



VIVIAN DODD

Corset

Technical File

Base Notes

Base notes is a collection inspired by modern perfumery and its origins in 19th century Europe. A time when natural and synthetic materials collided, and society and dress was strictly divided along lines of gender and social class. It is a reimagining of this style of dress for the modern age, doing away with soft curves and hidden structures, and replacing them with angular designs inspired by perfume chemistry.





I wanted to focus heavily on using biodegradable materials for this project, and for future projects.

I sourced my fabrics from Esce-tex, cloth hopuse, cloth atelier, top fabrics, the New Craft House, Empress Mills and Whaleys Bradford.

I sourced my trims mostly from an online shop called Button Queen, who had some really nice metal buttons I used repeatedly in the collection.

Malui Coconut Lantia : Vaguen Supplies
500 gsm
52.64 / 120x80cm 100% Coconut?


C Lonic Raw + Org
16.00% 100% cotton (Gore cotton)



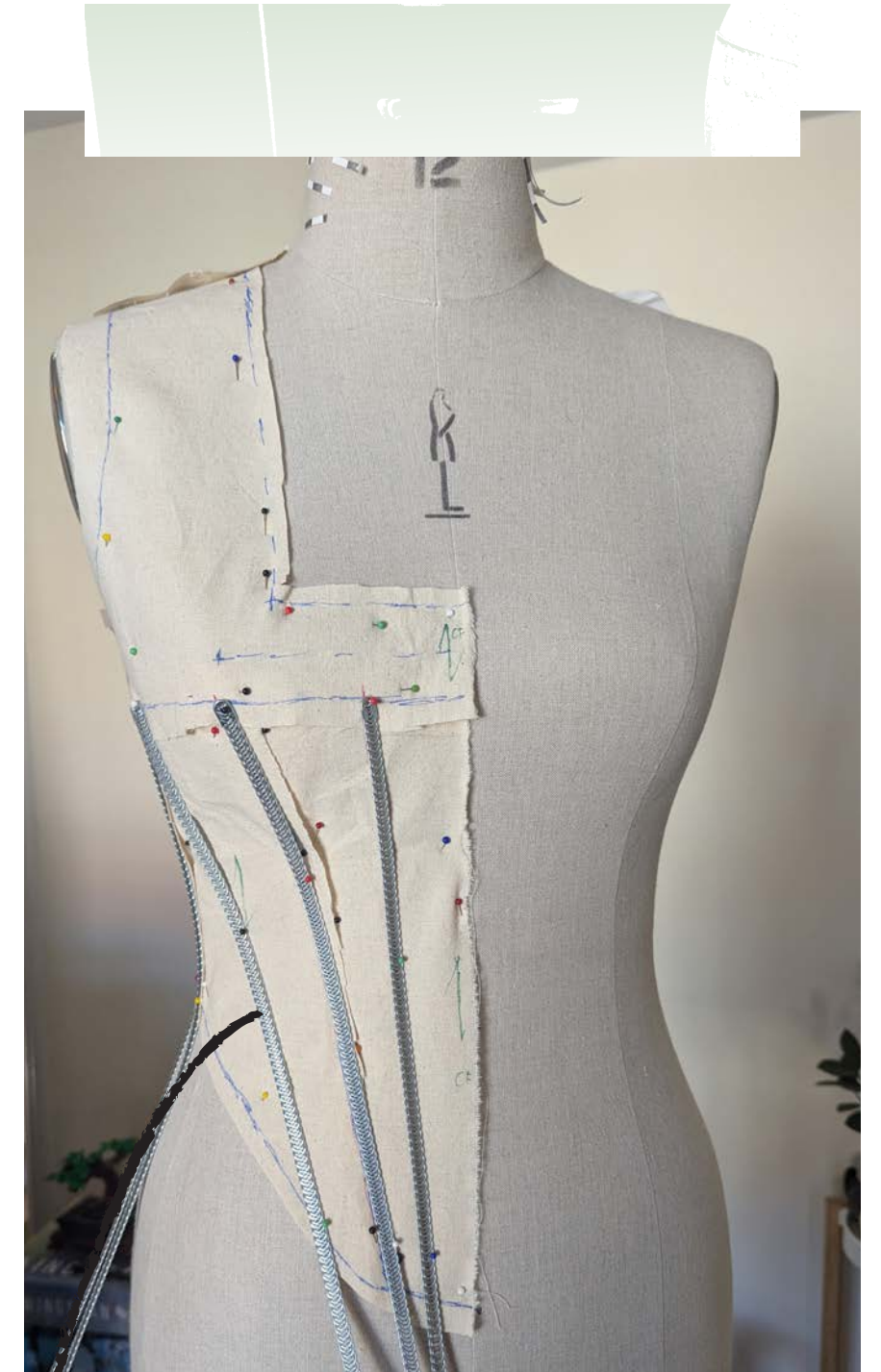
Background Research and Repeated Techniques



Historical Corsetry Construction



Over the summer before starting final year I wanted to learn more about corsetry. I made a few corsets in my internships, but I felt like it was an area of design that I had no real knowledge of.



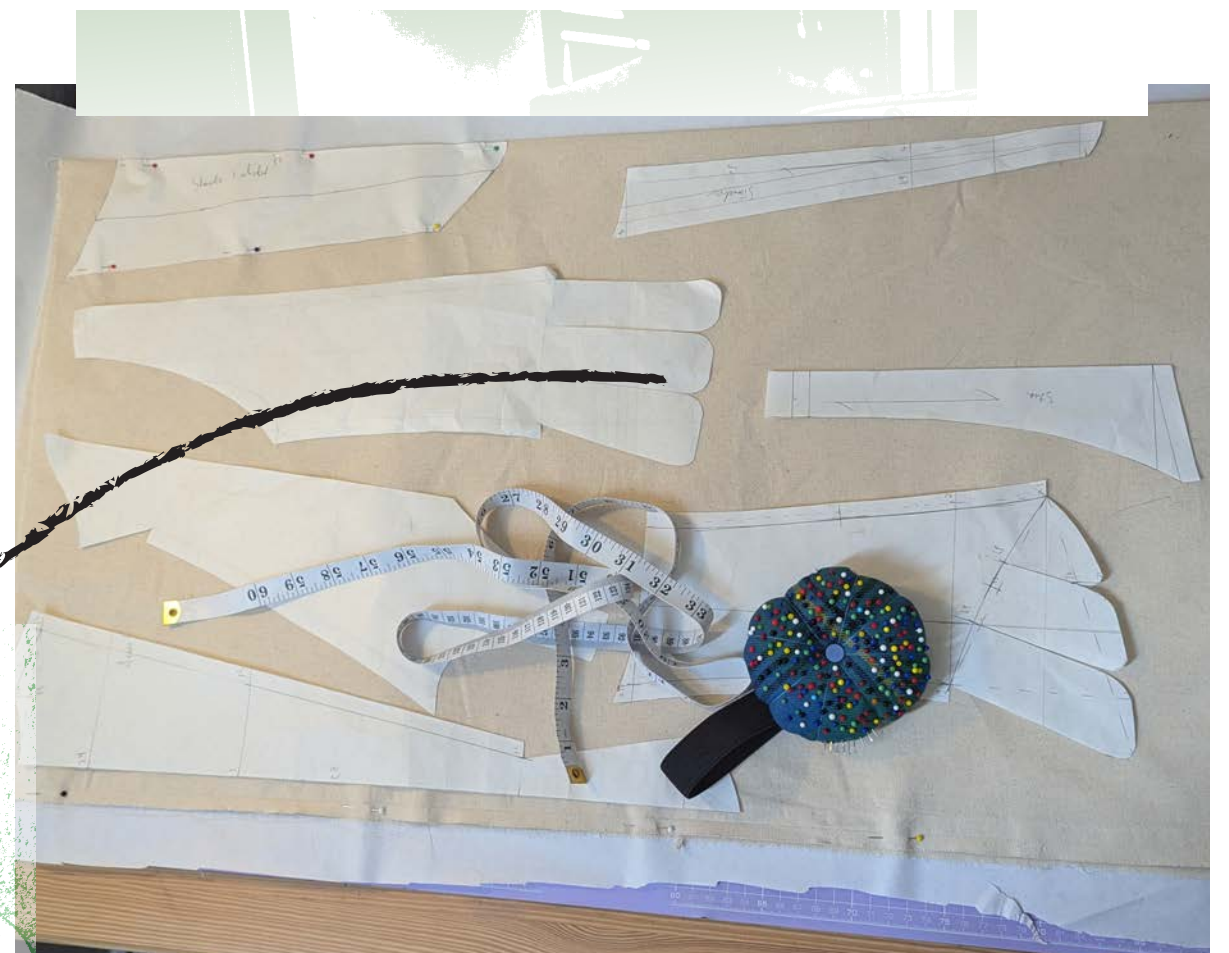
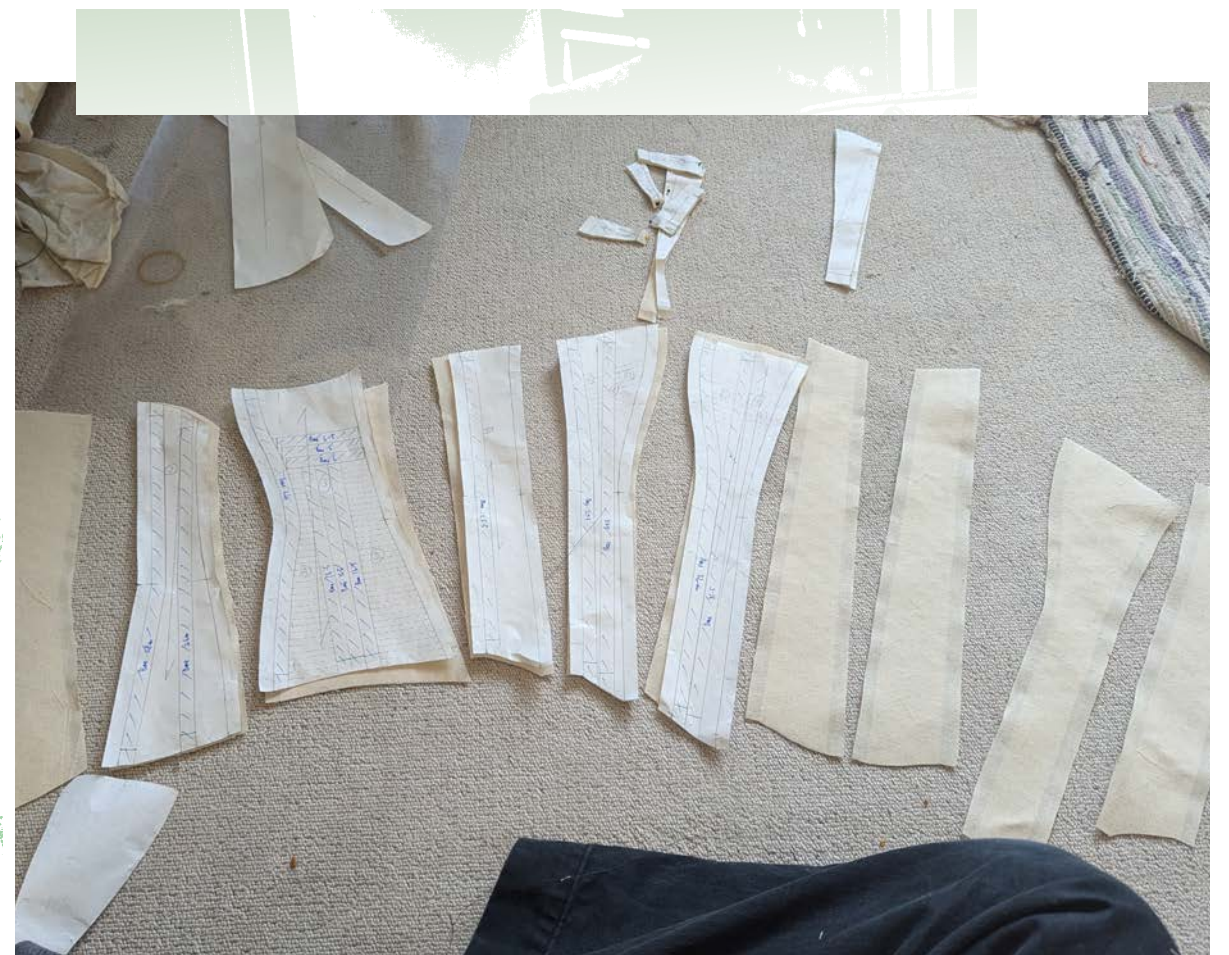
I tried draping a corset design without any reference, but I realised straight away that I needed to do a lot more research. I wanted to feel like I could make something that felt authentic.



