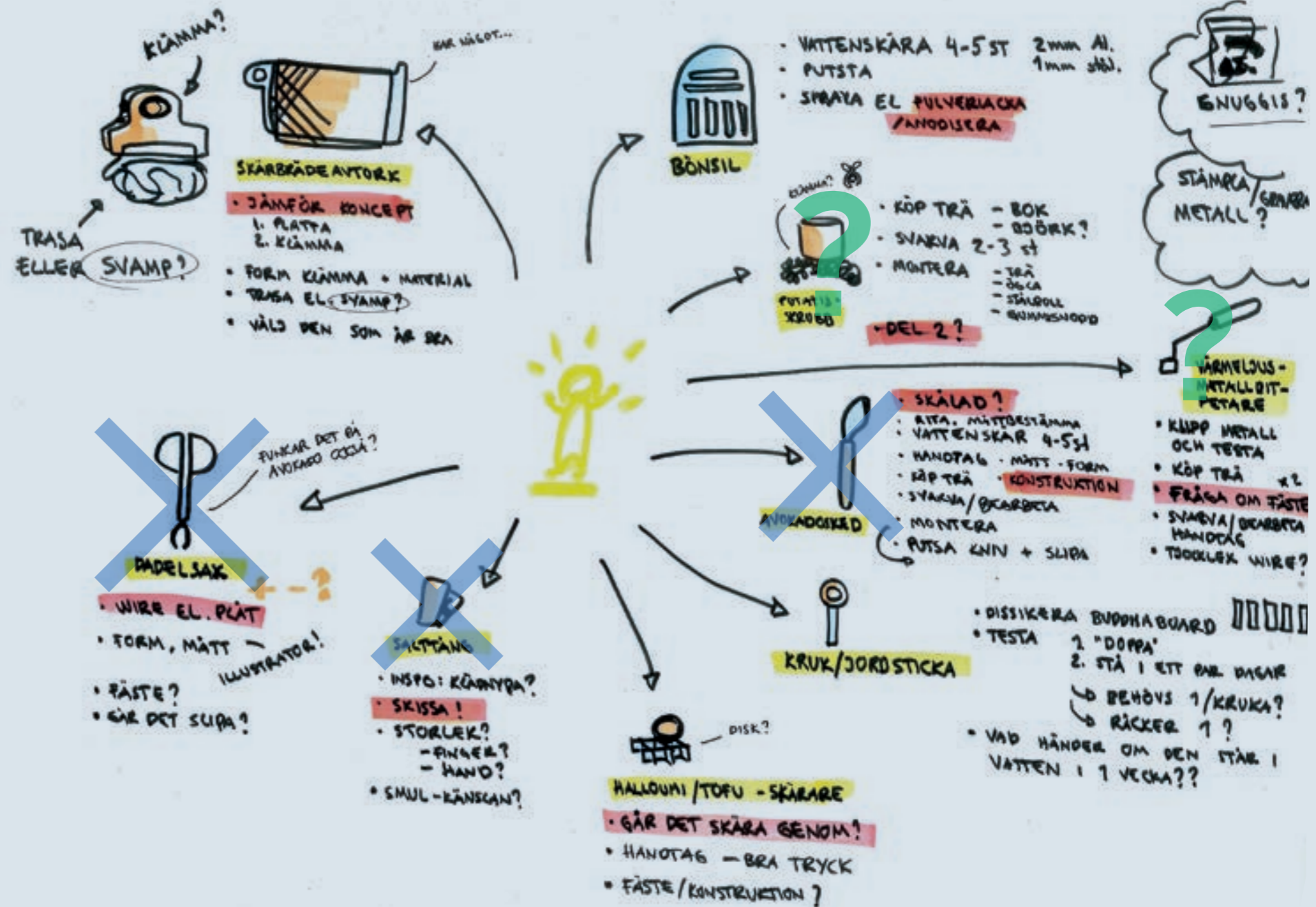
Facit:

It turned out to be 9 objects that I liked and wanted to realize. I worked a bit with each and as I got closer to presentation date (I did not want to postpone the presentation further) I had to delete 3 objects. I also put 2 extra objects on the "maybe-list", meaning they could be deleted if I didn't have time to work on them. I actually did finish them, but they turned out as really short projects – with results mirroring that; one of the products ended up fulfilling it's purpose, while the other one needs to be worked with more in order to work.

FROM 9 TO 6 OBJECTS

After a rather short process I had 9 different object I felt concluded trends and situations where I bump into problems on a daily basis. I managed to visualize 6 of them. The cut from 9 to 6 was basically based on how far I was in the different projects. I was prepared to delete 2 of the remaining 6 depending on time and deadline. Fortunately I didn't have to do this. Of course other issues arose instead.

As I walk you through the projects I will try to pinpoint insights I have made in the process.



PROJECT 1

Tool for removing liquid and rinsing chick peas and beans in cartons and metal cans

The first project I started. I also decided to finish it before starting the next one in order to get that nice feeling of accomplish and finish something. The process of this one was pretty straight forward, I had an almost ready idea in my head that I tried, evaluated and improved.

SITUATION

A trend I see growing: eat more beans and chick-peas. Maybe replace meat protein with leguminous plants. Truly dedicated people boil dried beans, I focus on the beans that comes in cartons and metal cans.

REQUIREMENTS

- Liquid go through
- Hands remain dry
- Easy to wash
- Fit in kitchen drawer

ISSUES WITH EXISTING PRODUCTS



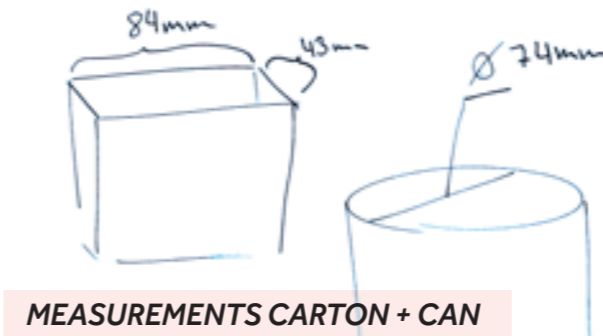
MESH SIEVE

Difficult to wash: small pieces and crumbs stick in the mesh.



STRAINER

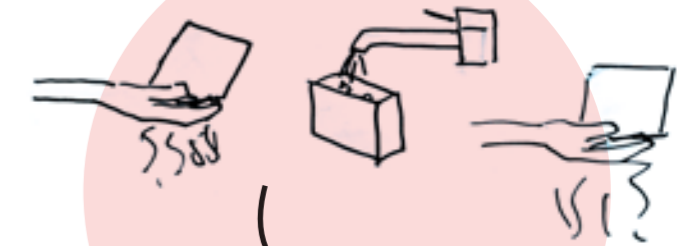
Big device for small job.



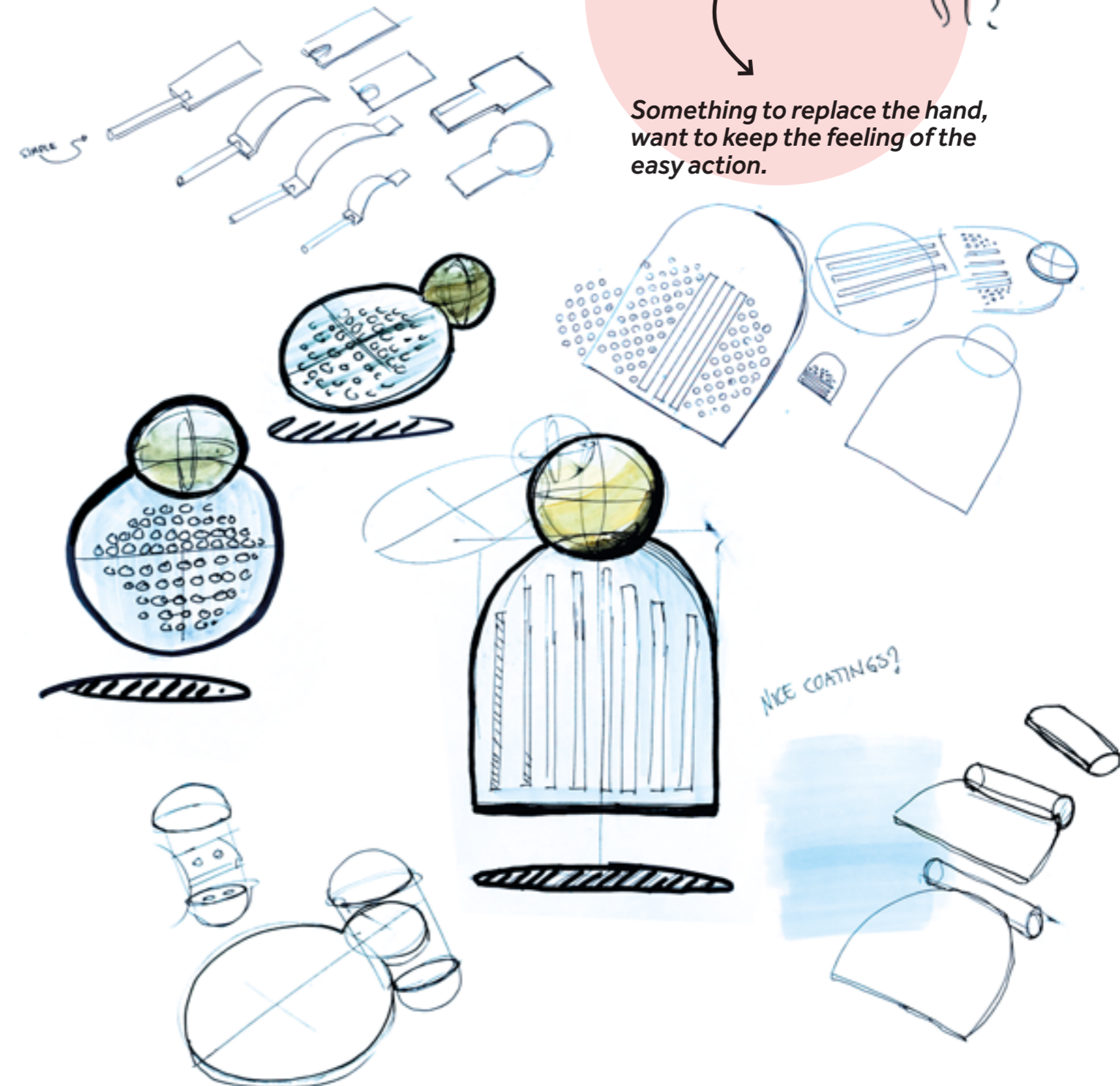
1. The annoying way



2. The lazy way



Something to replace the hand, want to keep the feeling of the easy action.



TEST ON CARTON AND CAN WITH PLEXIGLASS MOCKUPS



Handle: Difficult to make it stay in place. Feel urge to press on the plexi in order to be stable.



Made in same dimensions as the carton. This was too narrow. I didn't realize the box would change shape and become a little rounder at the opening. Beans fell out.



Nice size. Covers well and is possible to use in any direction. But where do I place my fingers?



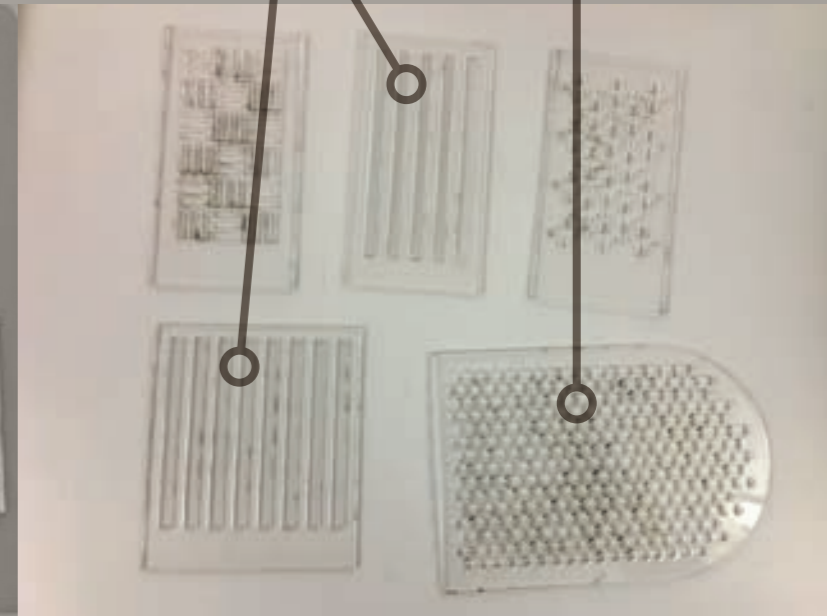
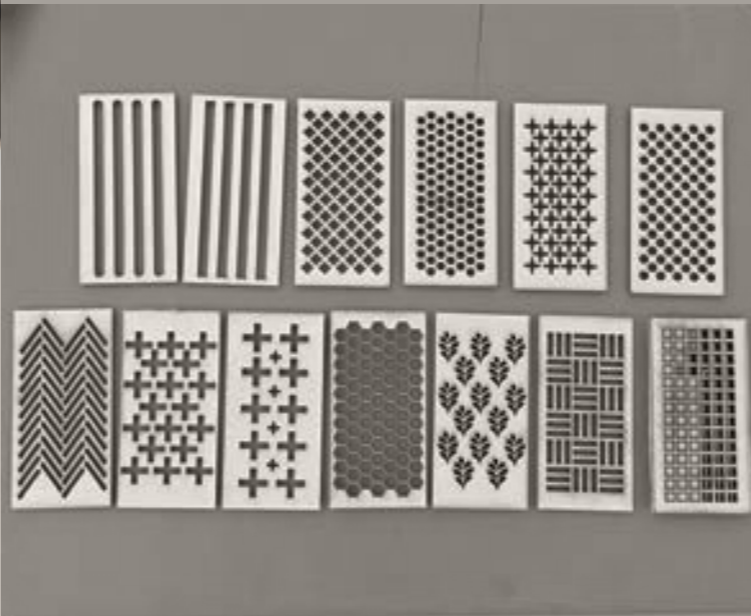
Profile: works fine with the square/straight part.



I want to symbolize both the square carton and the round can, but since I usually don't take the lid off it doesn't work very well using the rounded side.



Symbolize round can by shaping the stripes to follow the edge.



Stripes: the water runs along them.

Holes/hexagons: the water spreads all over.

ABOUT THE HOLES

Thoughts at this point:

I am confident about the function, I know this concept works. The size is alright and a few millimeters here or there doesn't really matter functionwise. Though, I feel less confident about the aesthetic part. And the decisions right now will be made based on what looks good, both when it comes to size, placement of holes and size and shape of holes. The stripes are more functional so I will go with those. But I could add round holes or other shapes if I want. I just don't know how to find the gut feeling that tells me what I like and don't like. On the other hand, why make more when you can make less? If it is good enough and fulfill the purpose it must be OK, right?

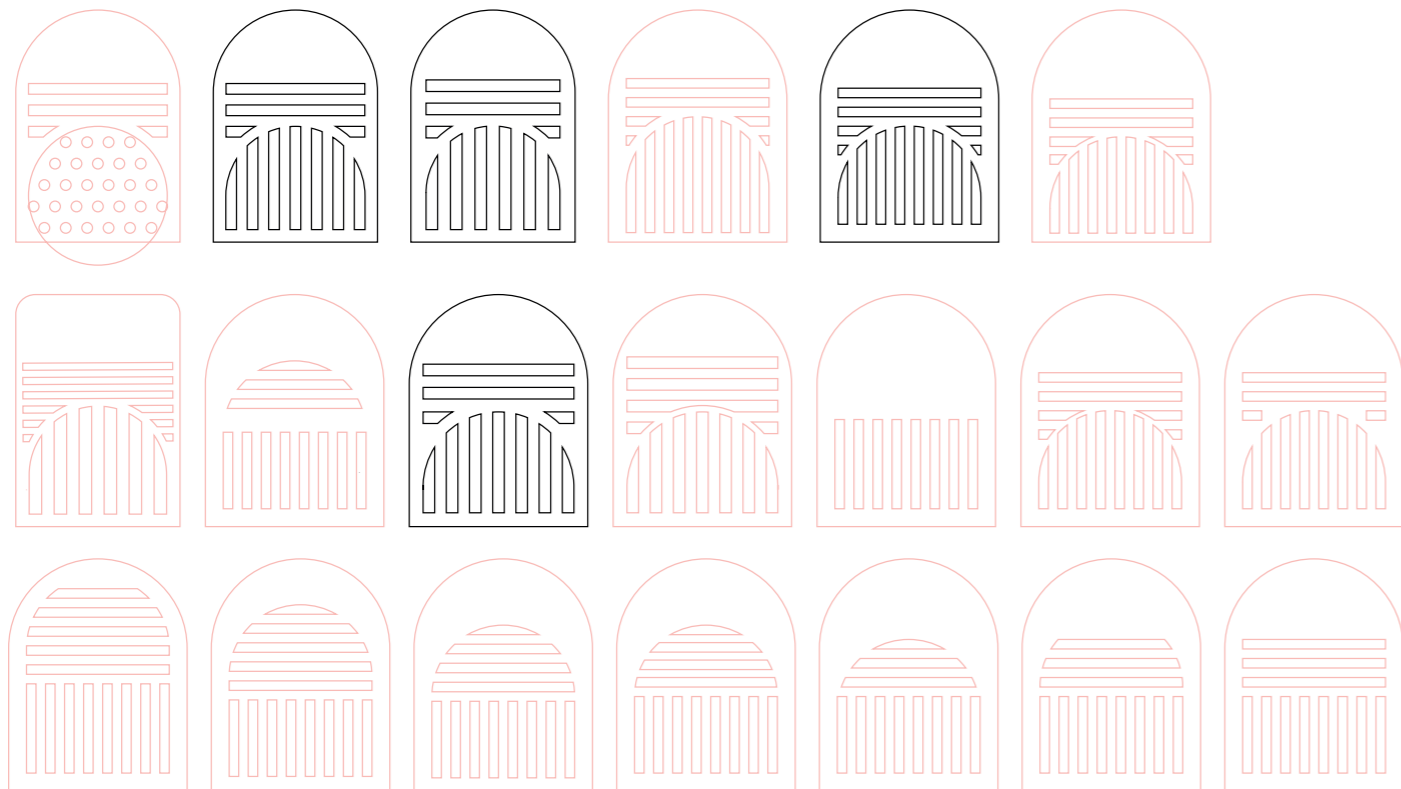
WHEN DO YOU SAY: "OK, THIS IS GOOD"?