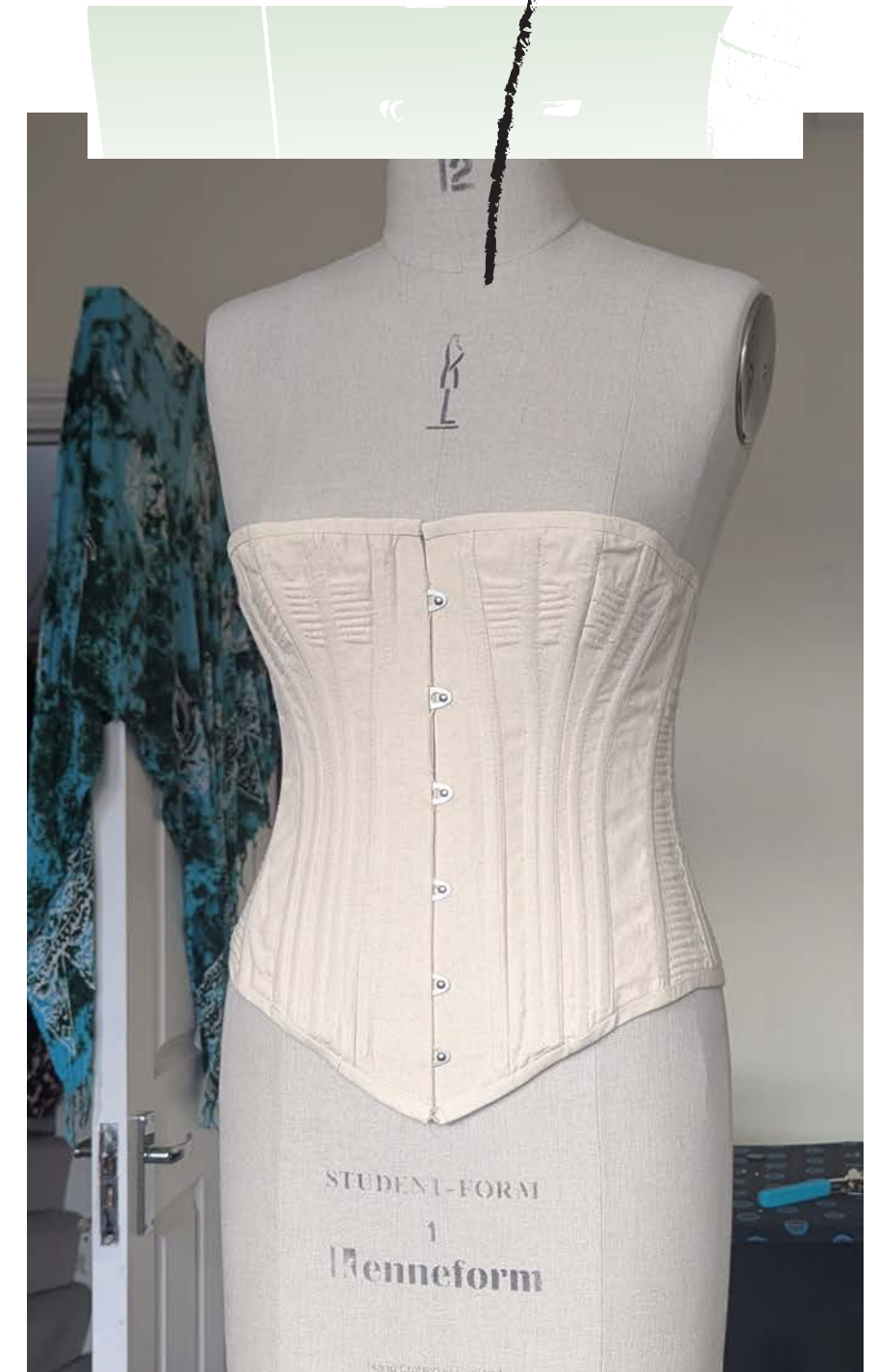
I drafted a few patterns from this book by Mandy Barrington to learn how historical corsets were made. My plan was to potentially use these as blocks/starting points for designing, which I found worked quite well for me.



I also found a lot of design details here that I would never have thought of without this research. The waist "tabs" from early stays for example became a feature in look 1.



1890 wasp waist corset pattern - I used this pattern as a starting point for a lot of design as it was from the time period I wanted to focus *on*.



1793 Short Stay Pattern - I didn't end up developing this one any further



I toiled both this 1750-90 pattern and the 1890 pattern fully to learn more about the actual construction that went into these corsets.