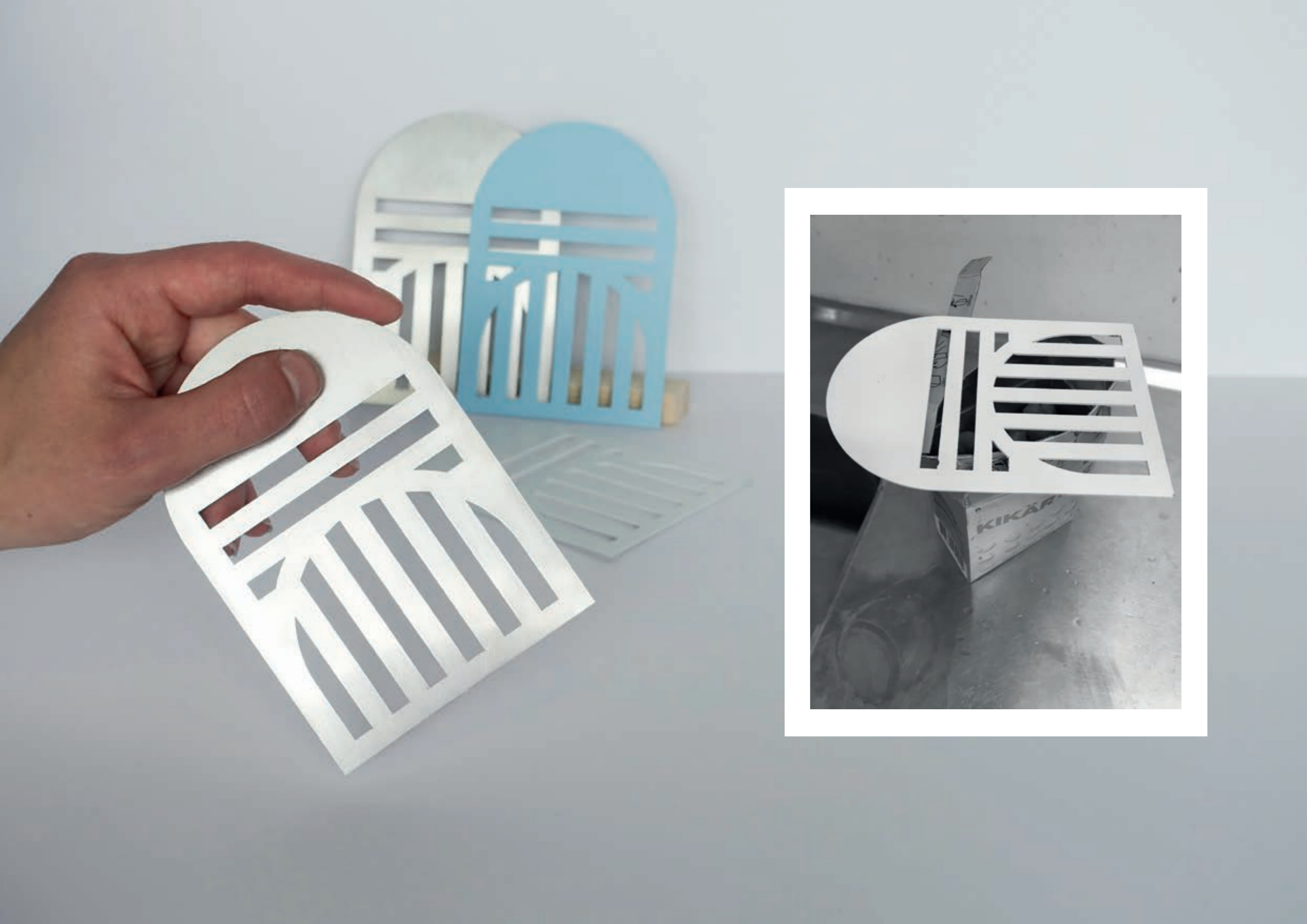
This is where the project turns graphic. I have a shape that I like and from this shape I make variations that differ in placement and size of stripes and outer width. I have chosen to water cut two pieces in metal that have different width and amount of stripes. When holding it in the hands you get a better feeling of what will work, in comparison to looking at a screen.

I found that the smaller piece feels much better holding and also looks more proportional for the eyes. Now my issue is if I should stay here, or if

I should make another alteration. My mental challenge is to tell myself that this is good enough. I always fight with the thought: "What if it can get even better..?"

I suppose in developing products, things can always become a little better. As designer, you must draw the line for where it is good enough - where the product does the job it is suppose to do. I like the feeling and look of the object at this point so I don't see any significant arguments to continue the process even further.





PROJECT 2

Tool for checking if plants need water

"The quick and easy one" I thought. In theory it is, but the process was not that easy. I had an initial idea that I "just" had to finish. But everything turned out ugly at first and when I managed to make something that looks close to *nice*, my agonizing decision problem happened to be about how simple it's OK to make a product.

SITUATION

The interest for plants is growing, for example the Swedish Facebook-group "Växtgäris" has over 19.000 members! To determine if the soil is dry or wet your finger is the best tool, but afterwards you have to wash your hands (again) and I don't like getting dirt under the nails.

REQUIREMENTS

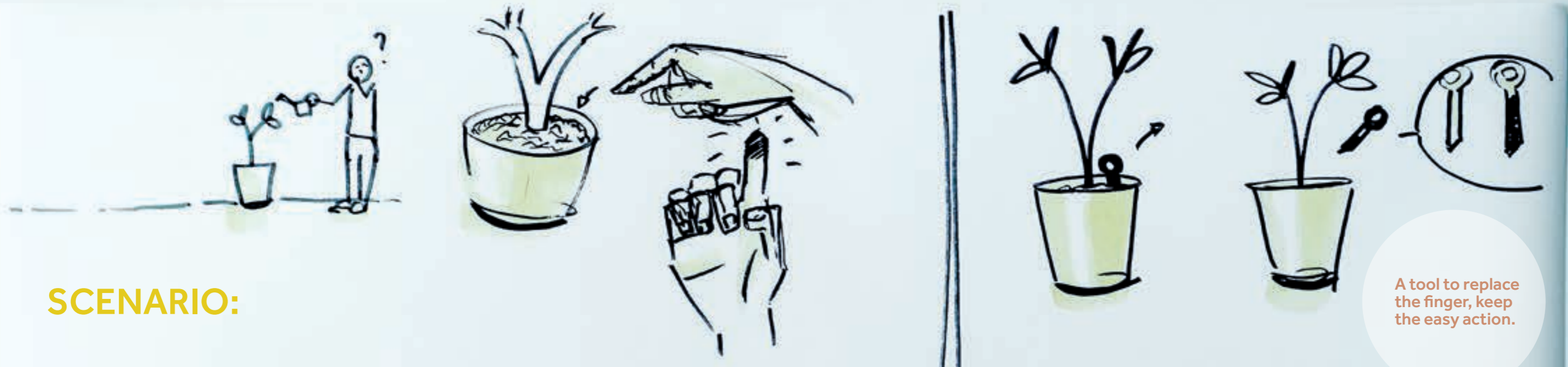
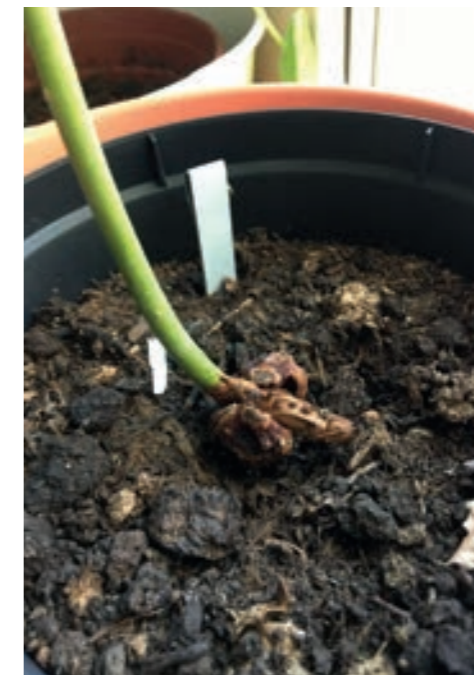
- Go easy through dirt
- Keep fingers clean
- Look nice (jewelry for the plant)
- Good grip



I remembered a birthday present my sister got 10 years ago or so. It is a mindfulness board where you paint with water. The paper turns really dark when in contact with water and after a few minutes it is dry again.

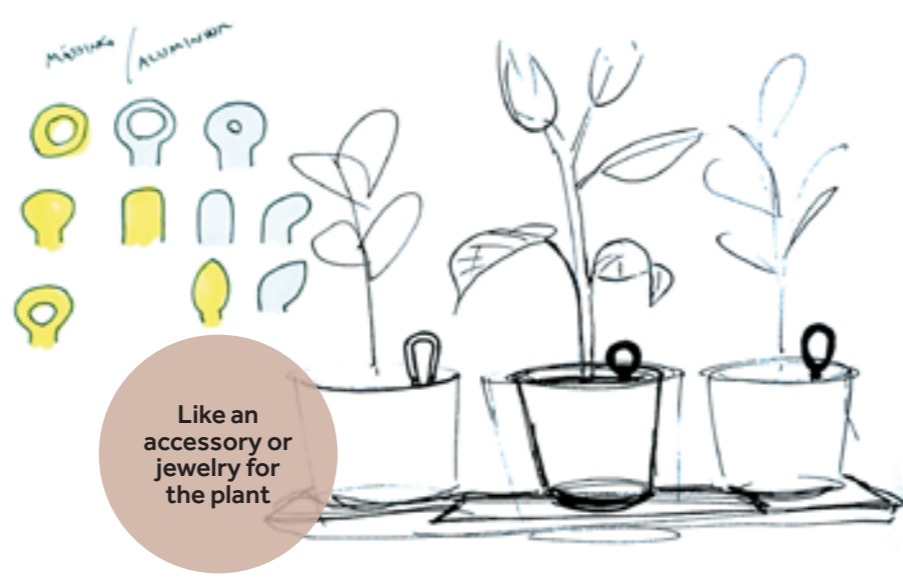
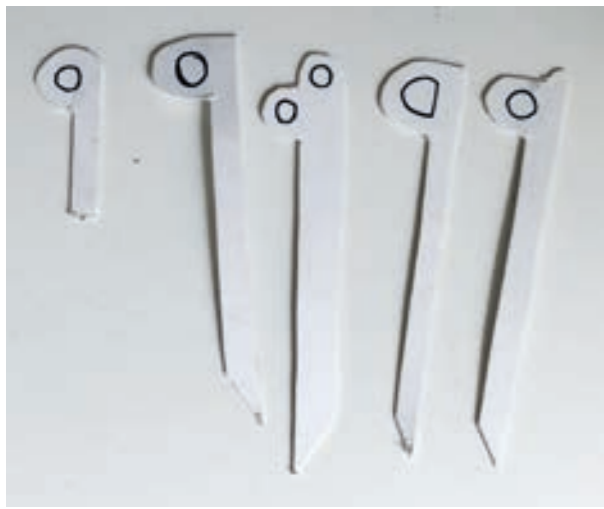
Maybe this could work as telling if the soil is moist or not? I cut some pieces of the paper and let it sit in a pot with soil and a glass of water for a couple of weeks. The one in water got a bit discolored but the one in the pot did not take any damage.

I am not 100% sure how well this works in reality, but it's a concept and I think the technology of the paper has potential to be developed even further.



SCENARIO:

A tool to replace the finger, keep the easy action.

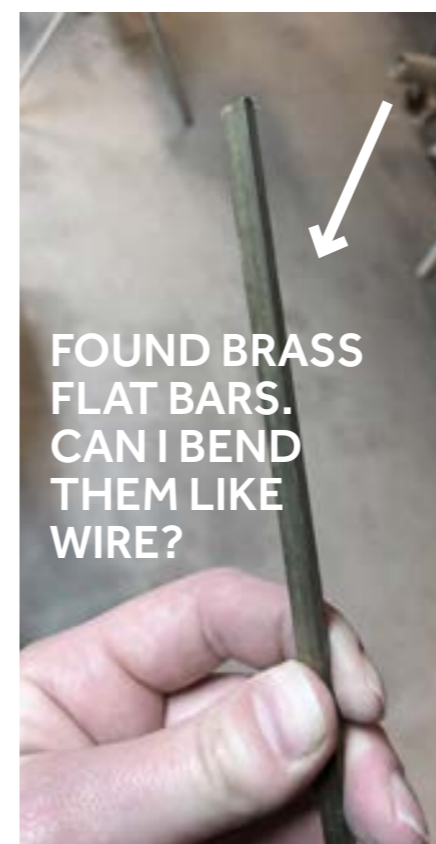
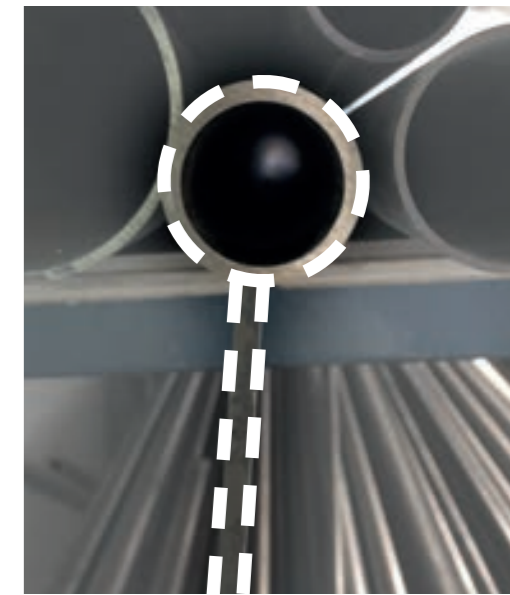
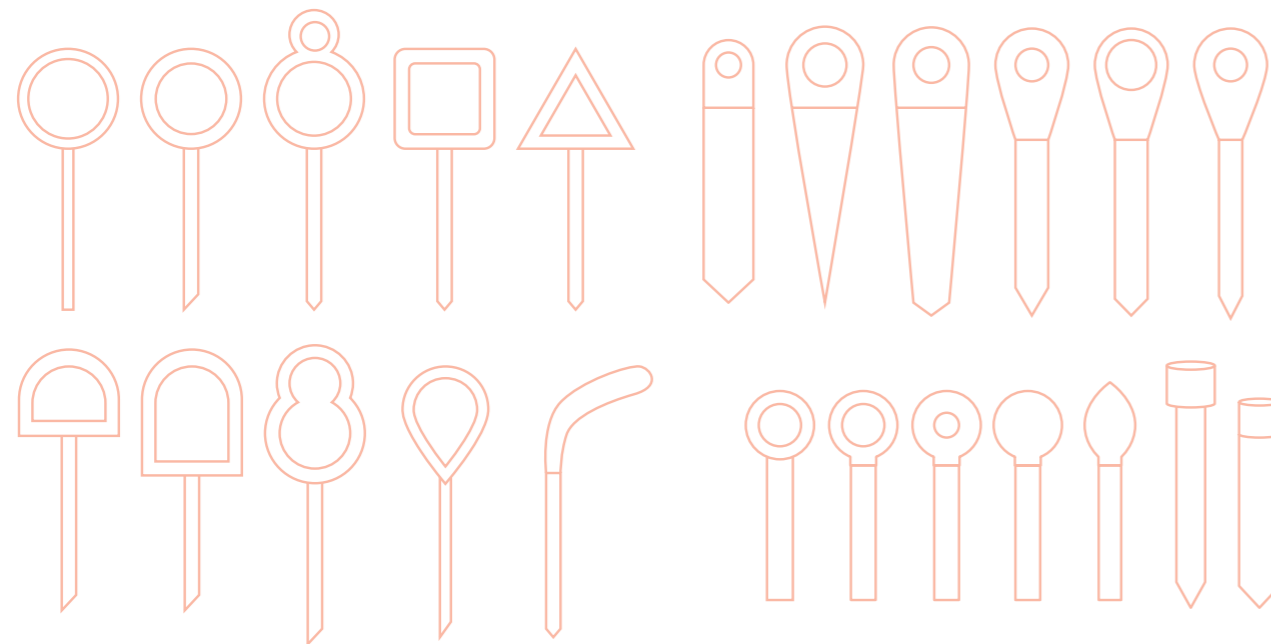
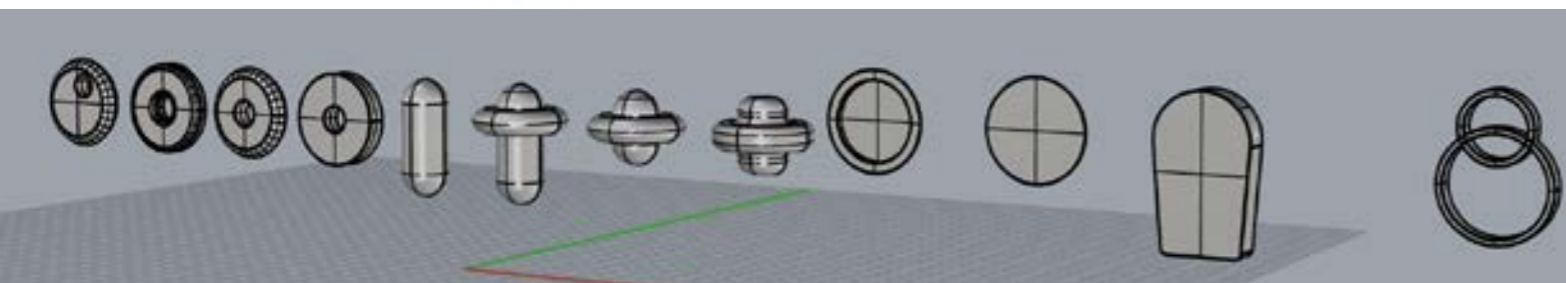
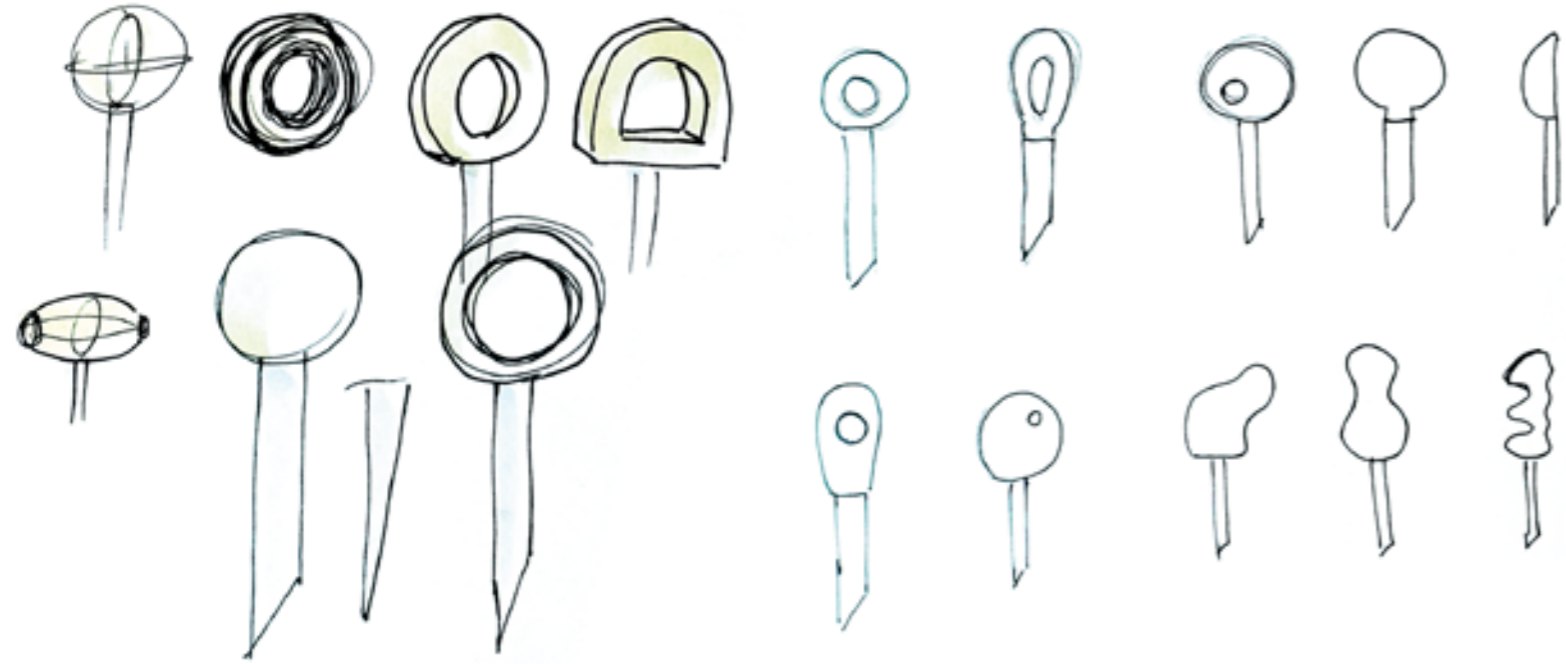


Like an accessory or jewelry for the plant

WHEN EVERYTHING TURNS OUT UGLY

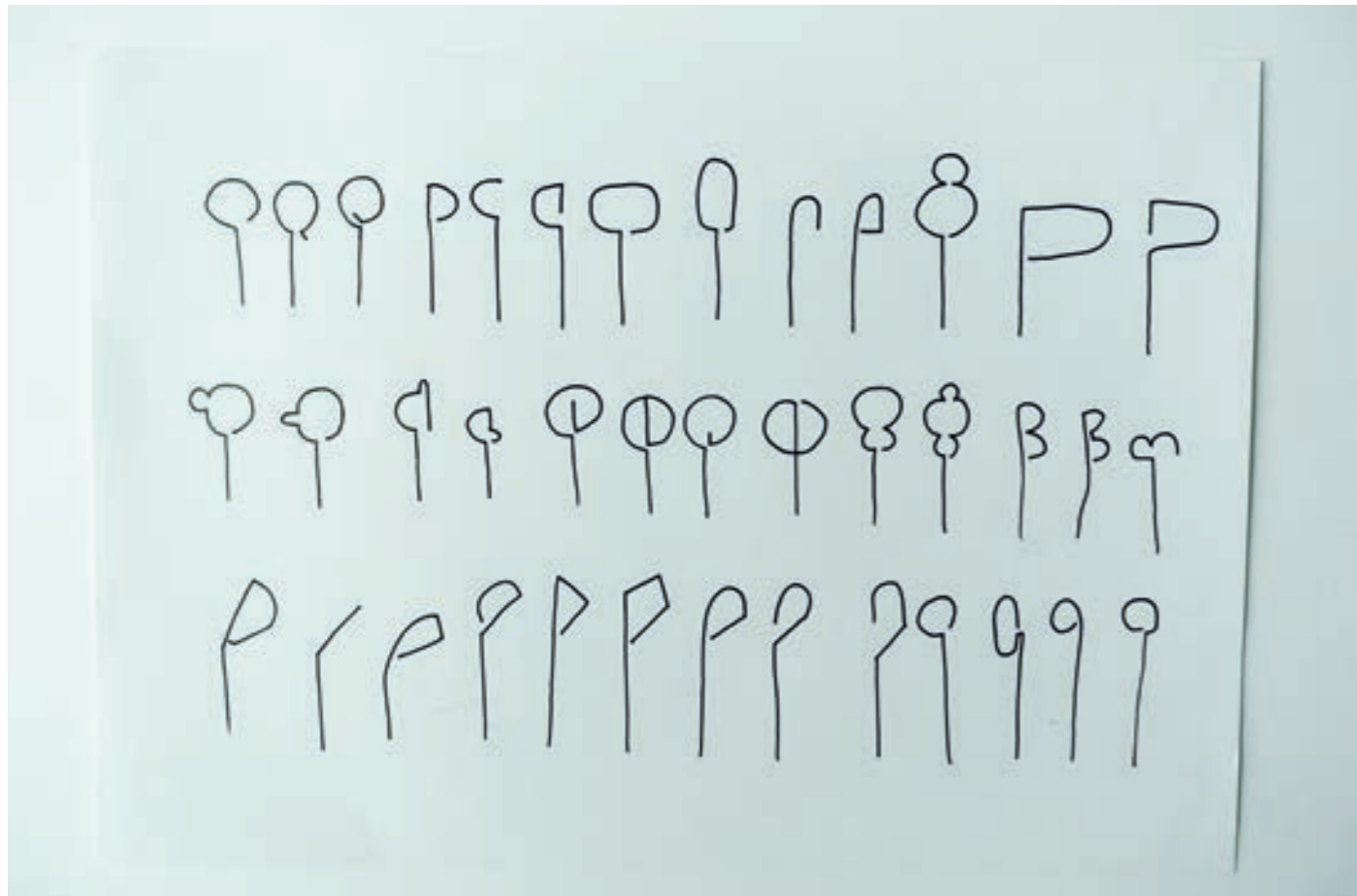
The shape then.. first I didn't even know where to start. I had a picture in my head of a circle on a stick with the paper attached. But I need to put some work onto shape, proportions, construction and material choice. I tried to sketch both by hand, in

illustrator and in 3D. But, as you can see on the previous page, everything turned out ugly and weird. So I decided to go down to the workshop and see what raw material there is, and proceed from there.



FOUND BRASS FLAT BARS. CAN I BEND THEM LIKE WIRE?

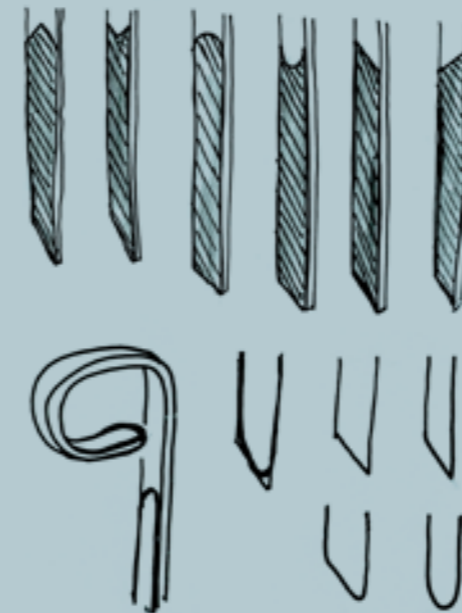
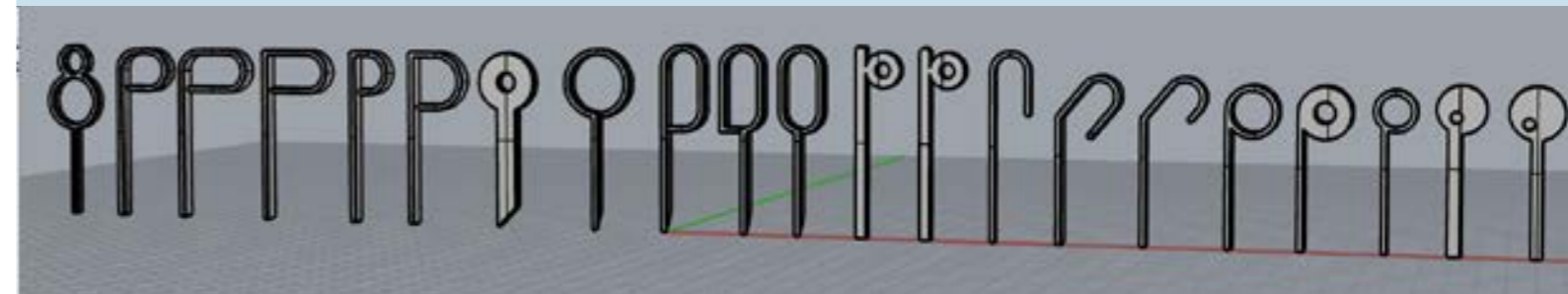
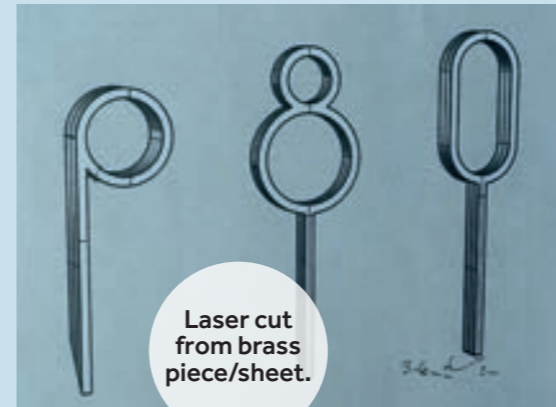




KEEP IT SIMPLE BUT HOW SIMPLE IS OK?

And here starts one of my most anxiety filled dilemmas in this project. I often say to myself: "Keep it simple" - to not overcomplicate things. But this felt *too simple*. Where goes the line for how simple something is allowed to be? I thought of other, more complicated options, like laser

cutting a solid piece. Everything stood still. I didn't now where to turn so I turned to math. I counted on time + production cost + material use and concluded that this simple way is both easier, cheaper and faster for me to produce. And that's enough to make the decision for me.

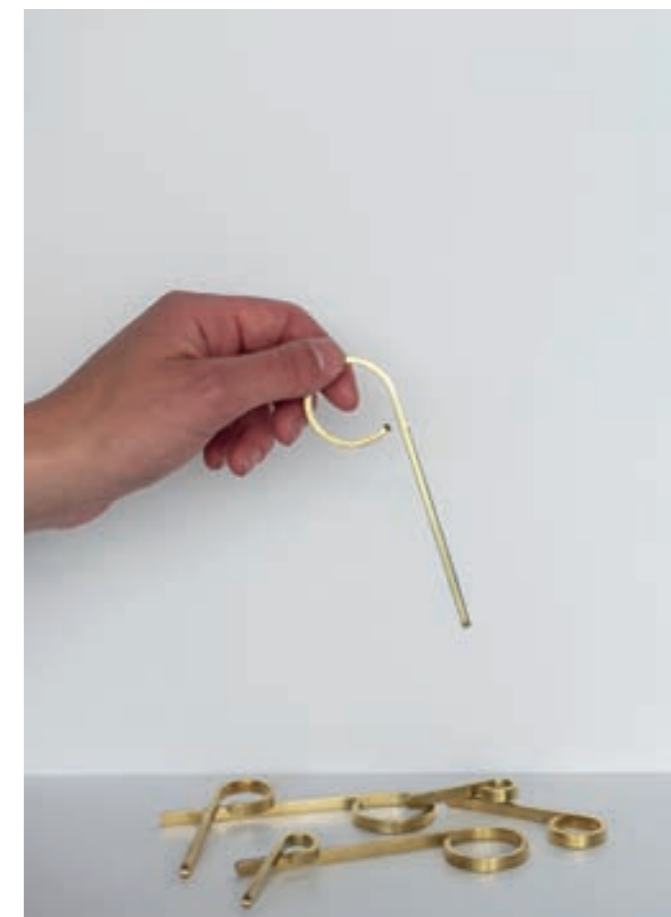
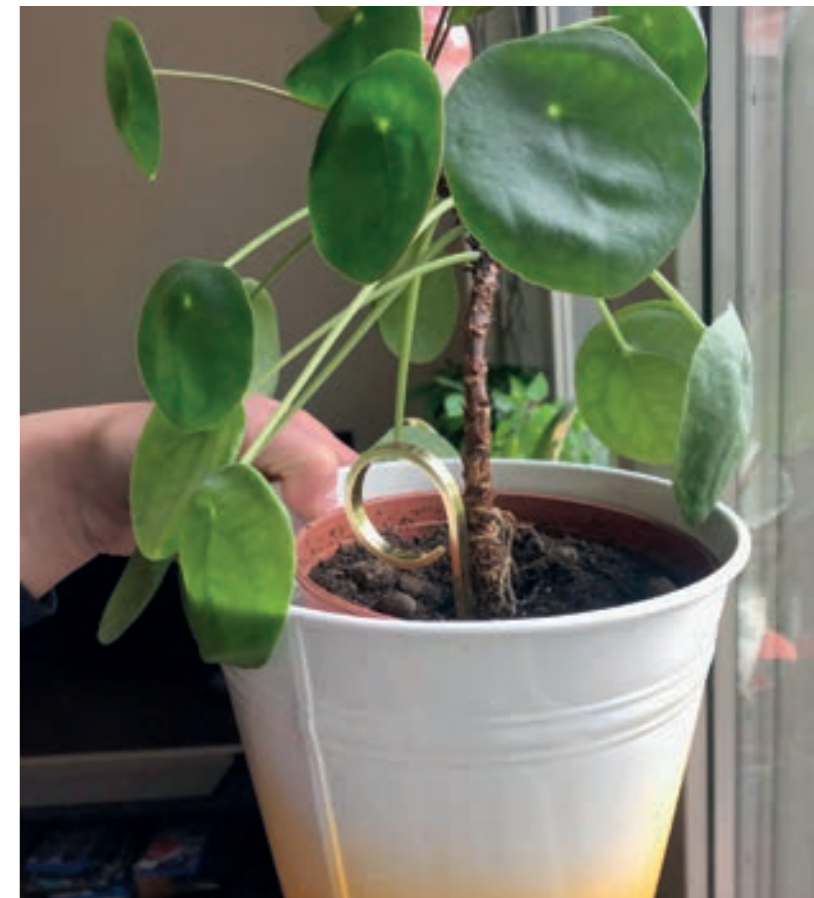
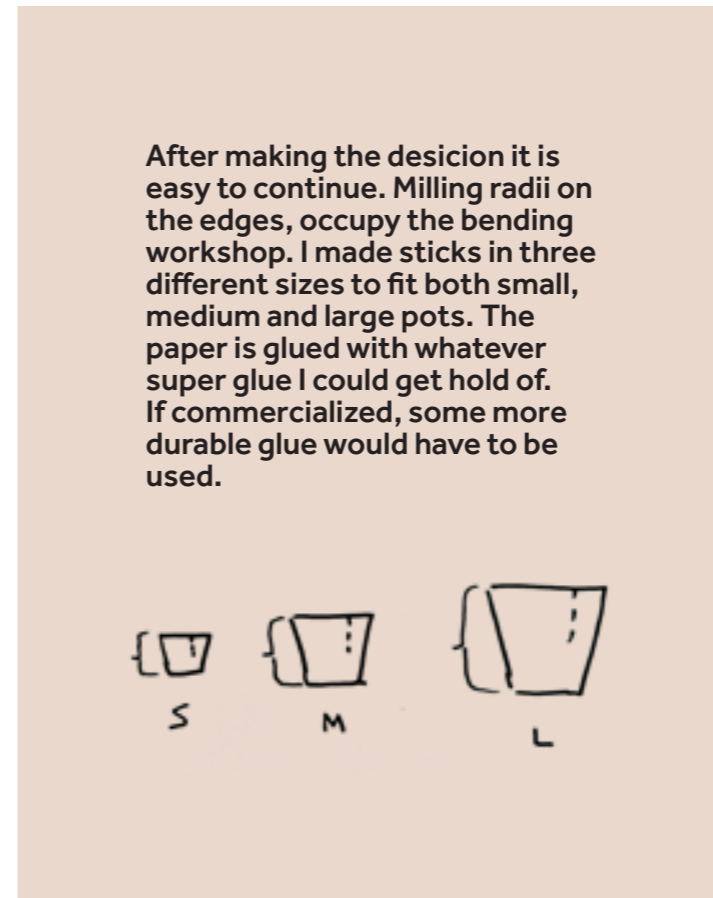


DETAILS

I figured that if I am going to keep it this simple, I need to put more effort into details. The ends of the bar has to be considered, as well as the paper to be attached.

I decided radii are a nice detail that give an elegant expression. It is a bit tricky to do, but in this case everything else is so simple that it is okay.

WORKSHOP & FINISH



PROJECT 3

Tool for scrubbing and washing potatoes

This and the next project I was prepared to delete due to time. However, I had a few days of waiting for parts for another project, so I gave these a shot; maybe I'll manage to finish them, maybe I won't. In this project I worked faster than in the other projects, which puts quick decision making to the test. Also deciding measurements had to be made in the workshop, without any chance to changes afterwards.

SITUATION

It is told that a major part of the nutrition sits in the peel of vegetables. Therefore you should eat the peel on for example potatoes.

REQUIREMENTS

- Easy use/scrubbing
- Protect hands



SIZE OF POTATO



I often use a metal scrub made for pots: it removes the dirt from potatoes well. Problem: it also scrubs your hand. I need to protect the hand somehow.



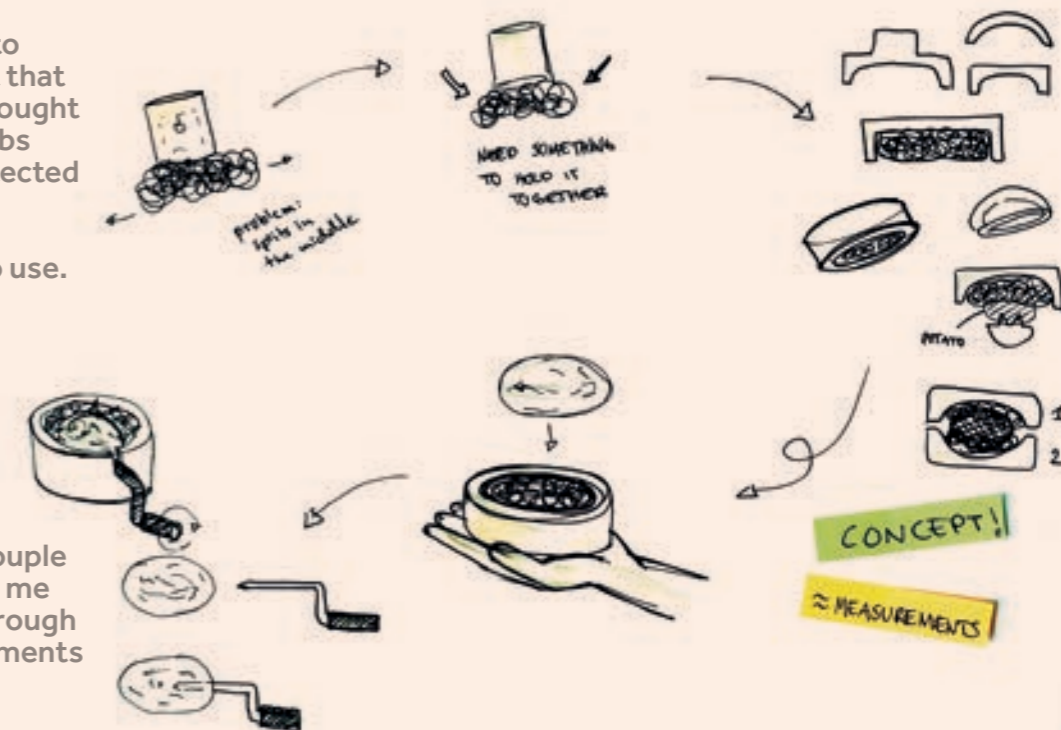
These pictures and sketches is what I made in Feb/ March 2018 when I started the project. I ordered two different kind of pot metal scrubs. The left ones are like a yarn of curled metal and are the easiest to work with.



When picking up the project to finish it in May 2019 I thought that this first idea was only half thought through. The metal yarn scrubs well but the hands are unprotected and my tests also reveal the problem with the metal yarn splitting, making it difficult to use.

After some thinking I figured: What if I turn it upside down? And making the potato turn instead of working the scrub tool around the potato?