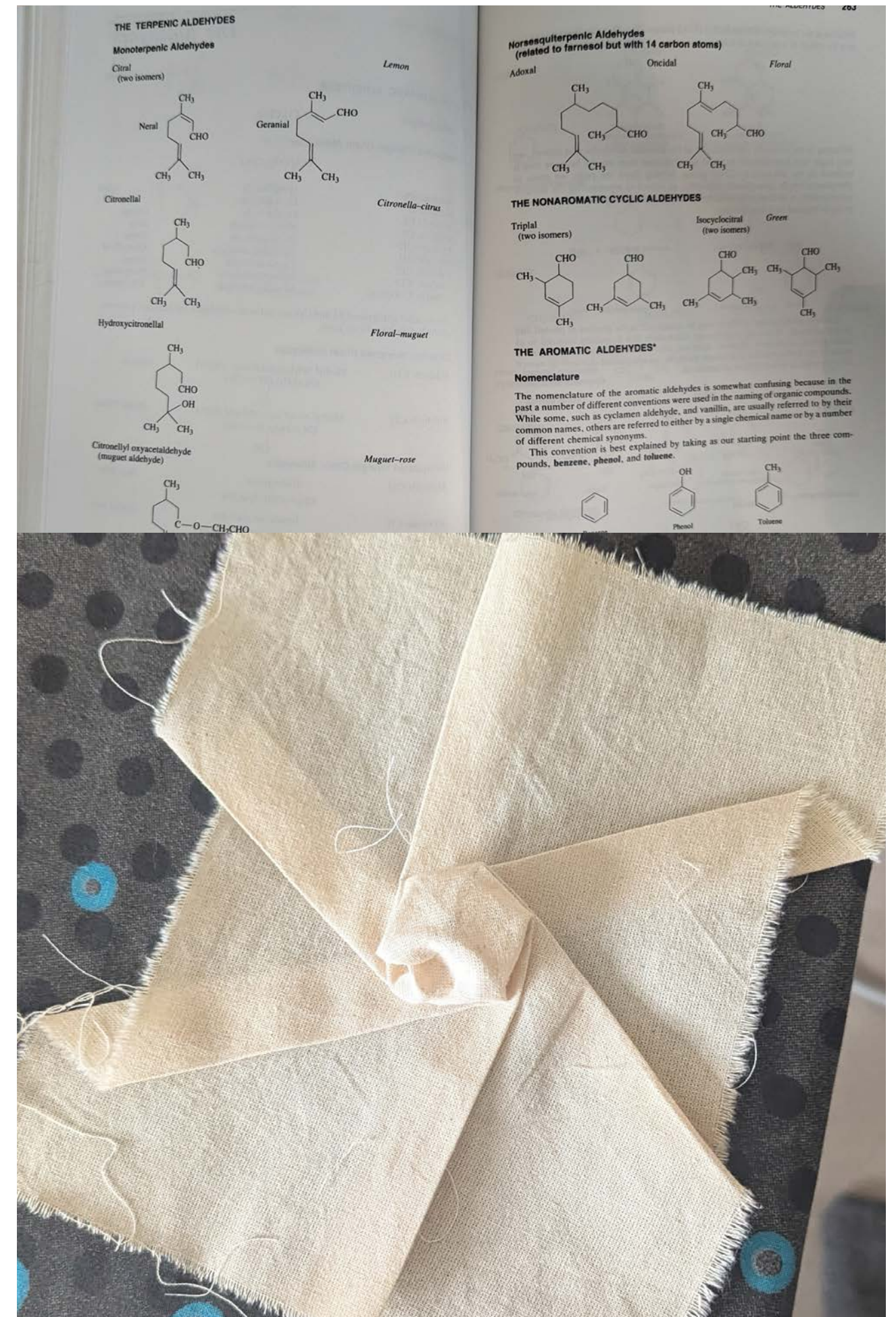
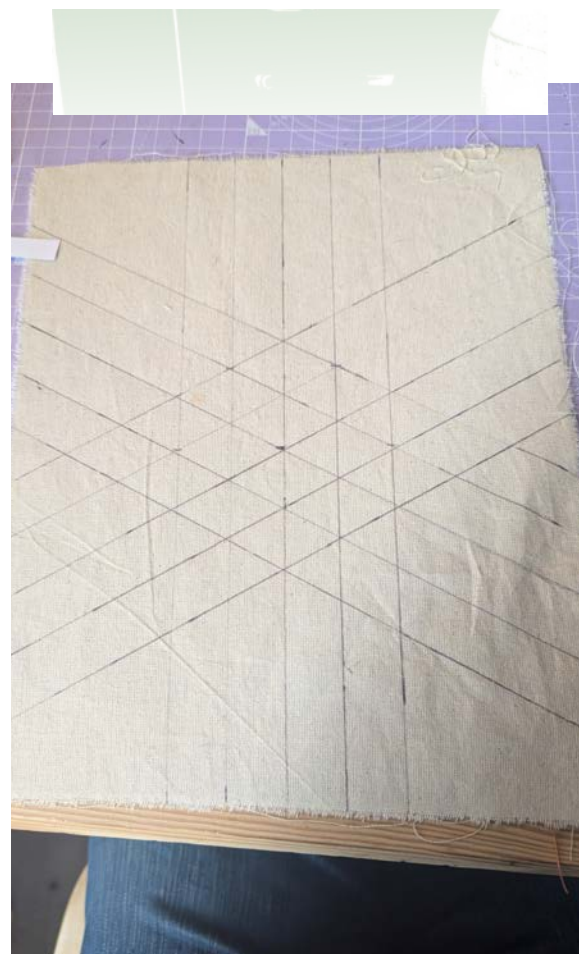
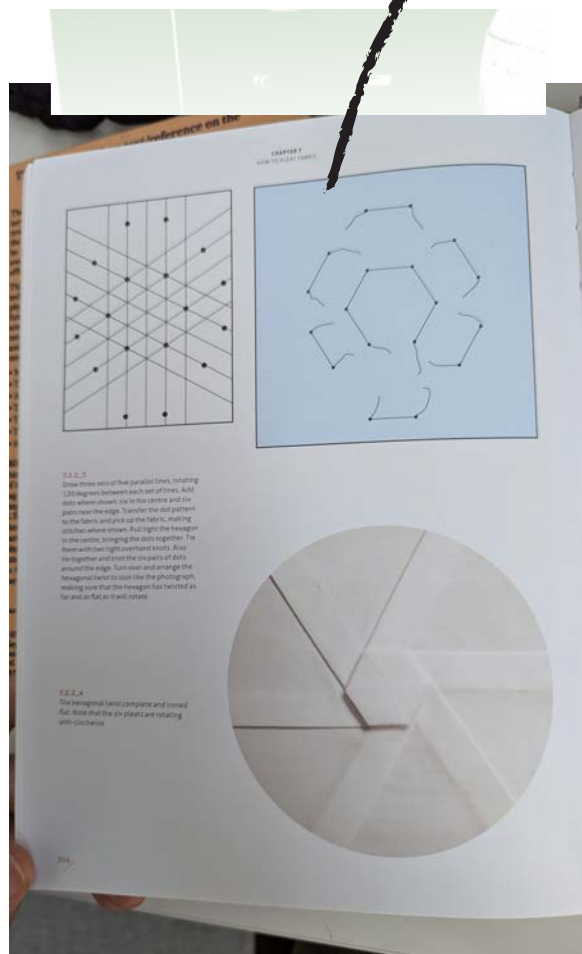
I chose to use spiral steel boning in these toiles and all of my collection as I liked its weight and flexibility.



Hexagon Pleating

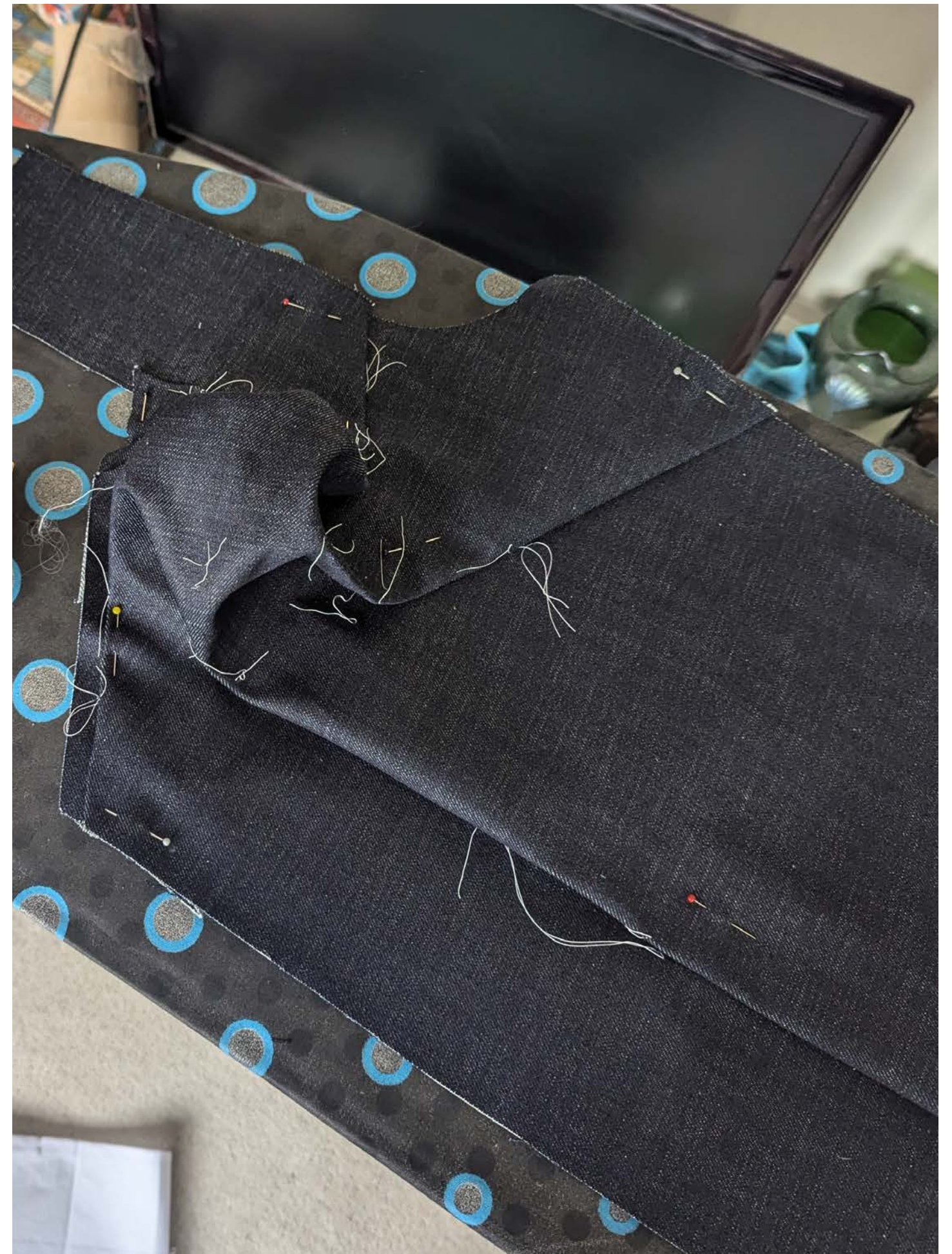
I found this hexagon pleating pattern in a book on pleating, and thought it connected well to some of my research on perfume chemistry, so I used it a few times in the collection.