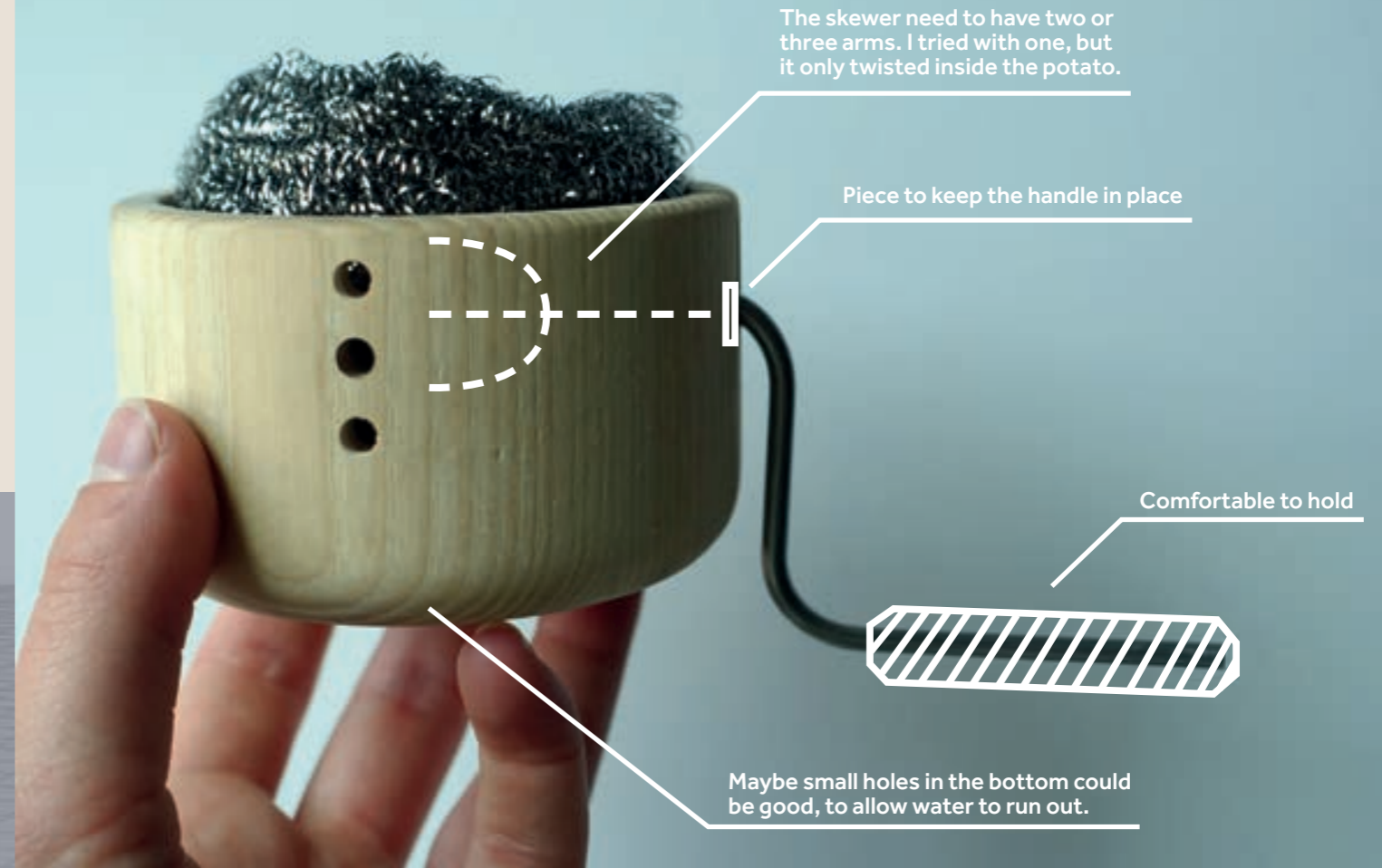
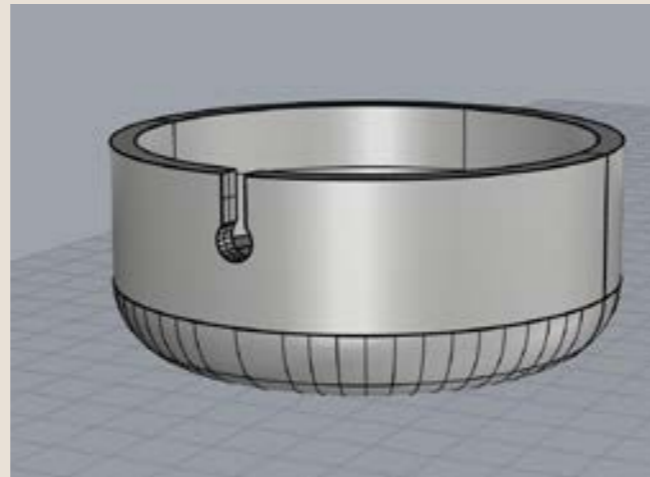
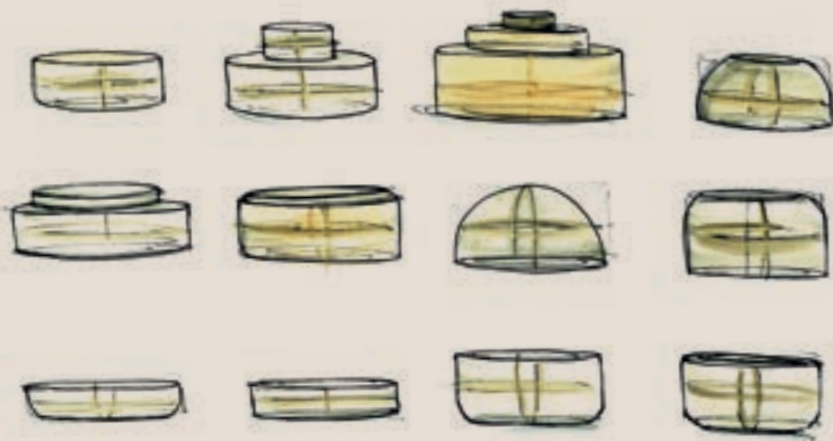
I liked the concept so that is what I went for. I only had a couple of days to visualize it, making me compromise with working through the actual function, measurements and other details.



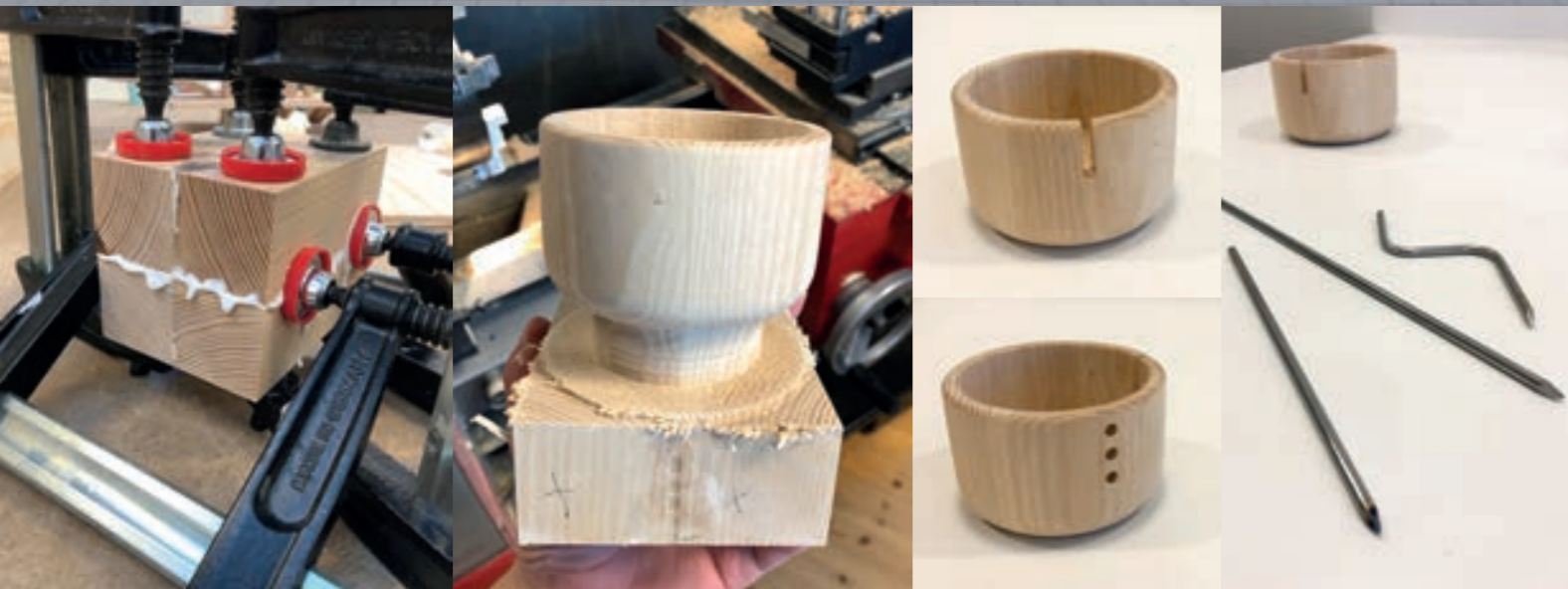
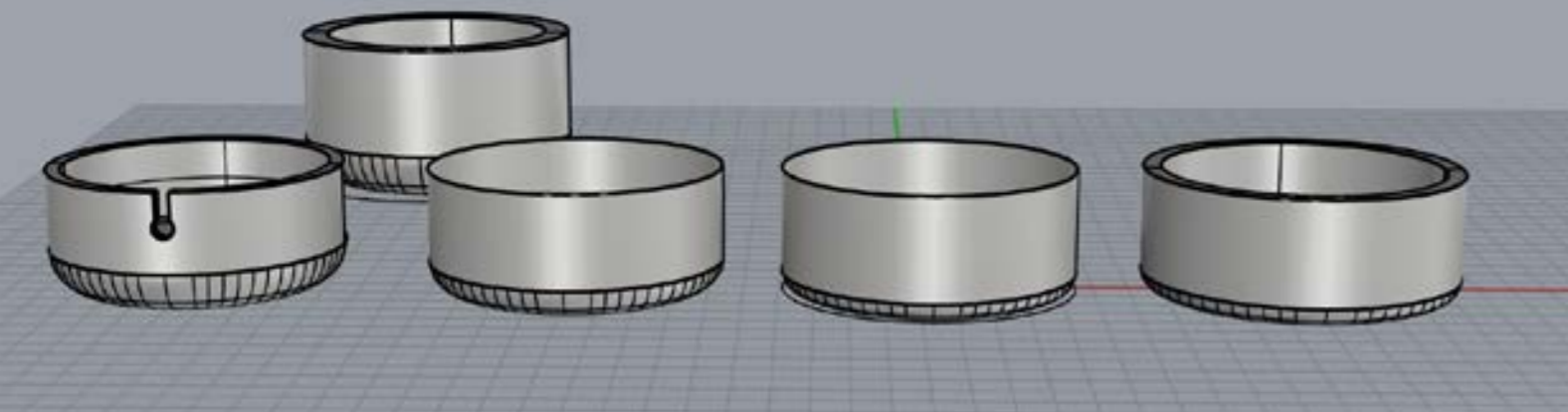
QUICK ESTIMATIONS AND DOWN TO THE WORKSHOP

As explained, quick decision making is the theme for this project. Proportions are difficult to estimate in mind, so I made a fast drawing in 3D. I brought those measurements with me down to the workshop,

but had to make some changes in the making. Both because the proportions felt weird when seeing it live, but also due to necessary material thickness.



PROTOTYPES IN THIS PROJECT



PROJECT 4

Tool for removing iron piece in tea light candles

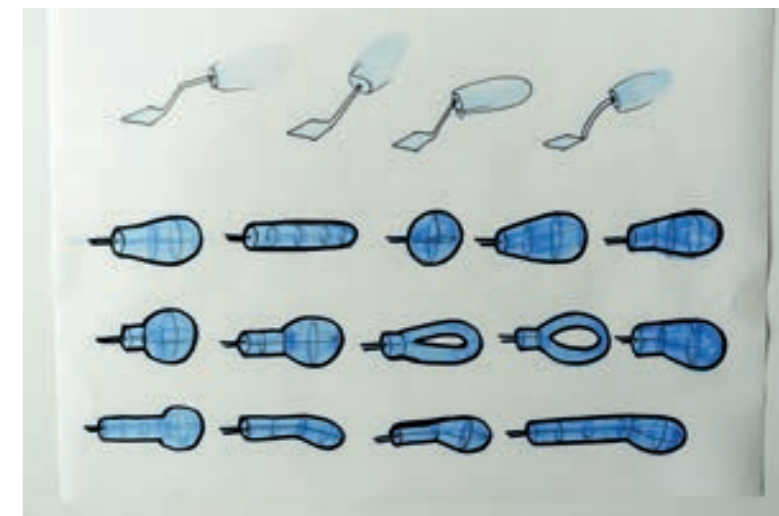
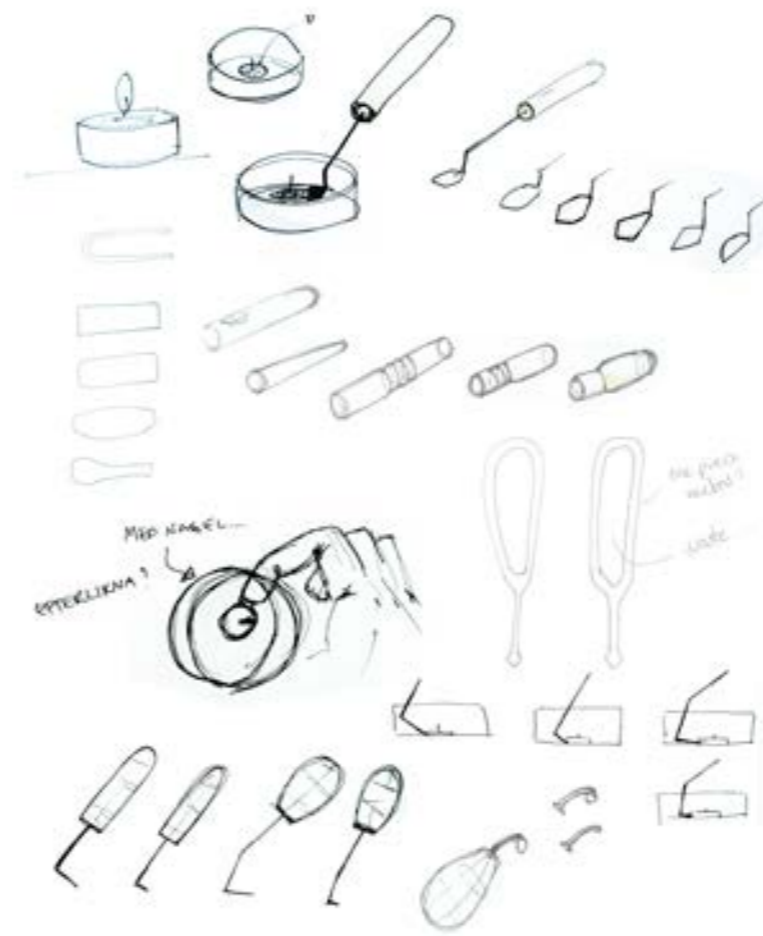
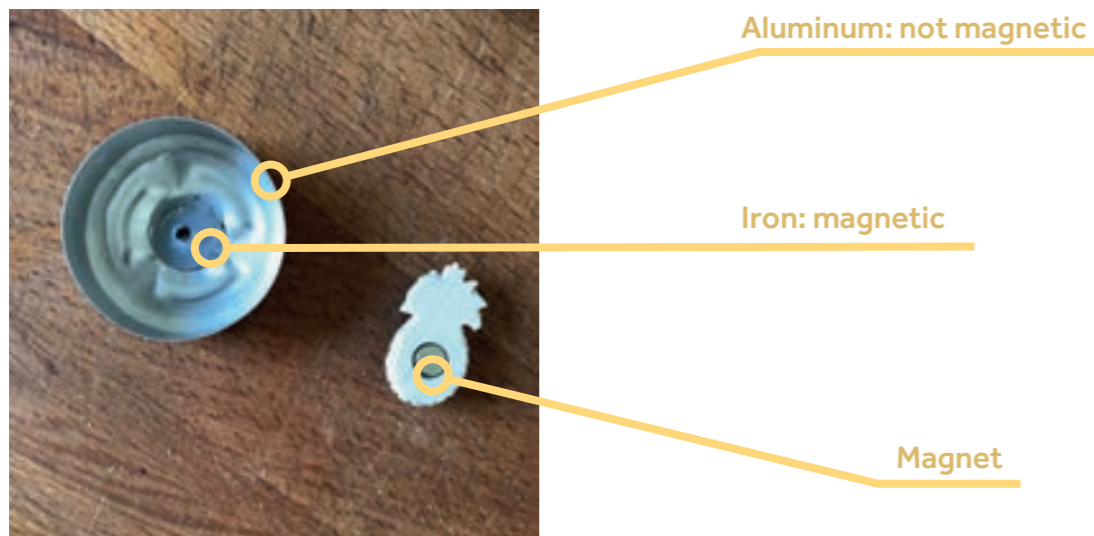
The other of two projects I finished in a couple of days. I had an initial idea which I tried very late in the process - and it did not work. But with one iteration it was one. In opposite to the potato scrub, which were operated under the same conditions, this concept actually turned out really well.

SITUATION

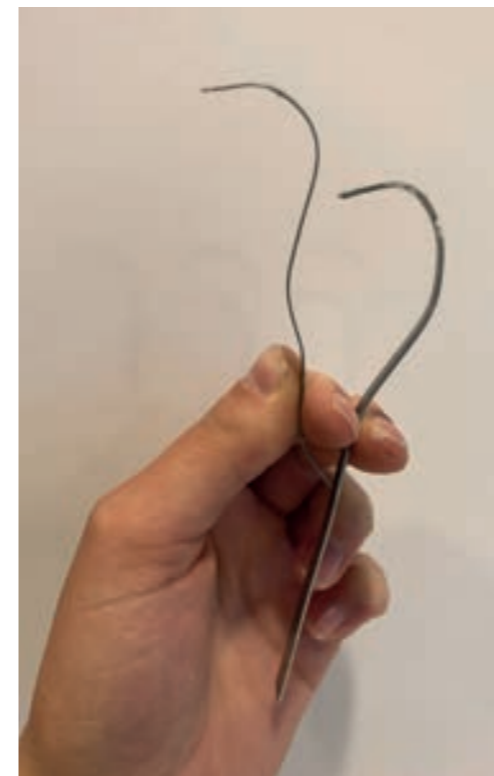
The magnetic iron part and the aluminum cup in tea light candles should be separated in the metal sorting. Using fingernail causes strain and glue to stick under the nail.