The first calico samples I made were made by drawing a grid and then hand sewing certain points together, as described in the book.



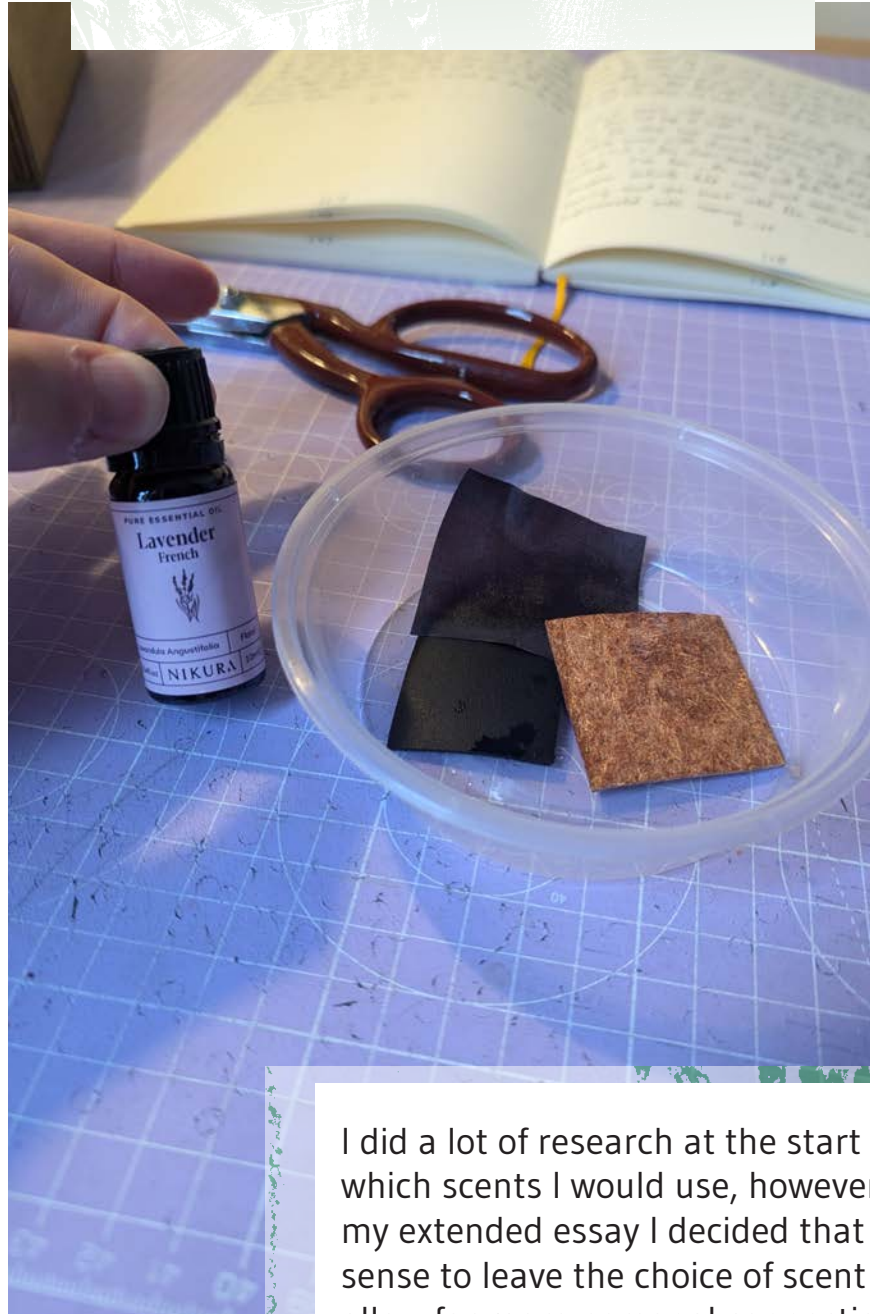
I stopped with this hand sewing method pretty quickly though as I could achieve the same effect by just carefully pressing the pleats in.

Most of the patterns were made by slashing and spreading the pleats into whatever pattern I was working on, and for construction the pleats are just careful pinned in place and pressed, allowing the central hexagon to fold upwards.



Fragrance Patches

Some garments in the collection have leather patches that can be scented with a fragrance oil. I trialled a few different materials (coconut leather, cactus leather and a waxed tencel) but none of them really worked aside from chamois leather. I learned the method for doing this from a book (Essence and Alchemy by Mandy Aftel).

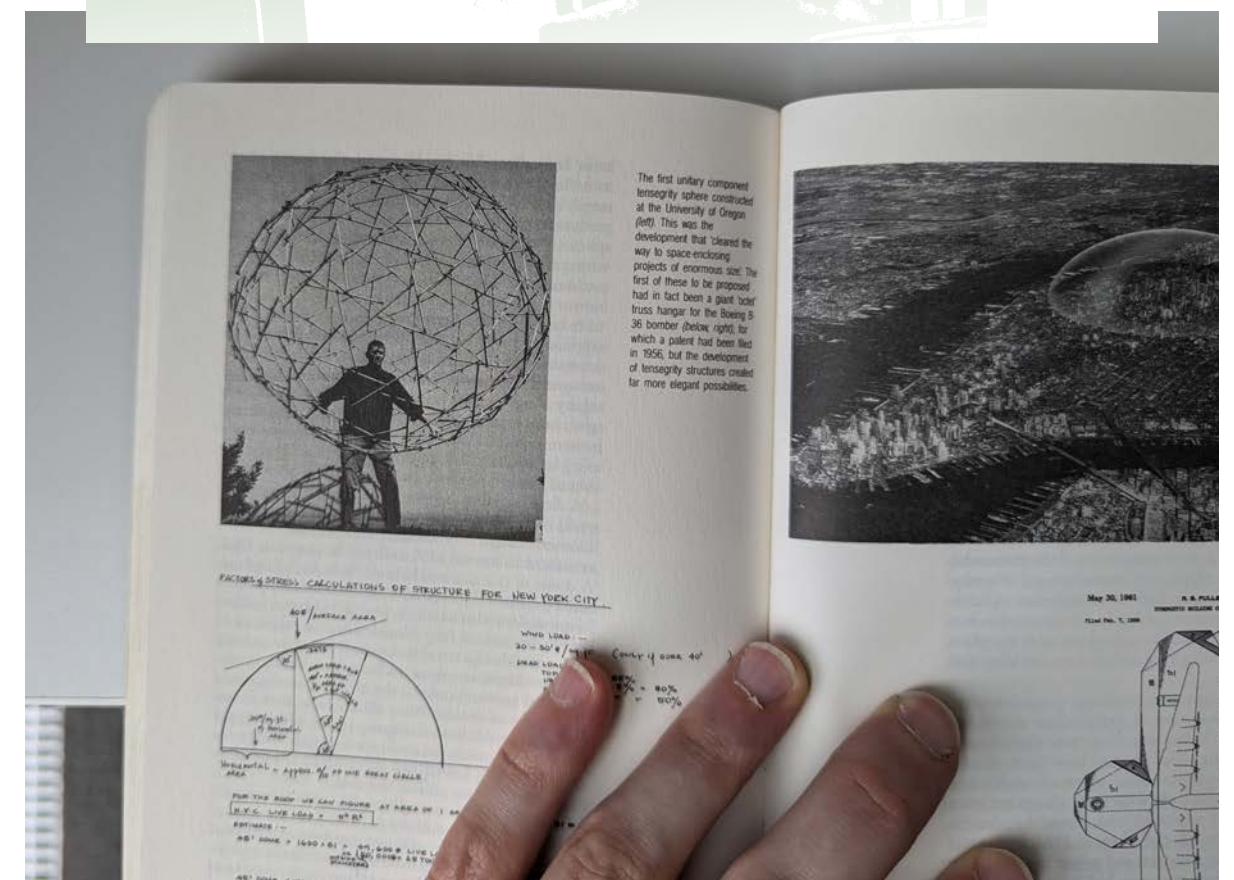
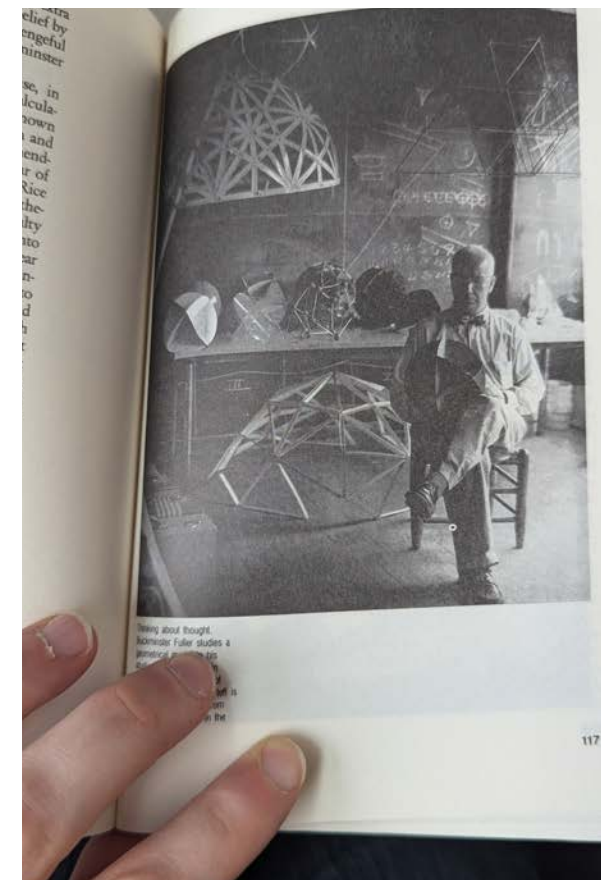


I did a lot of research at the start of the year into which scents I would use, however through writing my extended essay I decided that it would make more sense to leave the choice of scent up to the wearer, to allow for more personal connections to the garments.

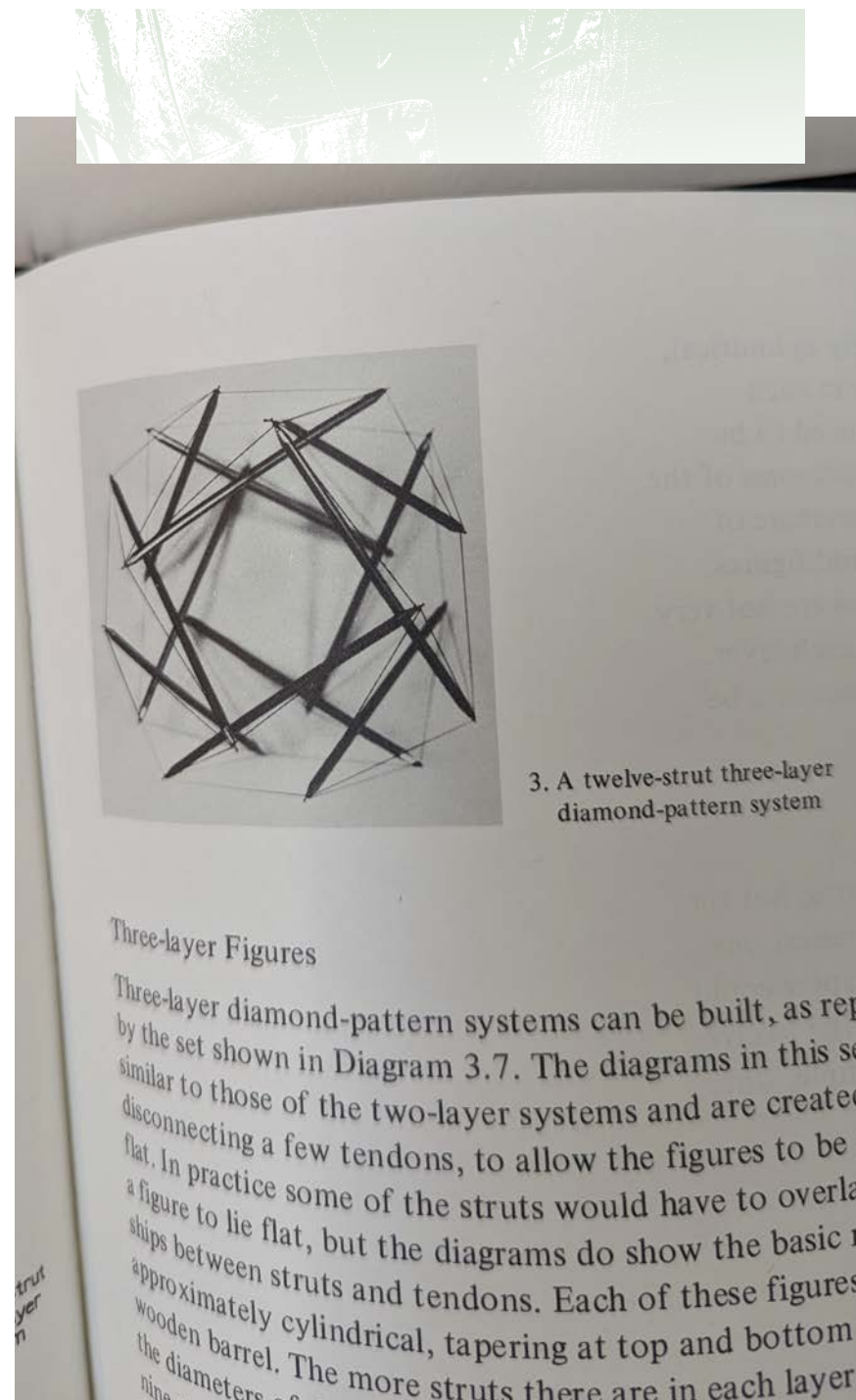


Tensegrity

I started researching tensegrity because of its links to chemical structures. I thought the idea of creating structure through tension could be quite interesting to apply to fashion, and I was interested in how this technique could build solid structures out of soft fabric.

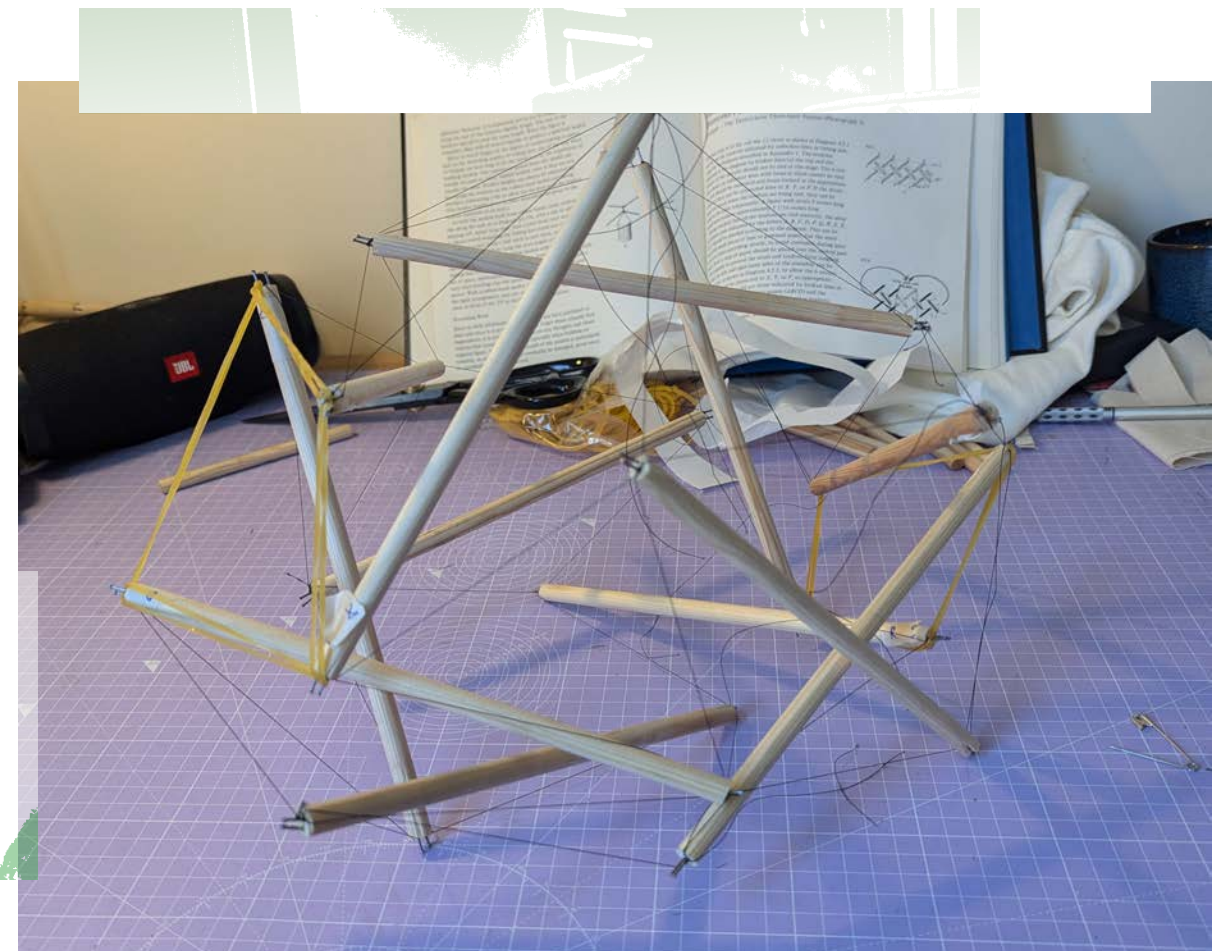


I got a book out from the library called "Introduction to tensegrity" which had some great instructions on building tensegrity structures.