REQUIREMENTS

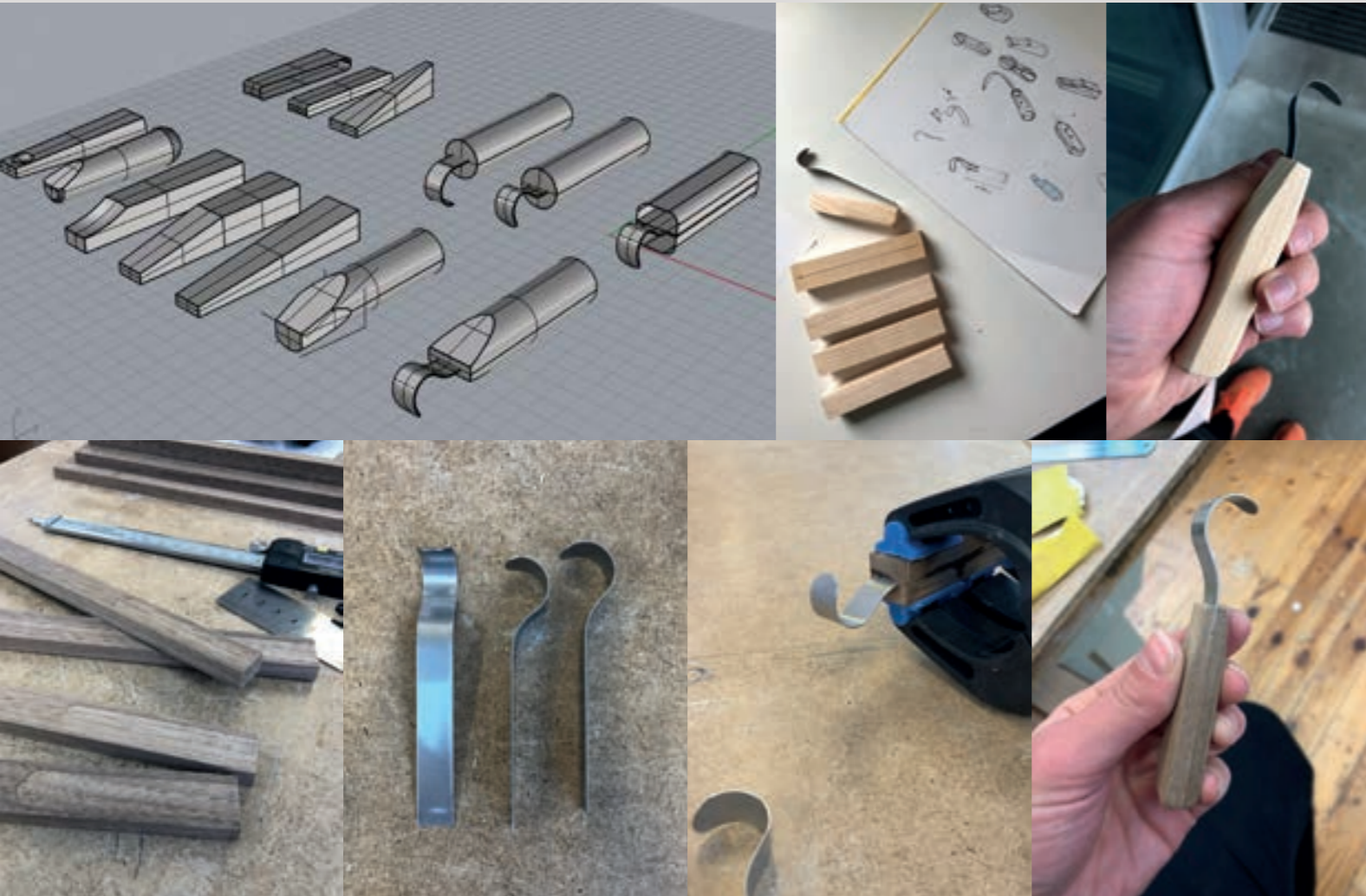
- Precision
- Easy maneuvering
- Small tool
- One simple movement



The first idea is something similar to a paint spatula. It did not work very well. It didn't reach under the iron part. Instead I thought of imitate the shape when I use the finger and nail. It works! But the metal sheet has to be thin, which means it also needs a reasonable width in order to be stable and not bend.

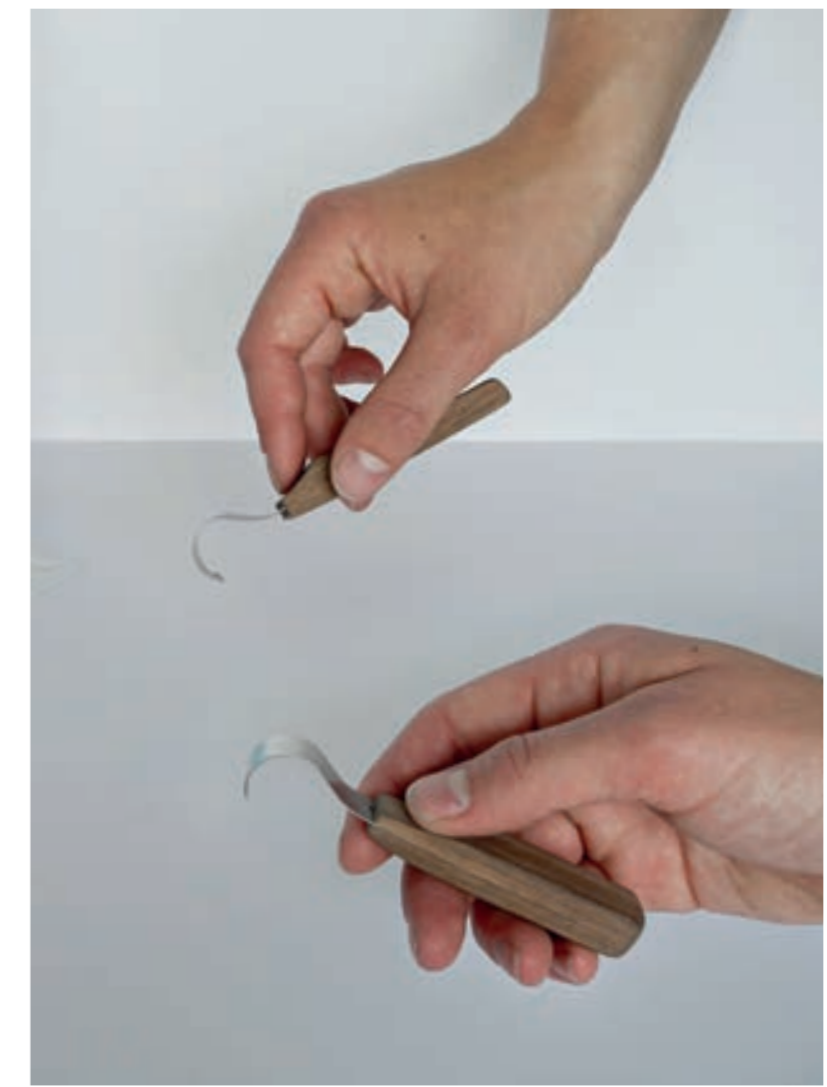
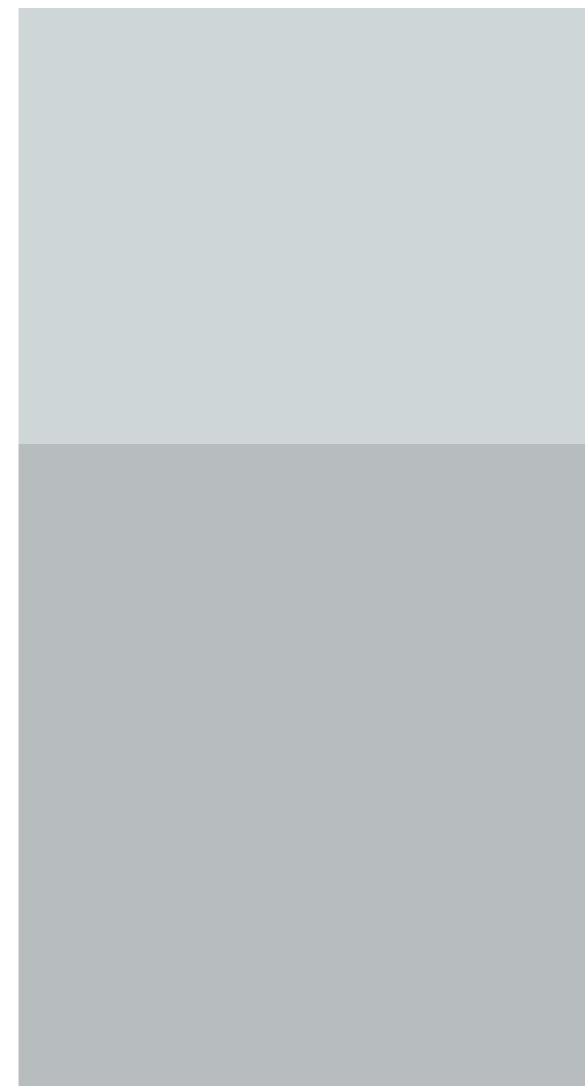


HANDS ON



I had difficulties imagining a shape for the handle. I had a few ideas about angles, length and so on, but when I drew them in a 3D-program nothing looked good. I was also limited by time - I did not have time to 3D-print or produce the handle somewhere else. I had to make them myself in the workshop. David in the school workshop has great experience of shafting tools and was really helpful. Together we made a plan: two pieces of wood glued together, with a milled place for the metal blade.

I used the sanding machine to shape the wood (walnut). The first one I shaped before gluing the pieces together, and the second one I glued first and shaped afterwards. I also made the two shafts a bit different from each other, but with the same main idea in head.



PROJECT 5

Tool for cutting halloumi, feta and other similar cheese

This project took quite a lot of turns. The difficulty of making decisions was due to that all options were equally good. Either way I turn would have resulted in a good product. How do you make decisions without clear dividers? Gut feeling I guess... So if I can find that, I can play around and find something that I am happy with.

SITUATION

Sweden is the top three halloumi consuming country after Cyprus and Greece. Could be a meat substitut. These kind of cheeses are a sticky business to handle. Want a tool to cut perfect pieces and keep my hands clean.

REQUIREMENTS

- One straight movement
- Lot of force
- Comfortable handle
- Easy to wash



SIZE



FIRST TEST - DID NOT WORK

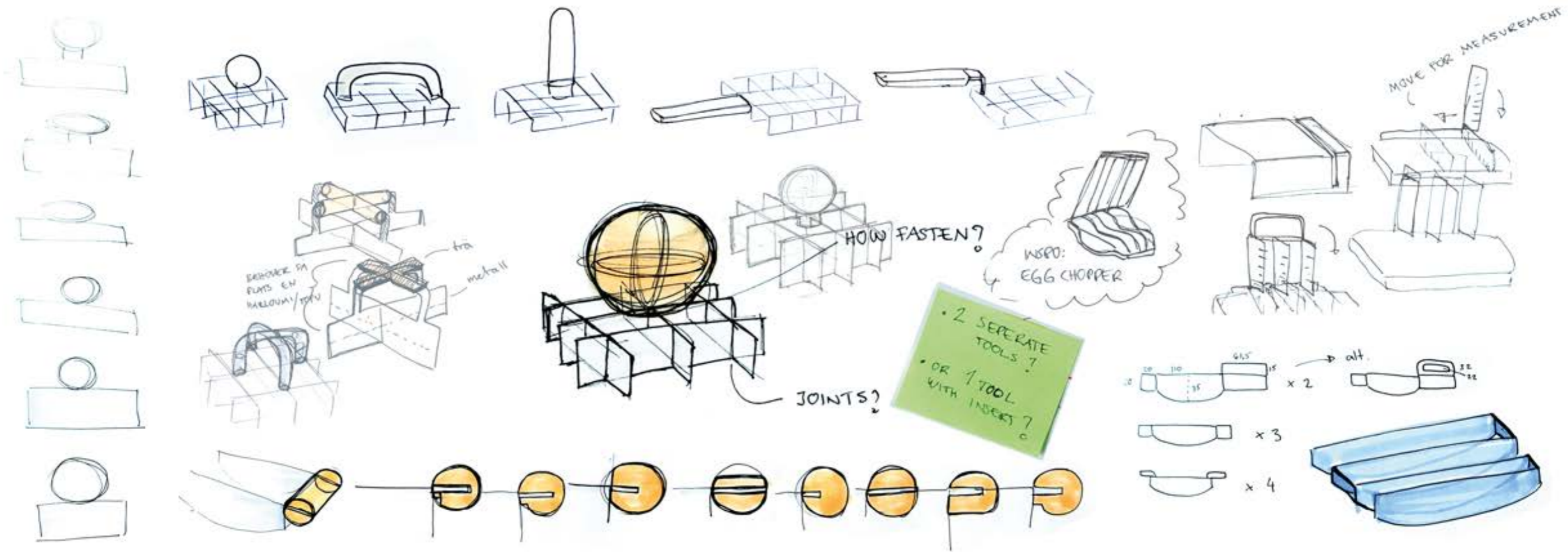
CAN AN APPLE SLICER CUT THROUGH CHEESE?

My mind went to an apple slicer. It is sturdy and cut through the quite hard fruit. I borrowed this red one from my friend and classmate Fredrika and tried cutting halloumi, feta and tofu with it. It went surprisingly well! I thought halloumi would be most

difficult to cut due to its consistency. But it was really easy to cut, actually the feta cheese was the cheese with most resistance. This test went well and I will refer to this concept in my final product which will work in the same way regarding the metal blades.



The metal is sharpened on one side for easy cut.

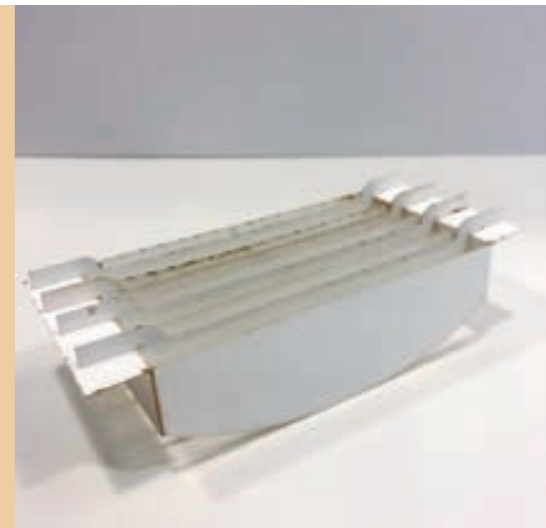
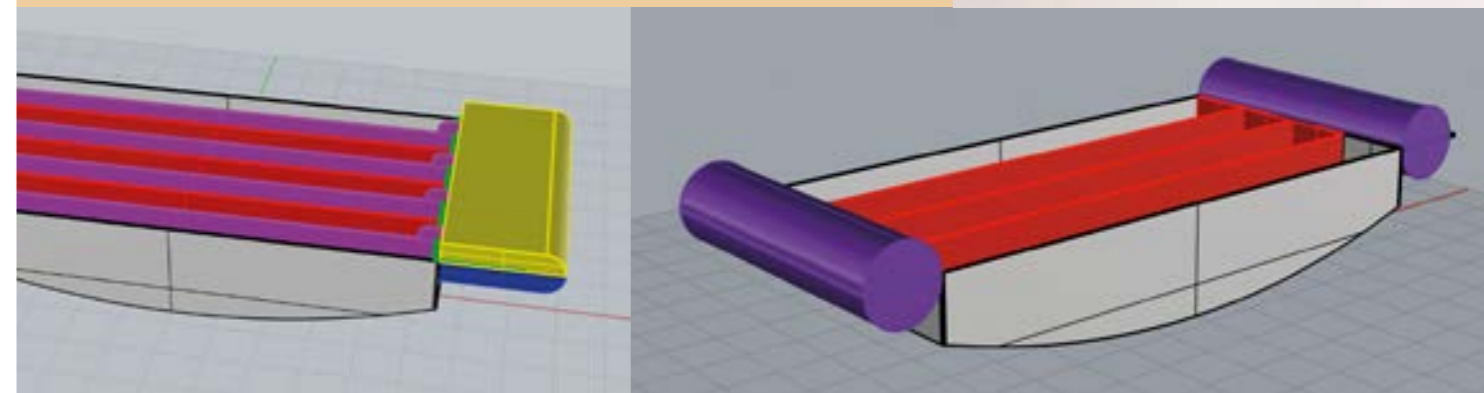
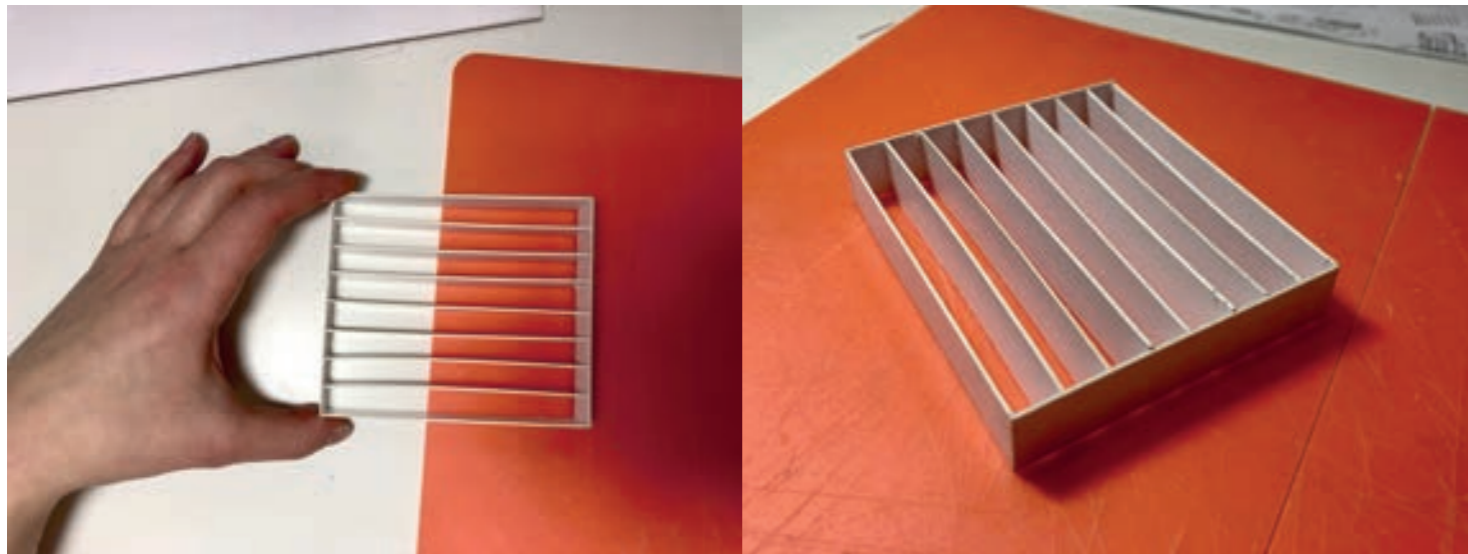


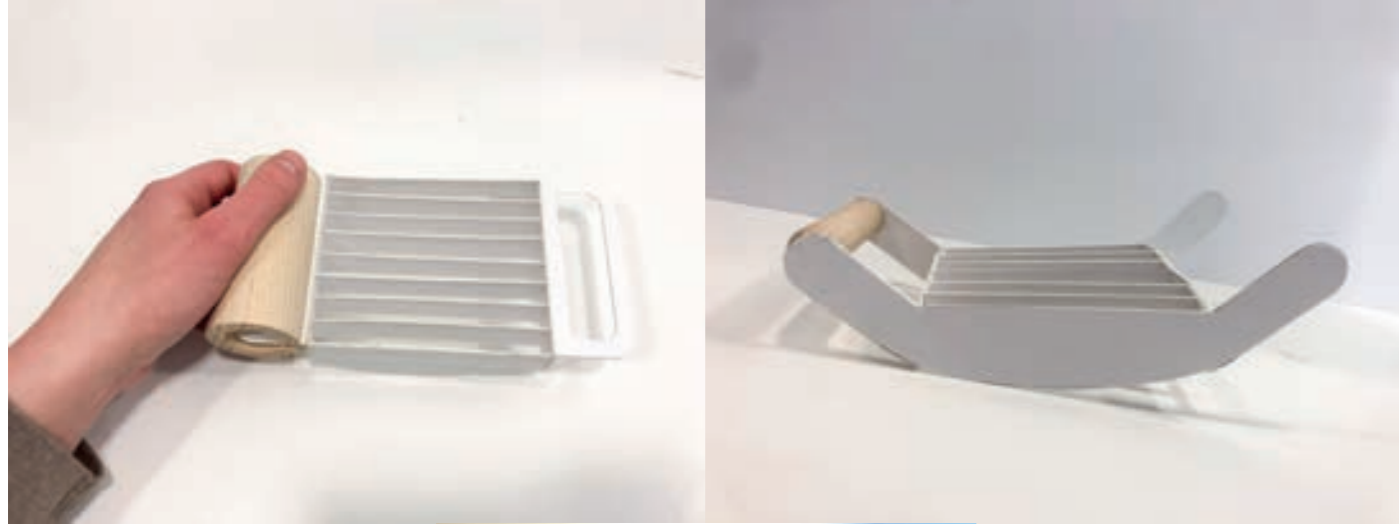
FIRST IDEAS, SKETCHES AND MOCKUPS

The original idea I had was something similar to a stamp - one handle, one movement. I also want to be able to cut both slices and dices. Halloumi is often cooked in slices, while feta usually is diced. I also thought about

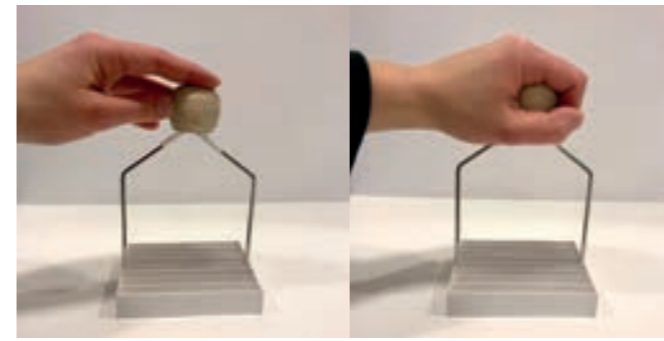
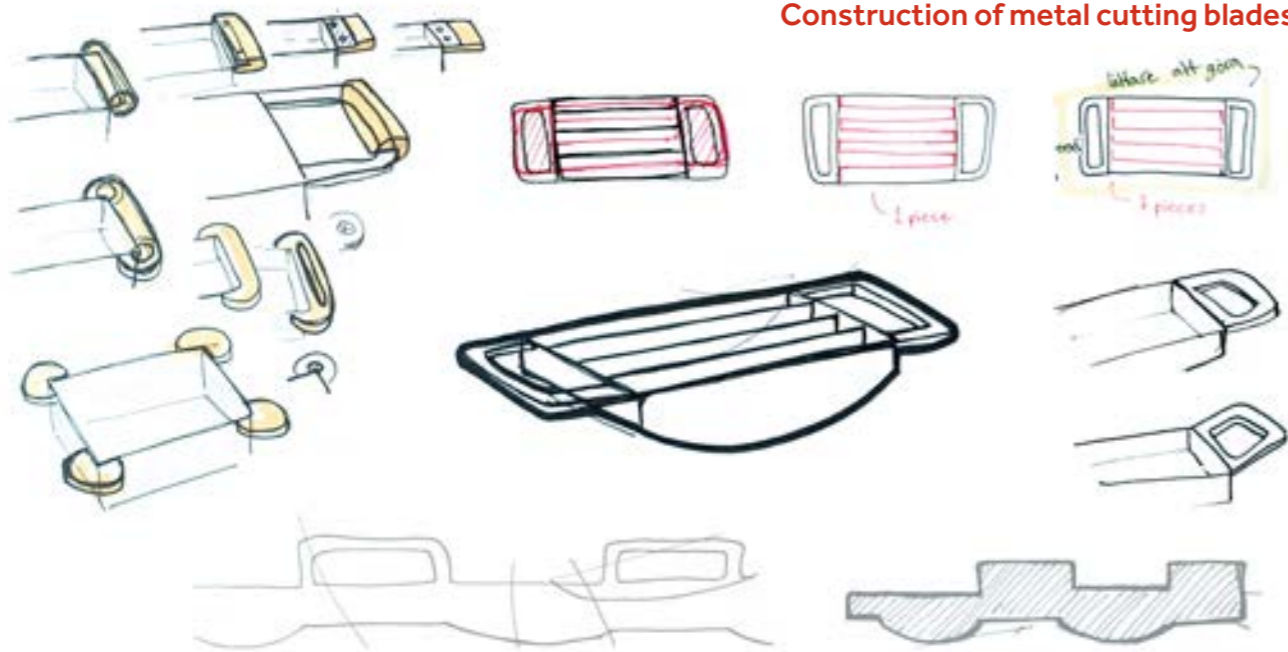
the egg slicer again, but something that is more stable. However, the concept of the apple slicer felt both simpler and easier so I continued working with that.

I worked a lot with if it should be one or more tools for the different desired cutting variations. I wanted to cut slices and dices - the dices about double the width as the slices. So I worked on a tool with an insert, which also gave the opportunity for both narrow and wide slices. To dice you would have to cut twice - the second cut 90° from the first. After a week or two I decided to instead make one tool for each function. I remembered that my project is about *monotools*, not *multitools*.

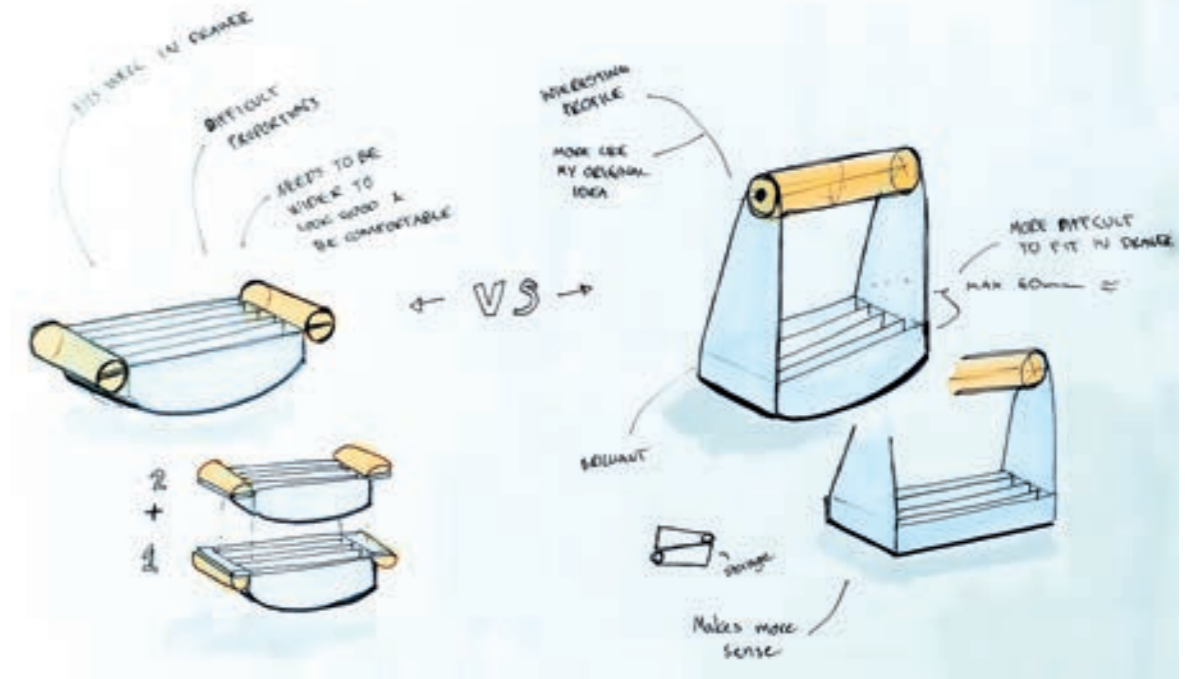
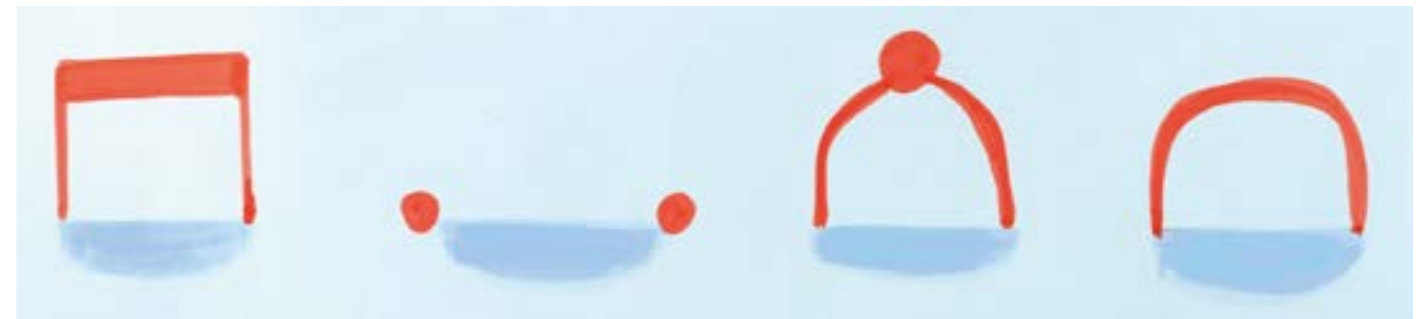
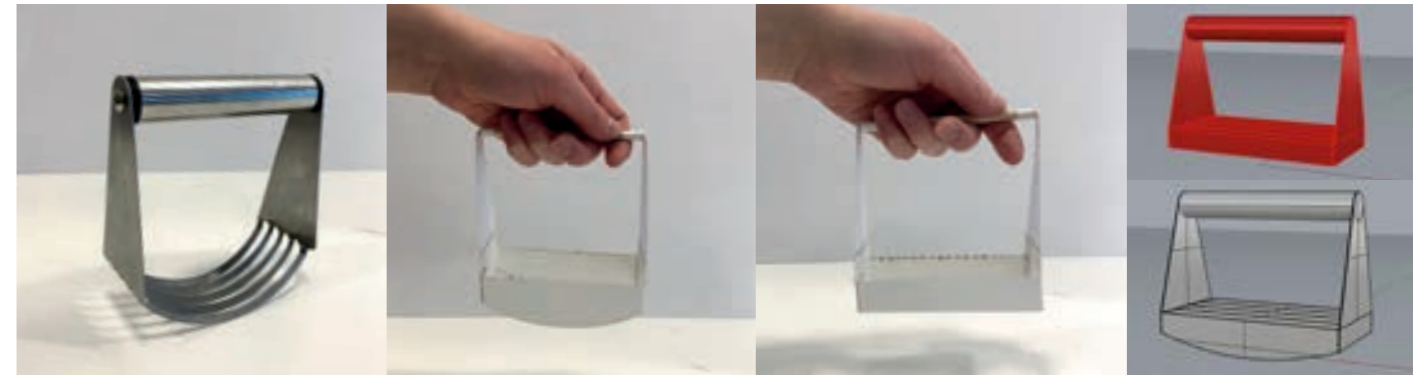


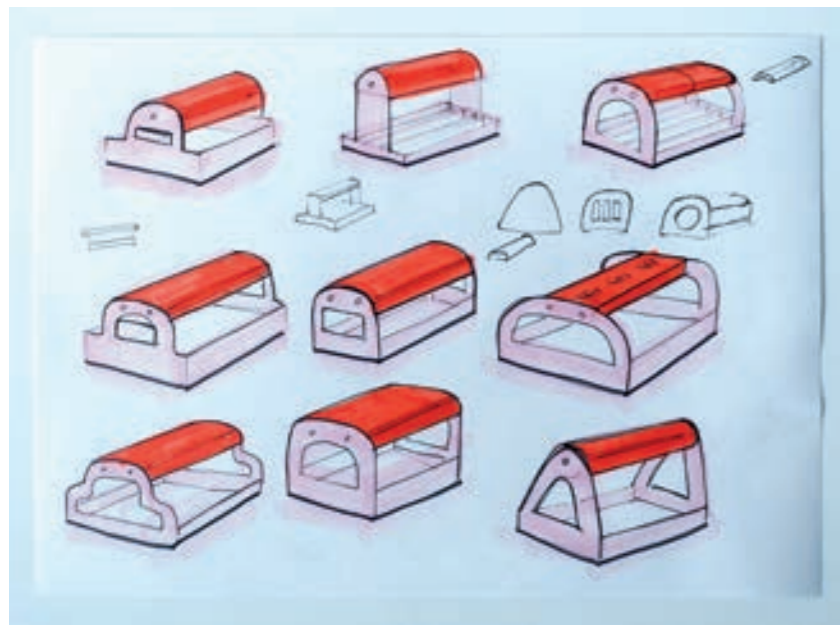


Construction of metal cutting blades



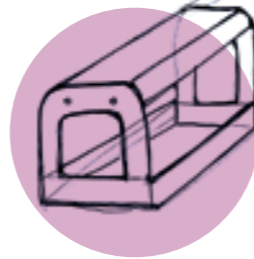
The battle between one- and two-handed tool... With two hands it feels like you get more force. But one hand gives a feeling of simplicity. I believe these both options would work fine, so I can really just choose whatever I like. I wanted to make something that is more different from the apple slicer so I chose to continue work with the one-handed concept.



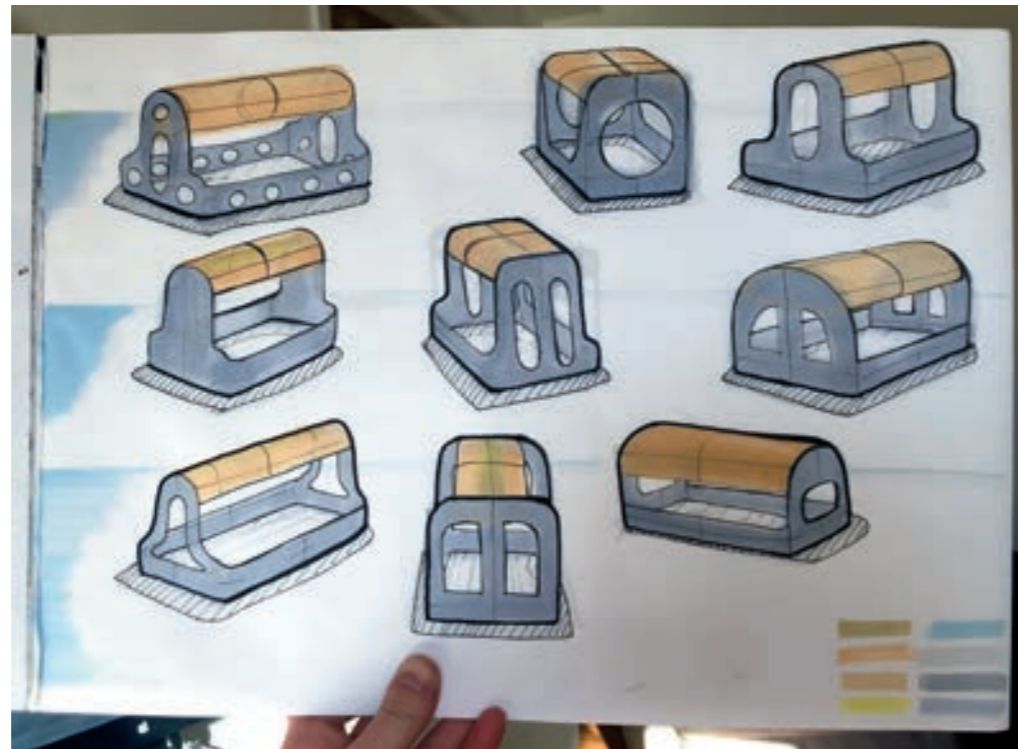


WORKING WITH SHAPES

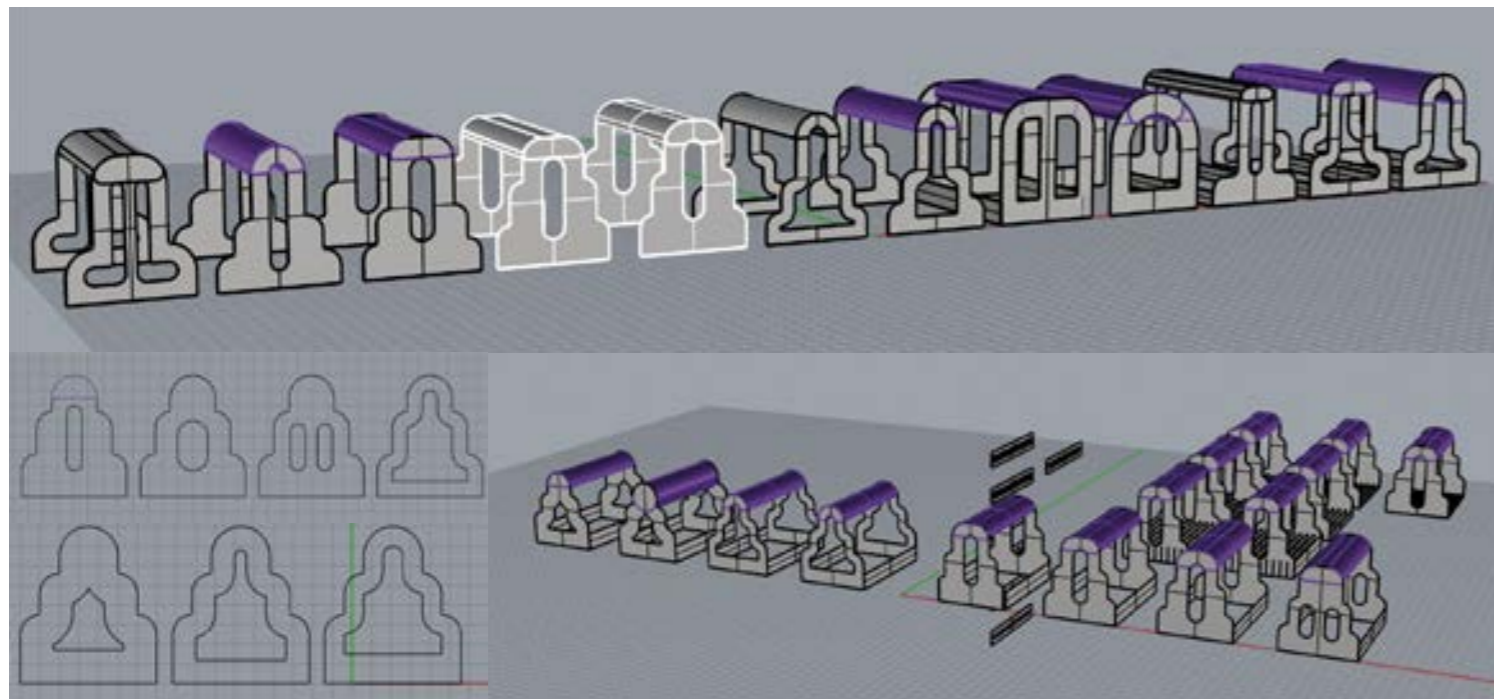
Some of my other projects have shapewise been based on circles or squares. I want to try to do something different with this one. It's okay to start with a circle and a square but I want to make a little more advanced shape or variation.