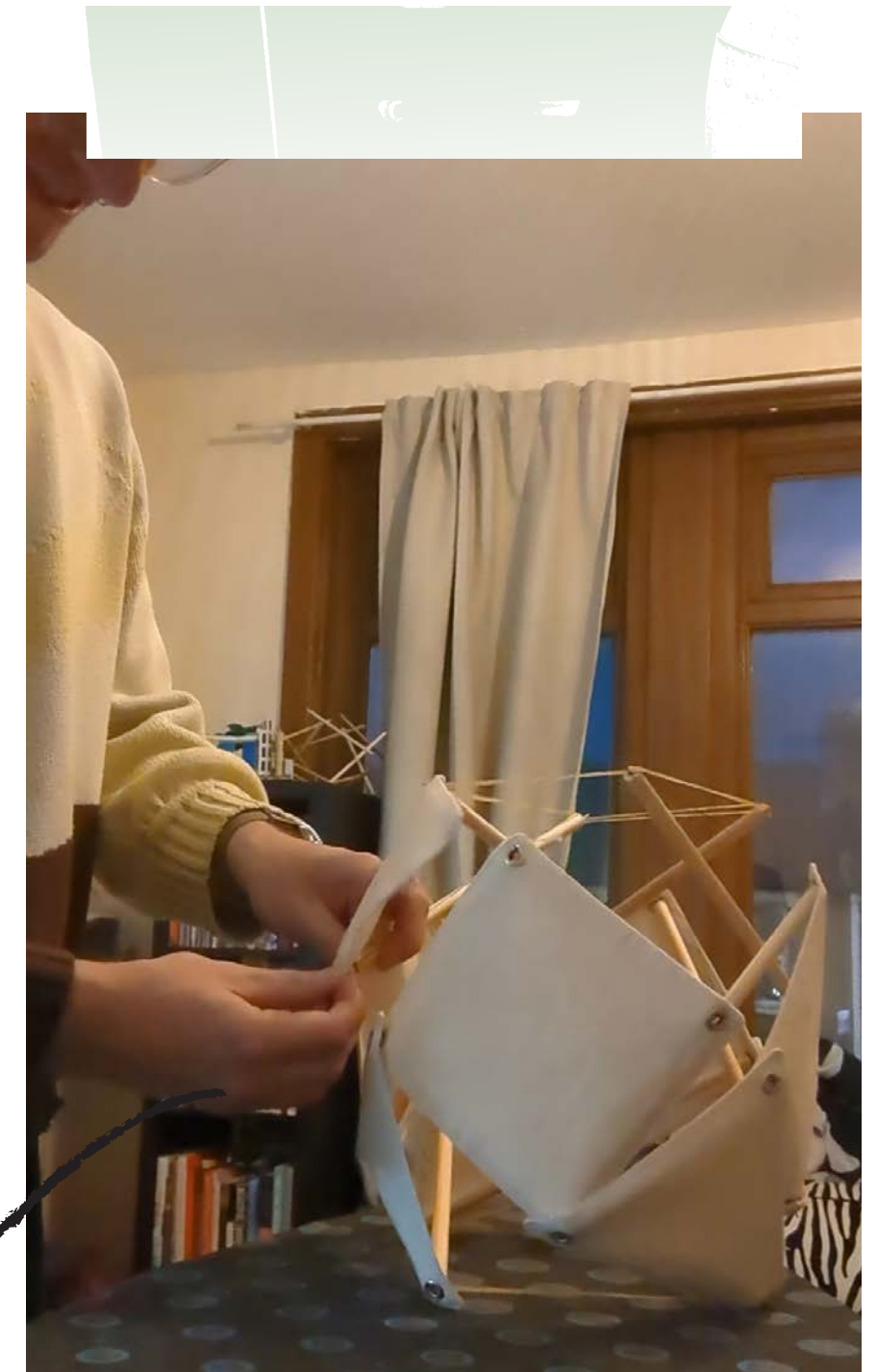


The book recommended using nylon fishing line and dowel to build with so this is what I started making the structures with.

The structures are all made from repeated patterns of struts and lines, which means they can be built in varying sizes depending on how many repeats they have.



At this point I wasn't thinking about what these structures could become garment wise, I was trying to just figure out how they work.



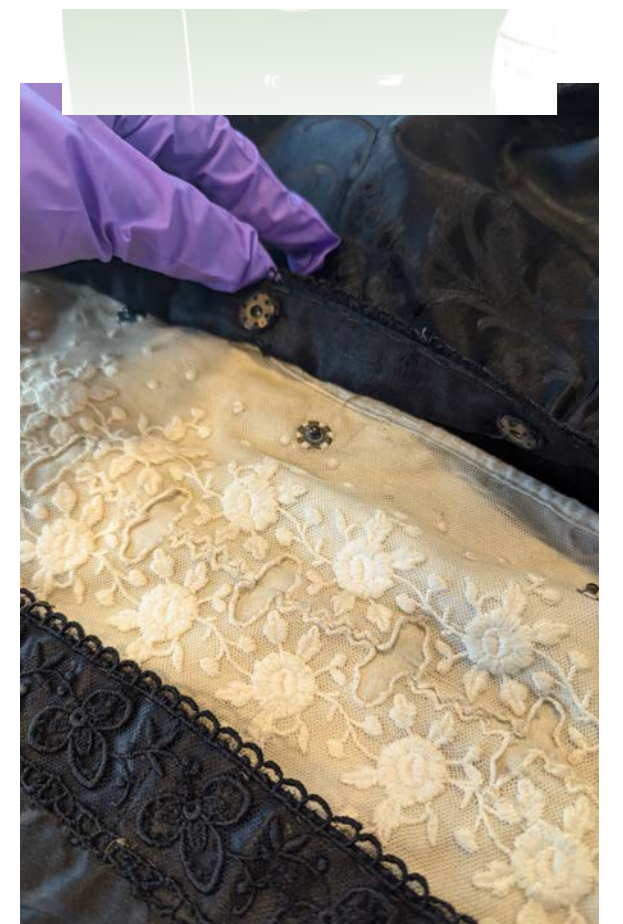
I realised that the fishing lines that were under tension could be replaced with flat squares and triangles of fabric, so starting experimenting with these. I really liked how these structures looked and felt like it was a strong motif that also matched with the hexagon pleats, so I stuck to mostly making the structures this way.

Archival Research



I visited the LCF archive to get a closer look at some Victorian clothing, as I wanted to have some authentic connections in the collection. One thing that really grabbed me was the fastenings used. There were a lot more snap fasteners than I expected or realised, and there were some beautiful buttons and ties.

I decided I would try to focus on using button and snap closures as much as possible, as well as lacing for my corsetry parts.



Look 1



Look 1 – Overview

Cedarwood Corset and Vetiver Trousers

Concept:

A reimagining of a Victorian corset with leg 'o' mutton style sleeves, worn with trousers to break up the traditional silhouette. I wanted to envision if and how such impractical garments would be worn today, so this look has fully detachable sleeves and easy adjustability, and explores using some new and less conventional sustainable materials.



Corset Starting Point



This portrait of Ada Lovelace was an important reference image for me and the starting point for this look, as well as this corset I saw in a museum in Vienna



Draped Ideas



Early on I had had the idea to use a tensegrity structure as a sleeve somehow, but I wasn't too sure how I could get it to work.

I really liked the idea of trying to create a leg 'o' mutton style sleeve to reference some of my research.

My first drapes were vague and I tried a few different ideas for how this would function, both with a wooden structure and without.

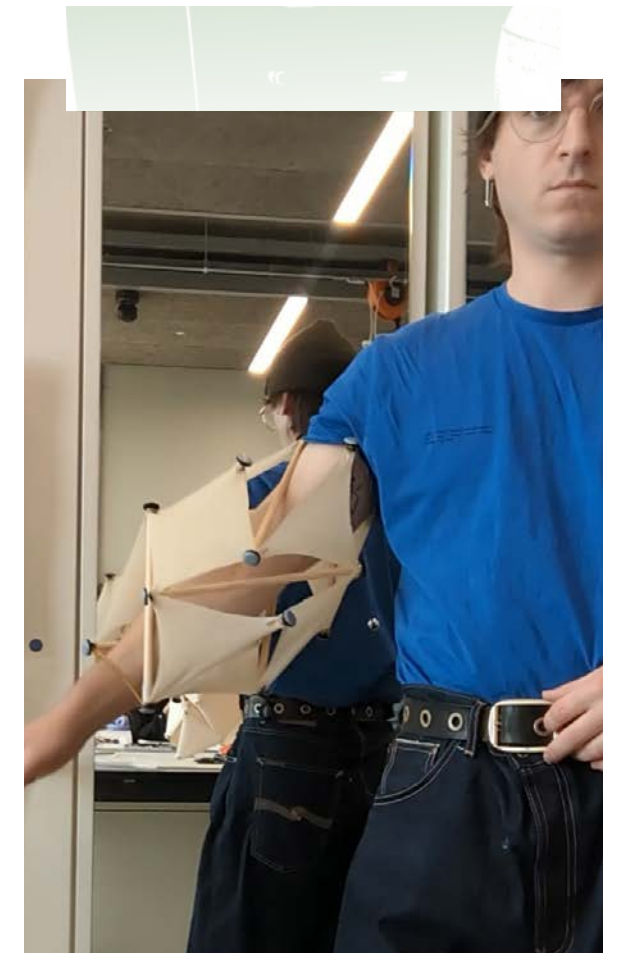


Latex Tensegrity Structure



As I was trying to think of ways to make the tensegrity structures more wearable, I realised that replacing the fishing line with elastic bands allowed for the structure to move a lot but still hold it's shape. I thought I could then do the same with the fabric squares and triangles I was using, so replaced them with latex thinking it would work well as it had no grainline and an equal amount of stretch in all directions.