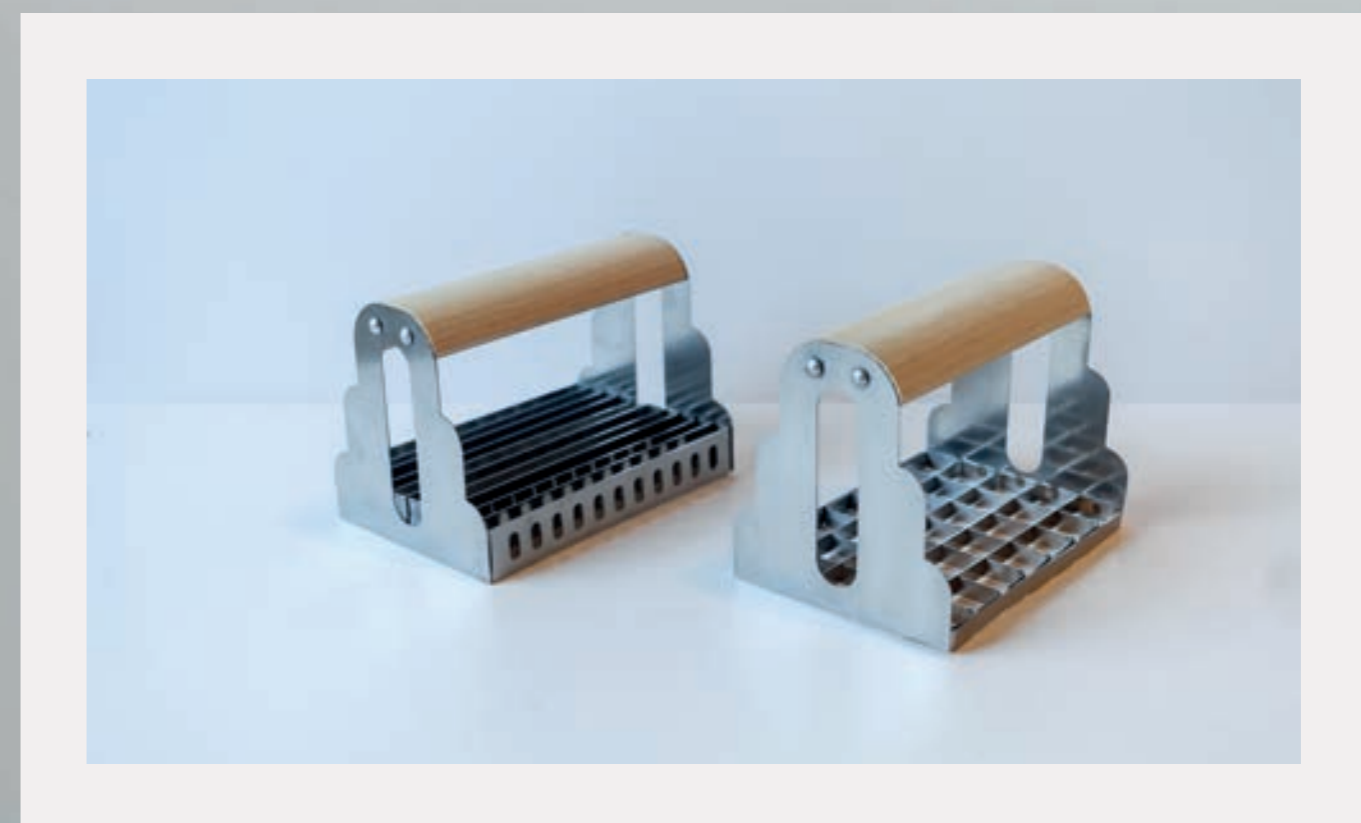


After sketching different options for shapes, I found a few that I liked and drew them in a 3D-modeling program. On the screen I got better understanding of proportions and could sort out what I liked. This sort of detailed graphic-like work is easier for me to make decisions about, compared to when it comes to larger things such as function or a variety of larger difference in options.



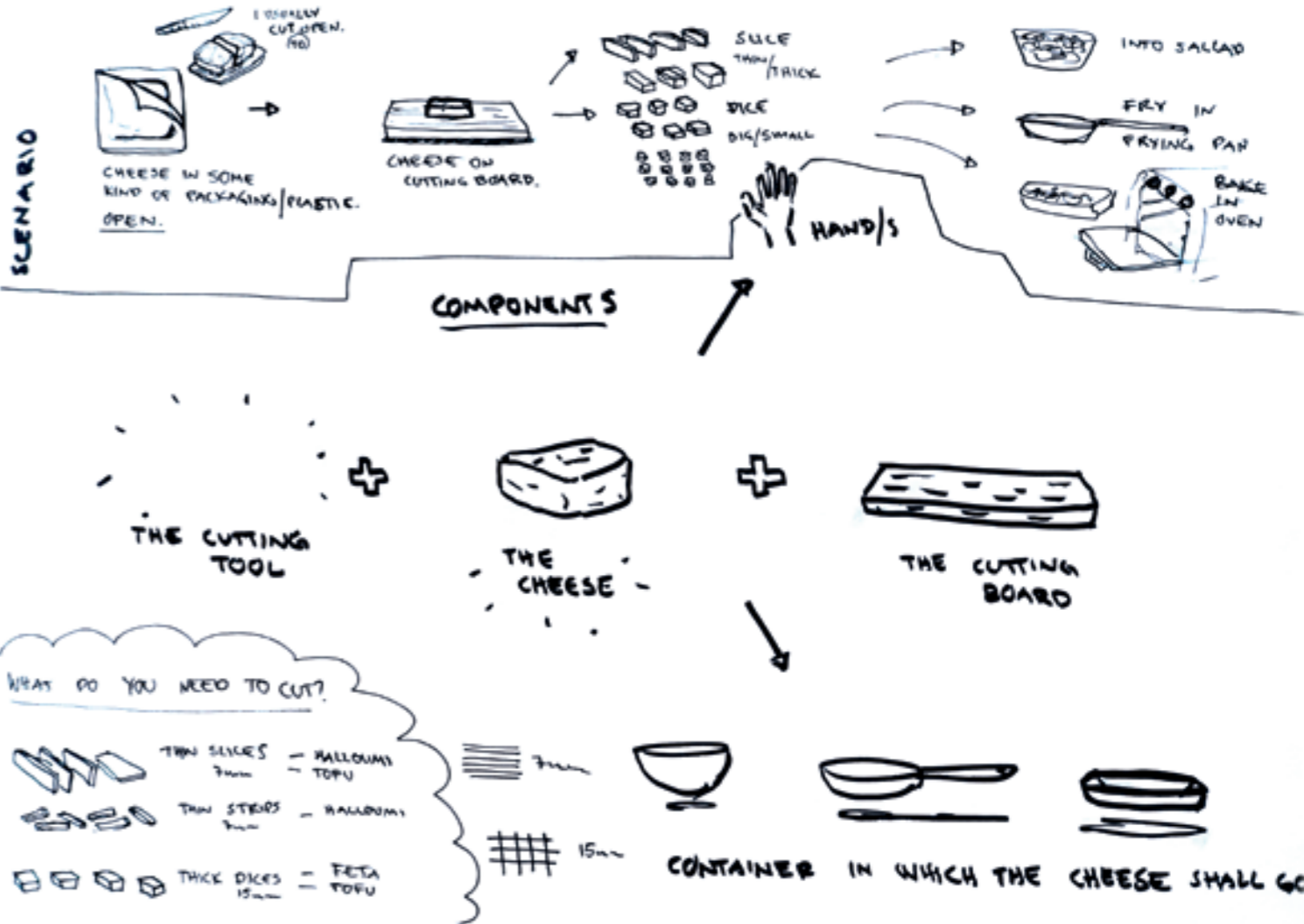
PUTTING THE PIECES TOGETHER





REFLECTIONS ON CHEESE SLICER/DICER

The overall project is designed to force me to practice quick decision-making. In hindsight I can see this particular project got a quick start and I realize that there are some unexplored grounds that I missed due to this. If I would remake this process I would have taken a step back in the scenario chain and look at the whole picture - the cutting board, packaging, what you do with the cheese after cutting it, etc. Then I could create something that fits and make the whole scenario easier, rather than just solving one small part of the process.



PROJECT 6

Tool for cleaning wooden cutting boards that you cut vegetables on

Also took many turns - but ended up far more simple than expected. The first and second iterations didn't do the job and I had to go back to basics in order to figure out a concept that would work. Halfway I had to "kill my darling", that was difficult for the "gut feeling" since it was something I liked. At the same time I knew it was necessary.

SITUATION

Wooden cutting boards should not be washed with water and detergents too often. It dries out the wood, making it crack. When cutting vegetables, which mainly contain water, it is enough to just wipe the cutting board clean with a cloth.

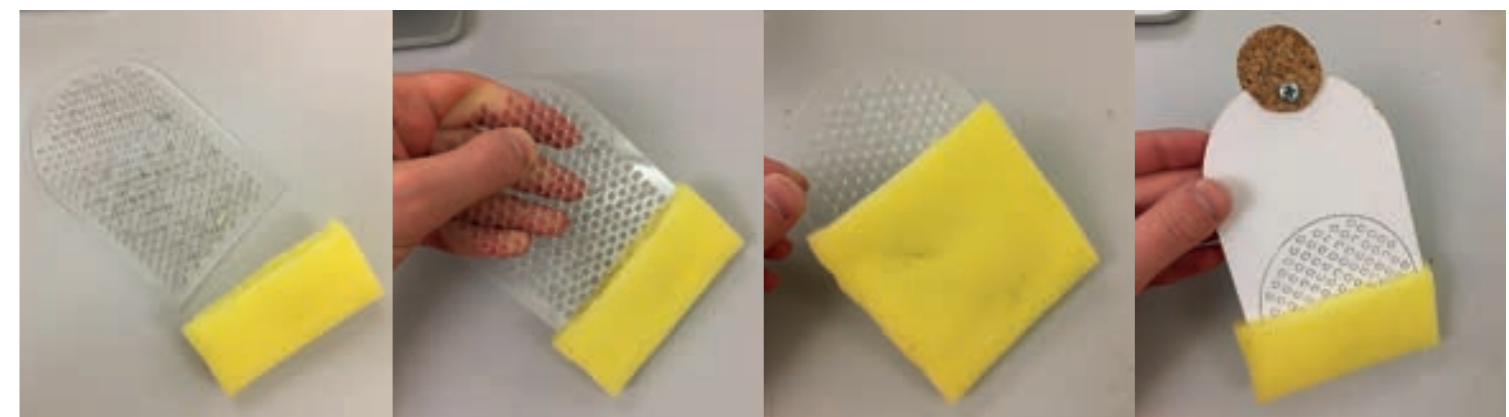
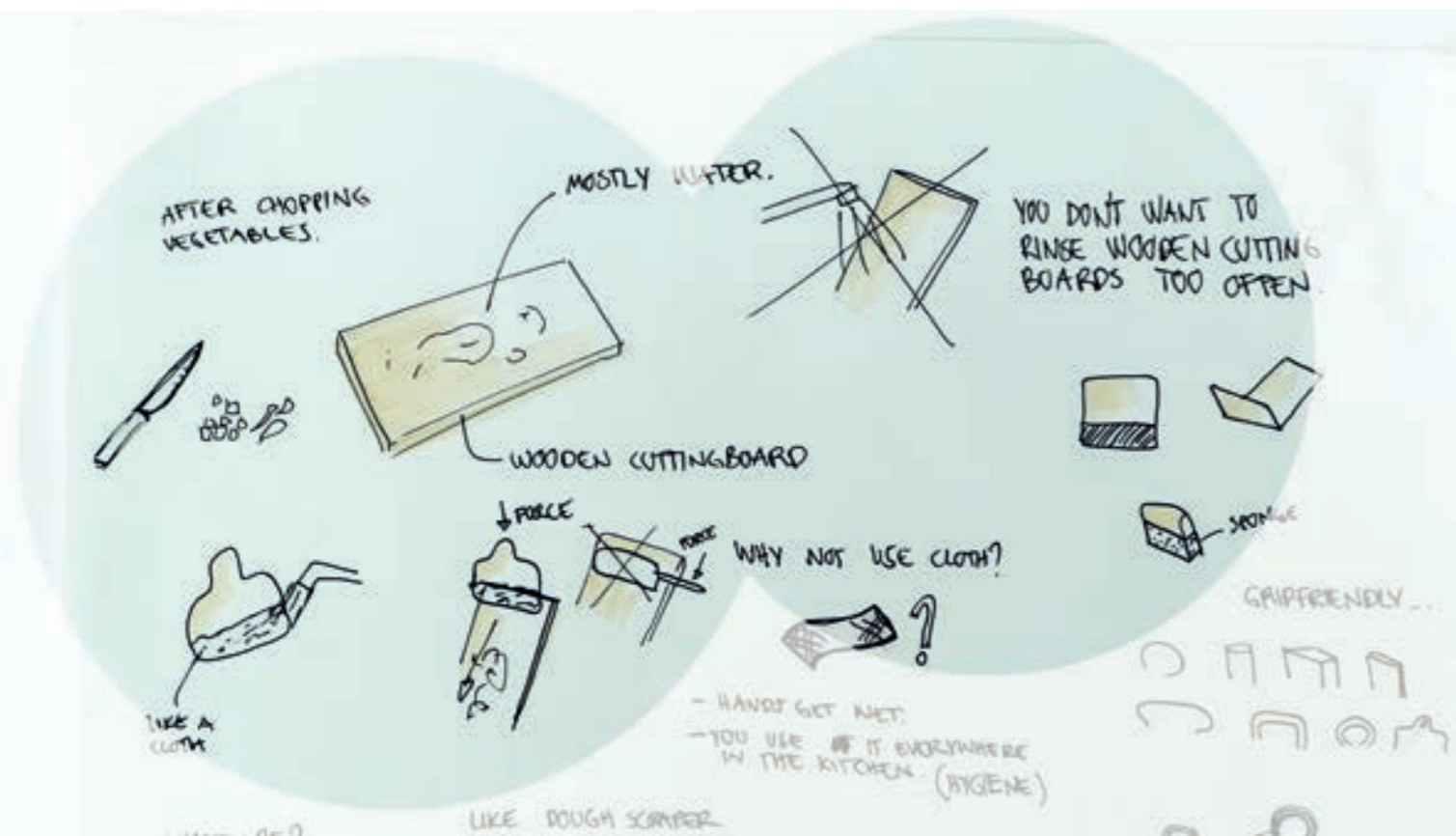
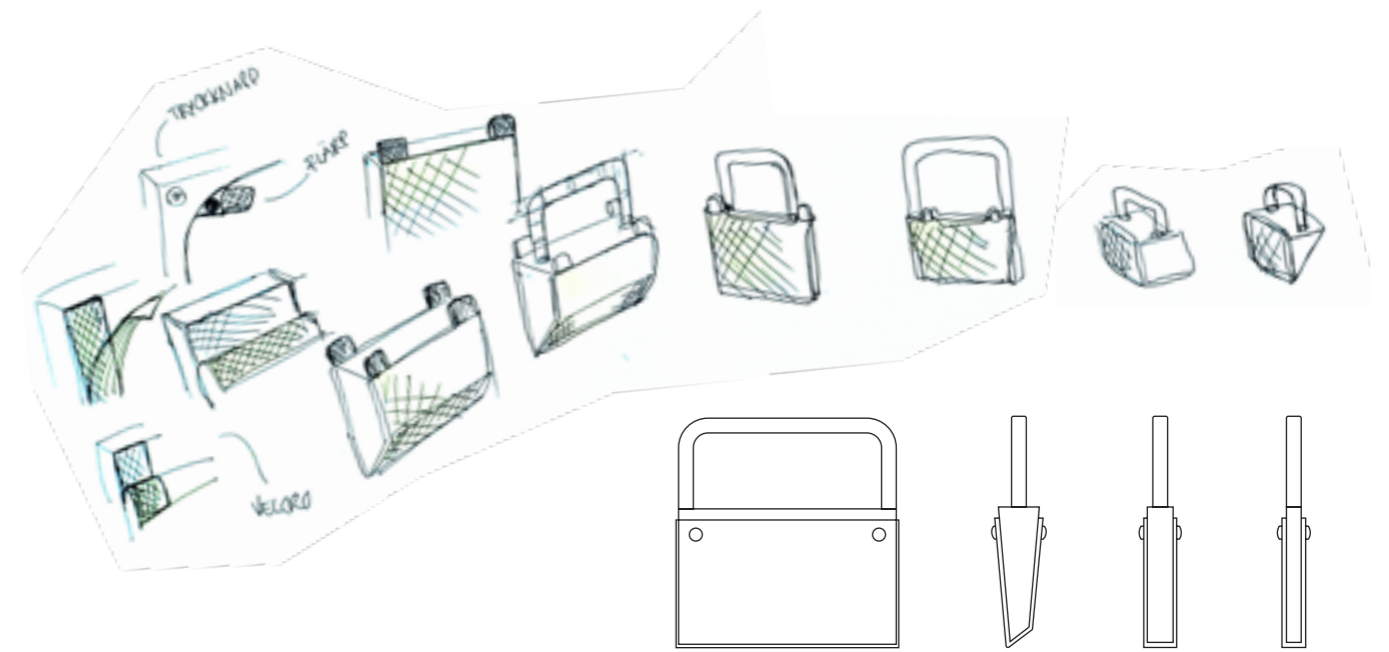
REQUIREMENTS

- Get the cutting board clean
- Easy to wash
- Dry so no bacteria grow
- Grip friendly

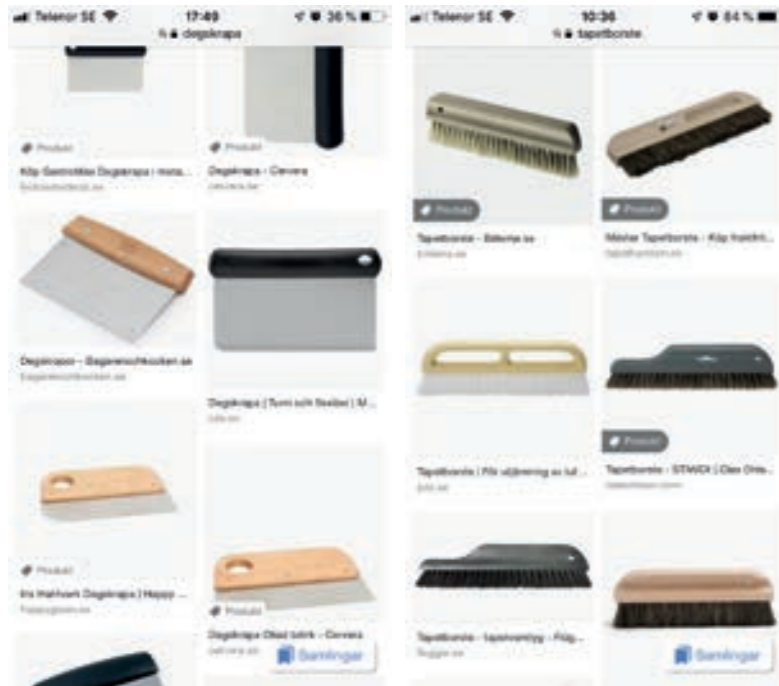
FIRST CONCEPT

My first thought was an object with some sort of water absorbing material that scrapes the cutting board clean. I tried with linen cloth due to its good absorption ability. I wanted to be able to change the cloth

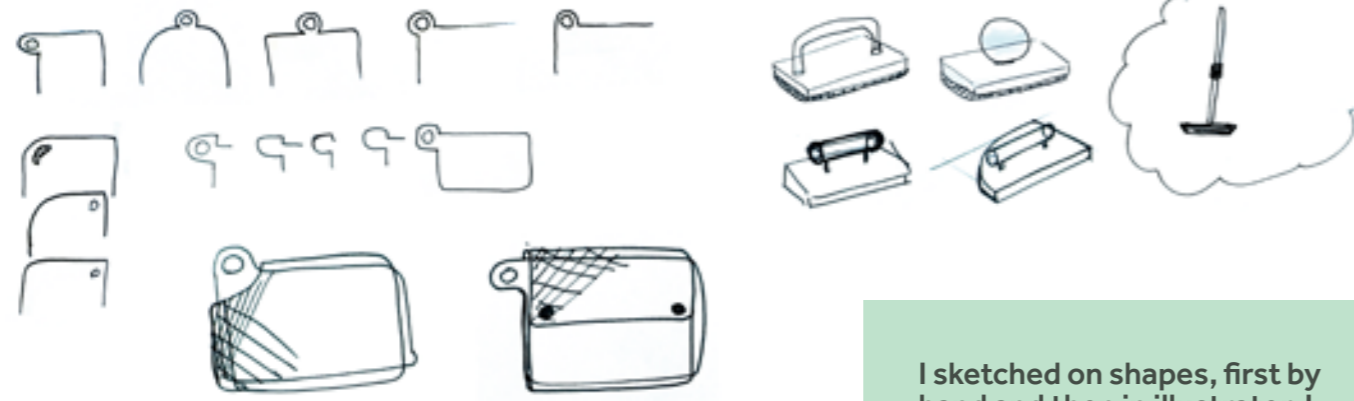
and thought of different attaching methods. I want to avoid touching the cloth with my hands so I put a handle on the piece. However, this made the scraper quite unstable since you need to put some force to it.



SECOND CONCEPT

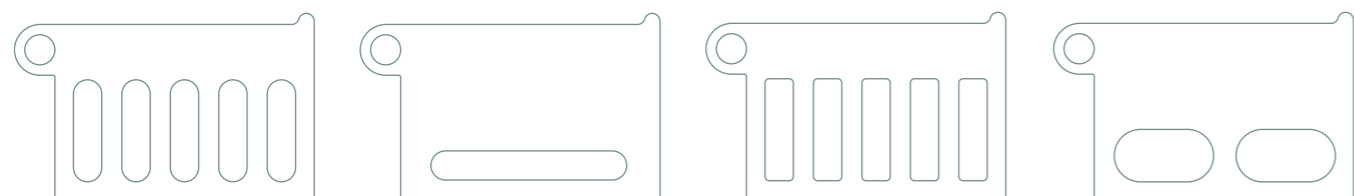
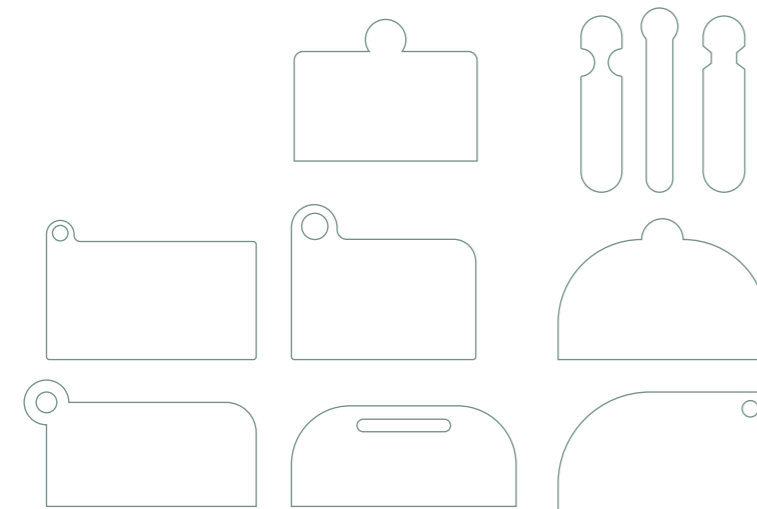


To get stability and allow the needed pressure and force I looked at the paper hangers brush and dough scraper. I also thought briefly about a floor mop. The key is one solid grip friendly piece. I keep working with the linen cloth because I believe it can work well.

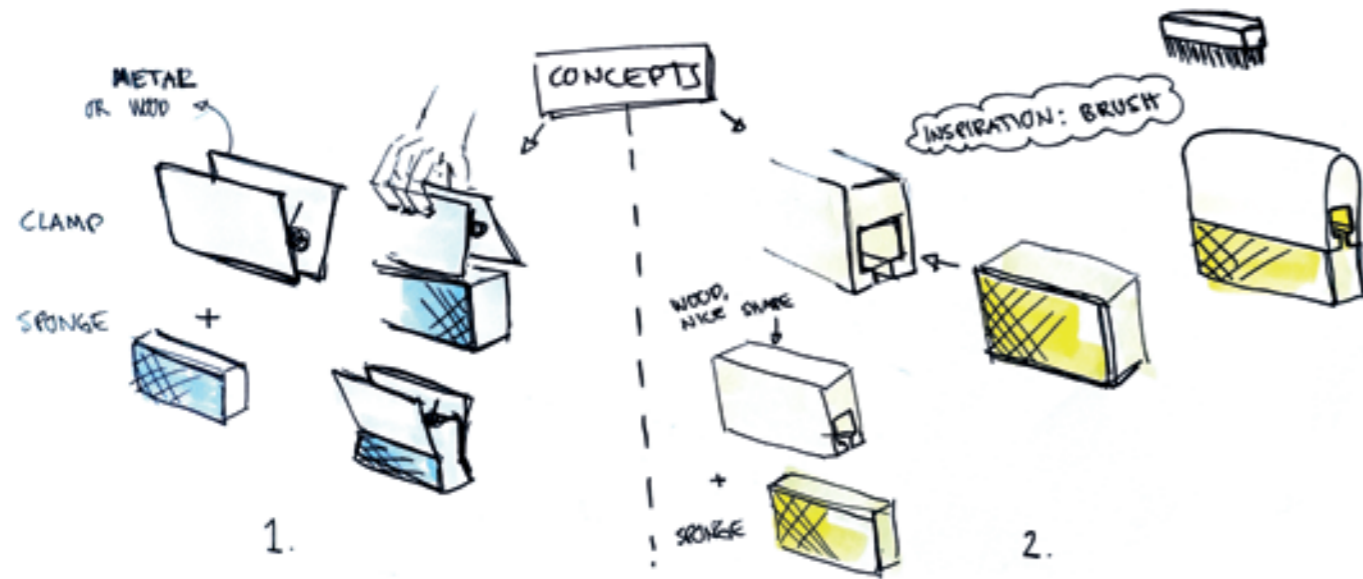


I sketched on shapes, first by hand and then in illustrator. I found a shape that I liked and water cut a piece in 6 mm aluminum. I sewed a linen cloth piece to test my idea.

Unfortunately it didn't work as well as anticipated. The cloth didn't clean that well and it was difficult to get the water out of it. I also thought you could turn the cloth gradually to sort of use the whole cloth. But it sits too tight, which it had to in order to not fall off.

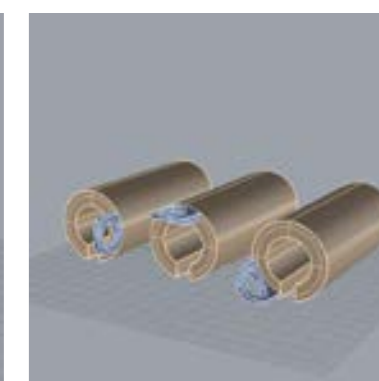
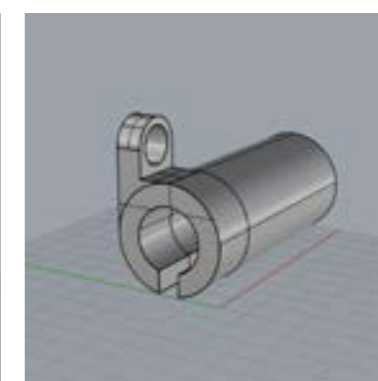
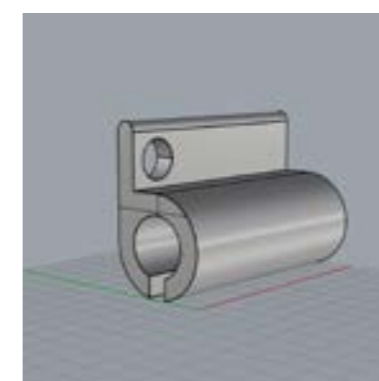
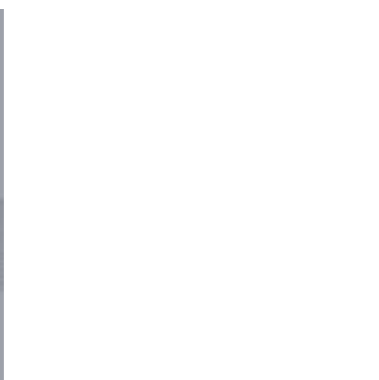
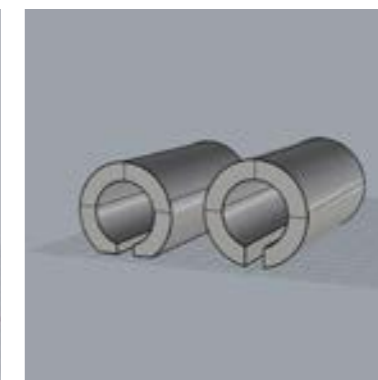
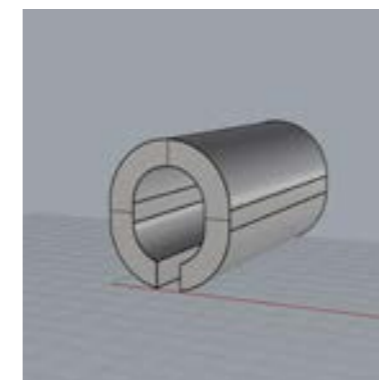
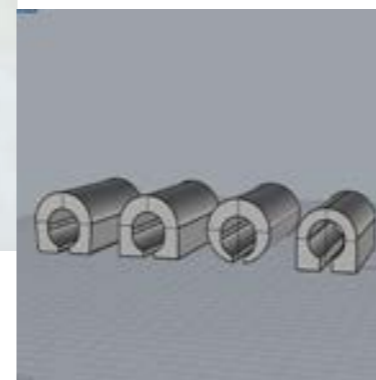
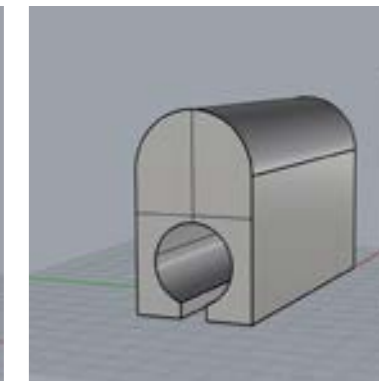
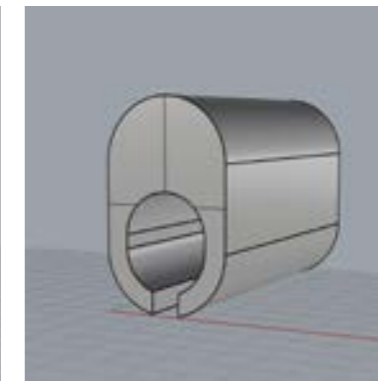
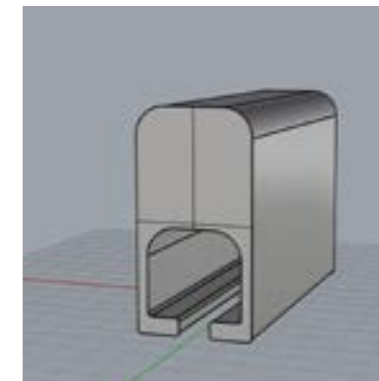
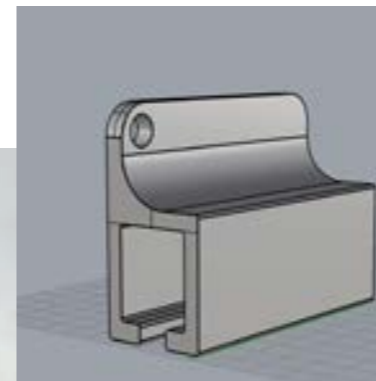


THIRD & FOURTH CONCEPTS



The first test was too small in the diameter, so I made a wider one and it was perfect. Next I worked with the shape of the handle. I tried hard to not make it into a simple cylinder, but production wise the cylinder is unbeatable. It is so easy to lathe and then drill a hole and mill the narrow opening.

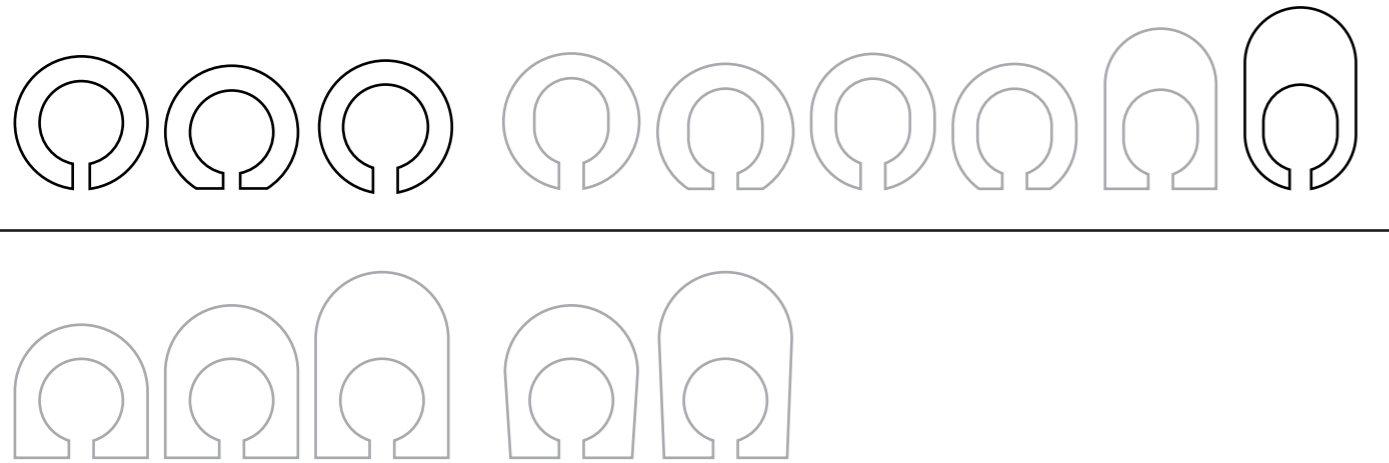
I also thought about attaching some hanging device, but I didn't have time to finish that. Might be nice to add a metal detail to enable storing the product on a hook.



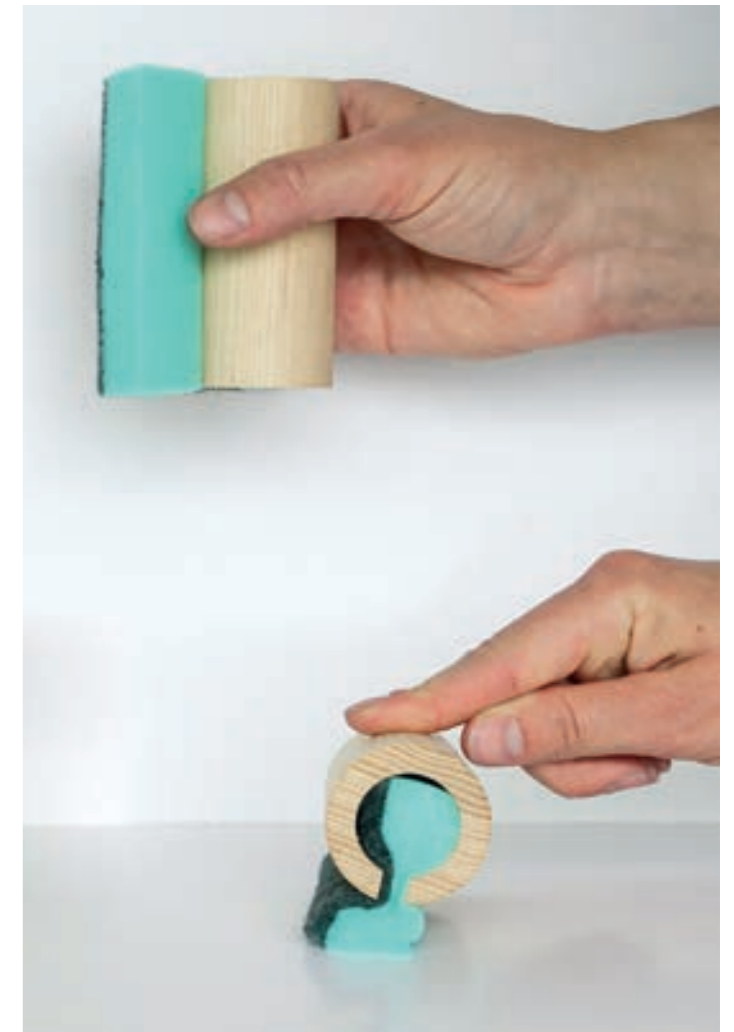
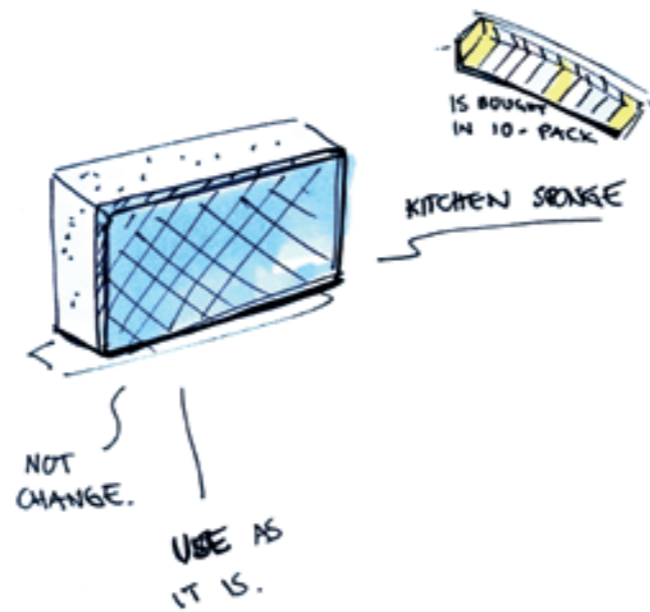
For the cleaning object to work, more absorption is required. Either thicker linen cloth, or a kitchen sponge. I worked with ways to fasten the cloth or sponge in some sort of handle. The clamp idea is smart, but a bit complicated to produce. At least for me, without access to a clamp-factory. I got the idea to insert the soft and formable sponge in a wood

piece with a milled hole or track. I was unsure if it would work, both if it might be too difficult to get the sponge in place, but also if it would stay in place. I had to make one to test. I first wanted the hole to be square - as the sponge. But it was too difficult to make in the workshop. I realized the sponge is soft and probably would fit in a round hole.

PROFILE STUDY



I decided to keep the kitchen sponge as it is, not change it in any way. They are bought in a big pack and I think it is nice to work with existing products that everyone recognize. To shape my products around existing concepts such as this one, but also the cheese cutter (p.54) captures the time we live in. Maybe it can tell a story and give a glimpse of our time for coming generations.



CONCLUSION & REFLECTIONS

I am satisfied with how the project turned out. I got the opportunity to try methods and go through the phases and processes that I wanted. It was not easy and I found myself in agonizing situations many times. I am proud that I got through and did not give up. I feel like I dared to make mistakes and even if I didn't understand it at the time I actually think I made decisions quicker and most important, with less agony, in the end compared to the beginning.

All projects had their own processes with different duration in different phases. It felt like the projects steered their own way, I seldom found myself in a place where I didn't know what to do. I mostly knew if I should sketch, build a paper mockup or make a decision in order to move forward. It was the implementation of it that I struggled with. In hindsight it might seem ridiculous, even for me, but

the smallest obstacle could stop the process for many days.

Self doubt, or project doubt, occurred a couple of times. I started question the products and the concepts, thinking that I must be able to find something that is better. In these moments I had to practice trusting my early decisions and instincts, trusting the process, and also reconcile with the possibility that the concept can fail. I don't have to find the best option all the time, sometimes it's okay with "good enough", and that a bad result also is a result.

One idea I had regarding creating this family of products was that they will reflect our contemporary time, just as my collected tools do. But I see now that they tell more about the design process. In a subtle way of course, but they do each sit on an individual story.

RESULT: OBJECTS



RESULT: MOCKUPS





MONOTOOLS
MASTER DEGREE PROJECT
AGNES SJÖBERG
2018-2019