I was really happy with this first sample of a latex structure! It was strange but worked really well as a sleeve, and allowed for a lot of movement. I thought it could be a really interesting technique for creating structure instead of using boning.



First Design

For my concept development working line up, the design was still quite vague, but I liked it enough to start working on it as my first garment to toile.

The key features were:

- Front and back lacing
- Detachable tensegrity sleeves
- Separate stomacher panel
- I was also keen to use the coconut biocomposite/leather I'd sourced for this piece, but I wasn't sure whether it would work, or what I could make the sleeves out of.

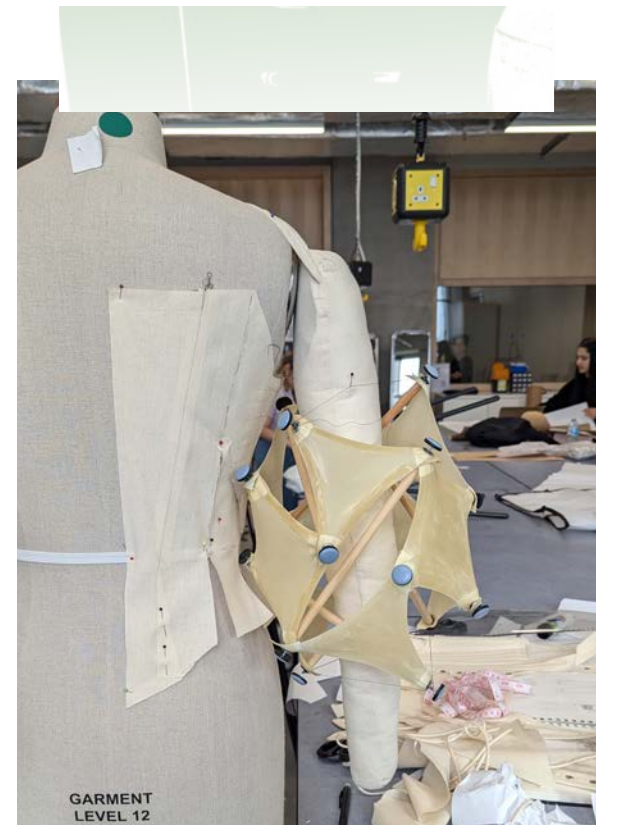
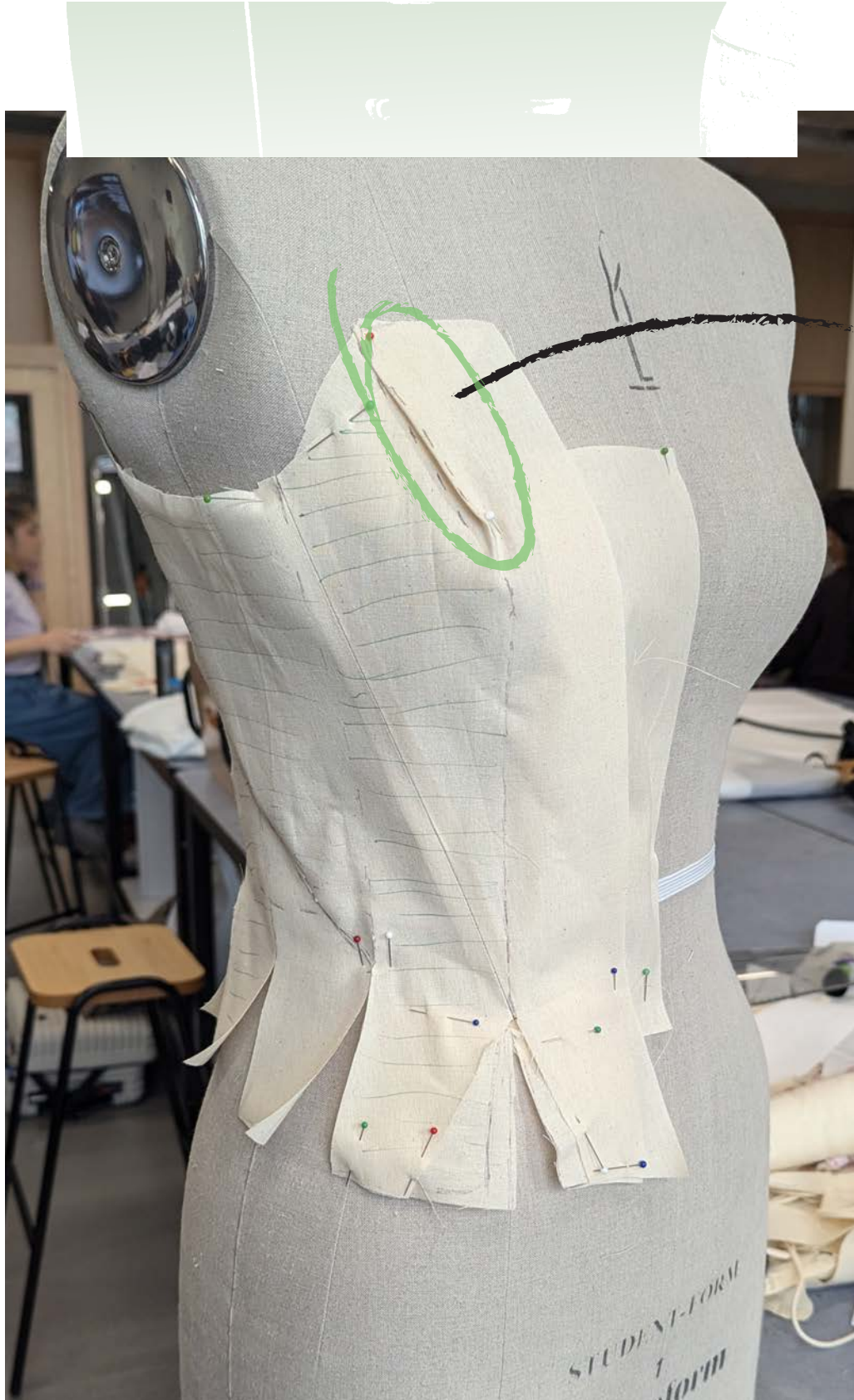


Developing a Pattern from my Historical Block

I used the 1750-90s stay pattern I made in the summer as a starting point for this design as I liked the fit and knew I wanted front and back lacing.

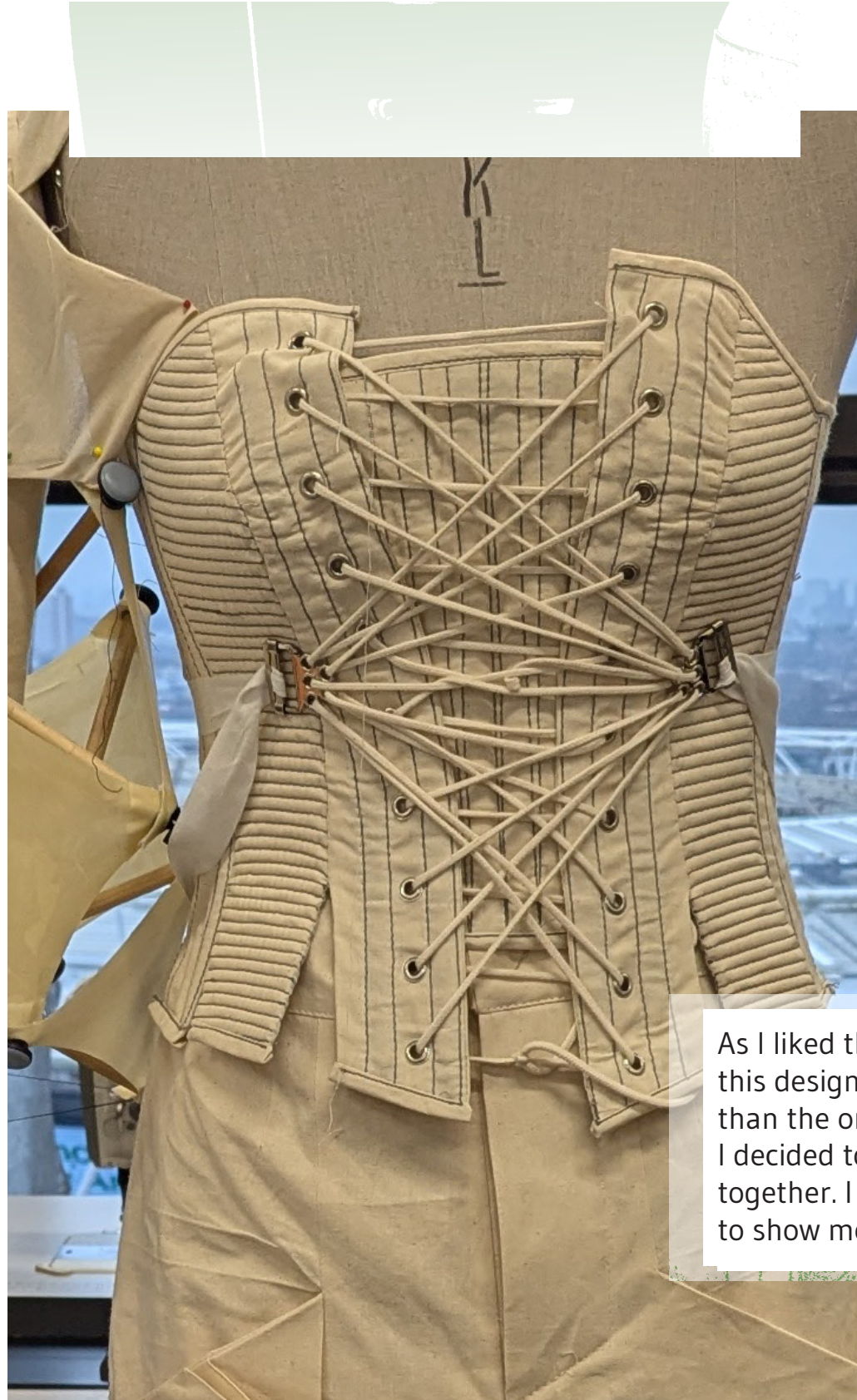
I started by sewing a calico version of the pattern, draping it and drawing new seam lines on where I wanted them.

I then marked new panels out and decide to have some corded sections. I removed the shoulder strap to better reflect a Victorian style corset, which meant I also needed to pinch a small dart out of the chest to ensure it still fit closely to the body.



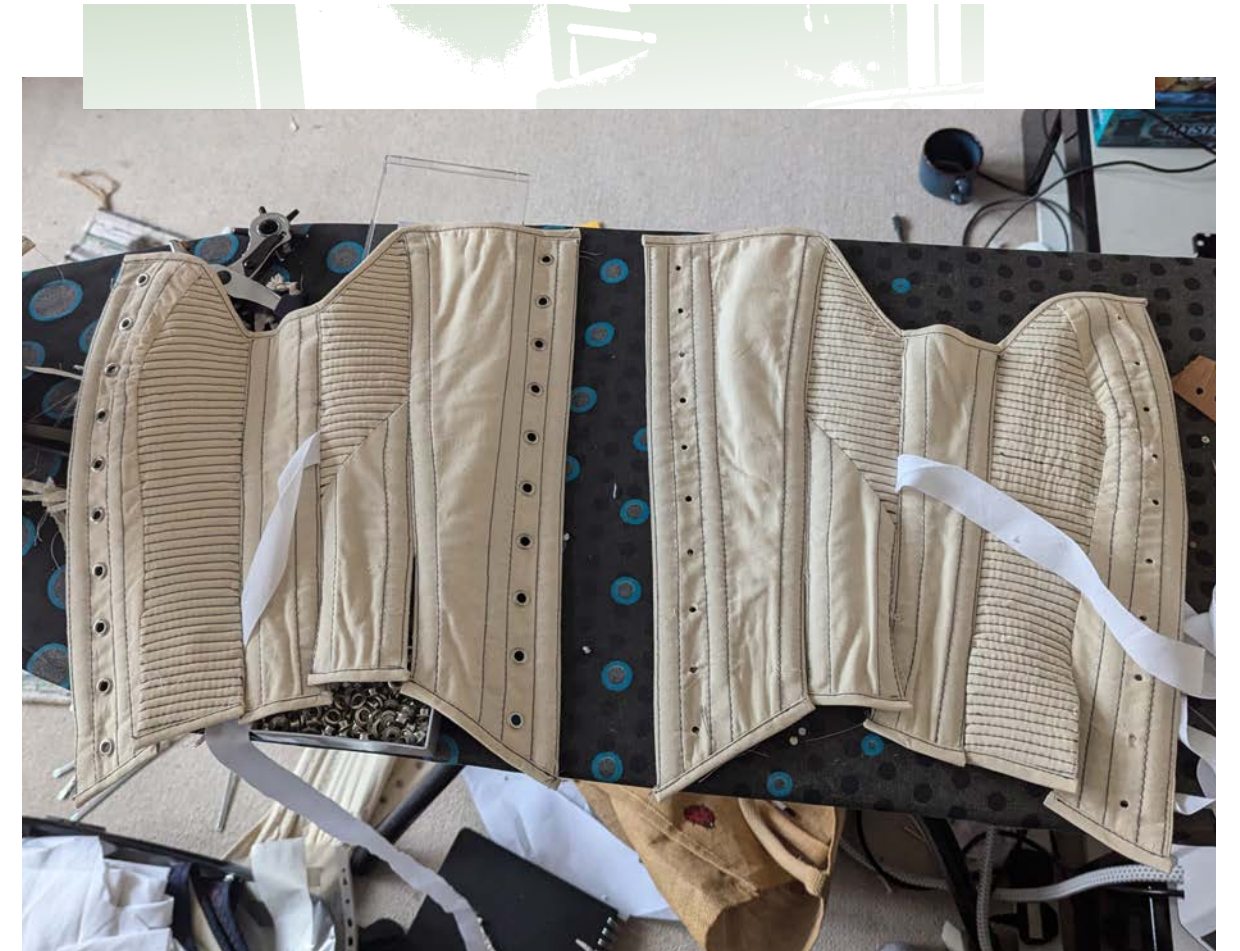
I started to think about how and where I could attach the sleeves as well, as I knew I wanted them to be detachable.

First Bodice Toile



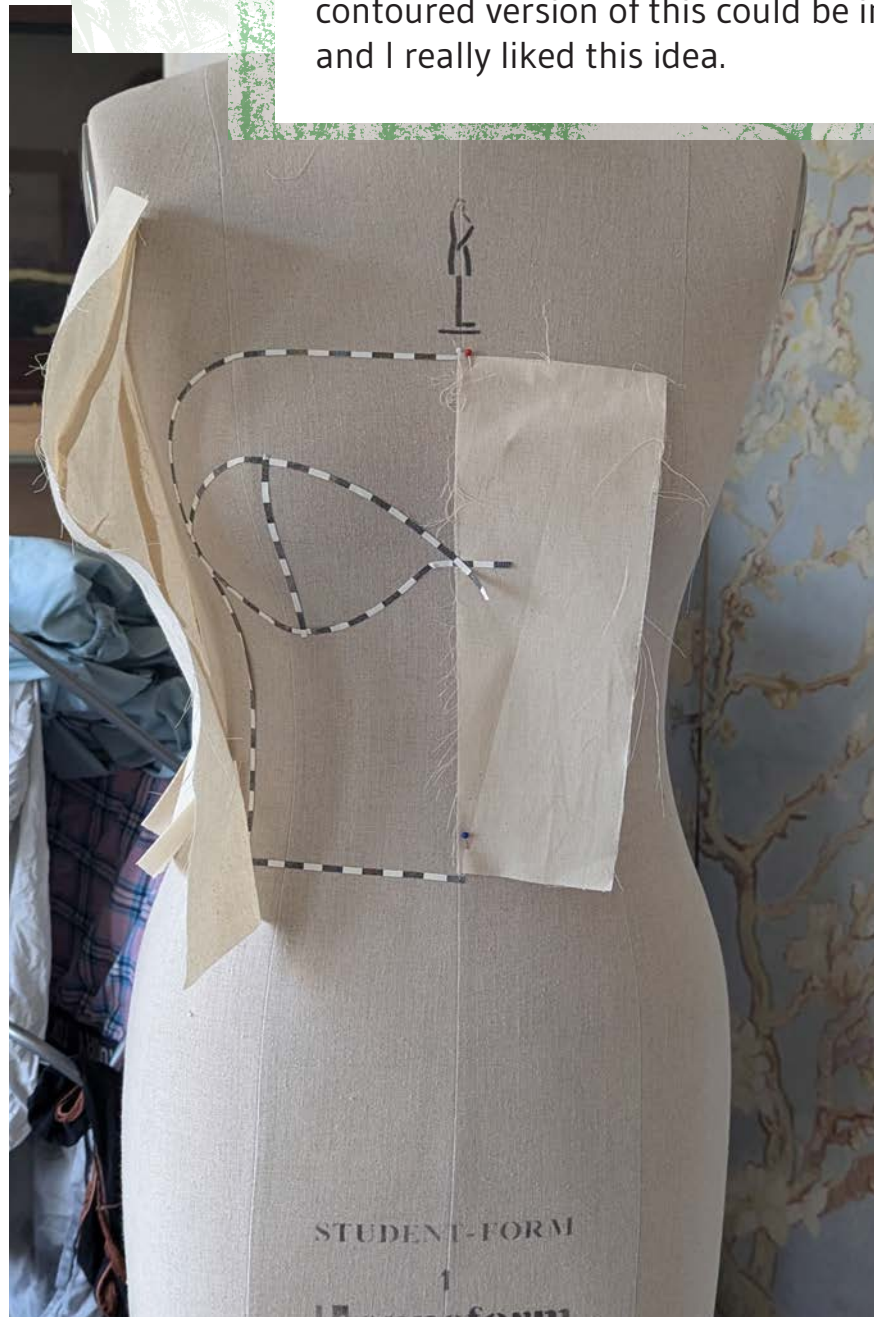
I really liked the direction this corset was going, the shape and fit was great, but the design felt too busy, especially the front corded panel.

As I liked the proportion of the back of this design, which was a wider panel than the ones at the front of the corset, I decided to merge the front two panels together. I then opened the front slightly to show more of the stomacher panel.



Drafting a New “Stomacher” Pattern

The original stay pattern had a completely flat stomacher panel that was fully boned. A fitting note from class was that making a more contoured version of this could be interesting, and I really liked this idea.



I started by marking a design in tape, trying to be more form fitting, and allowing the boning to stop beneath the bust to be more comfortable to wear



I changed the tape lines very slightly as I wasn't happy with how the seam lines were going to look.



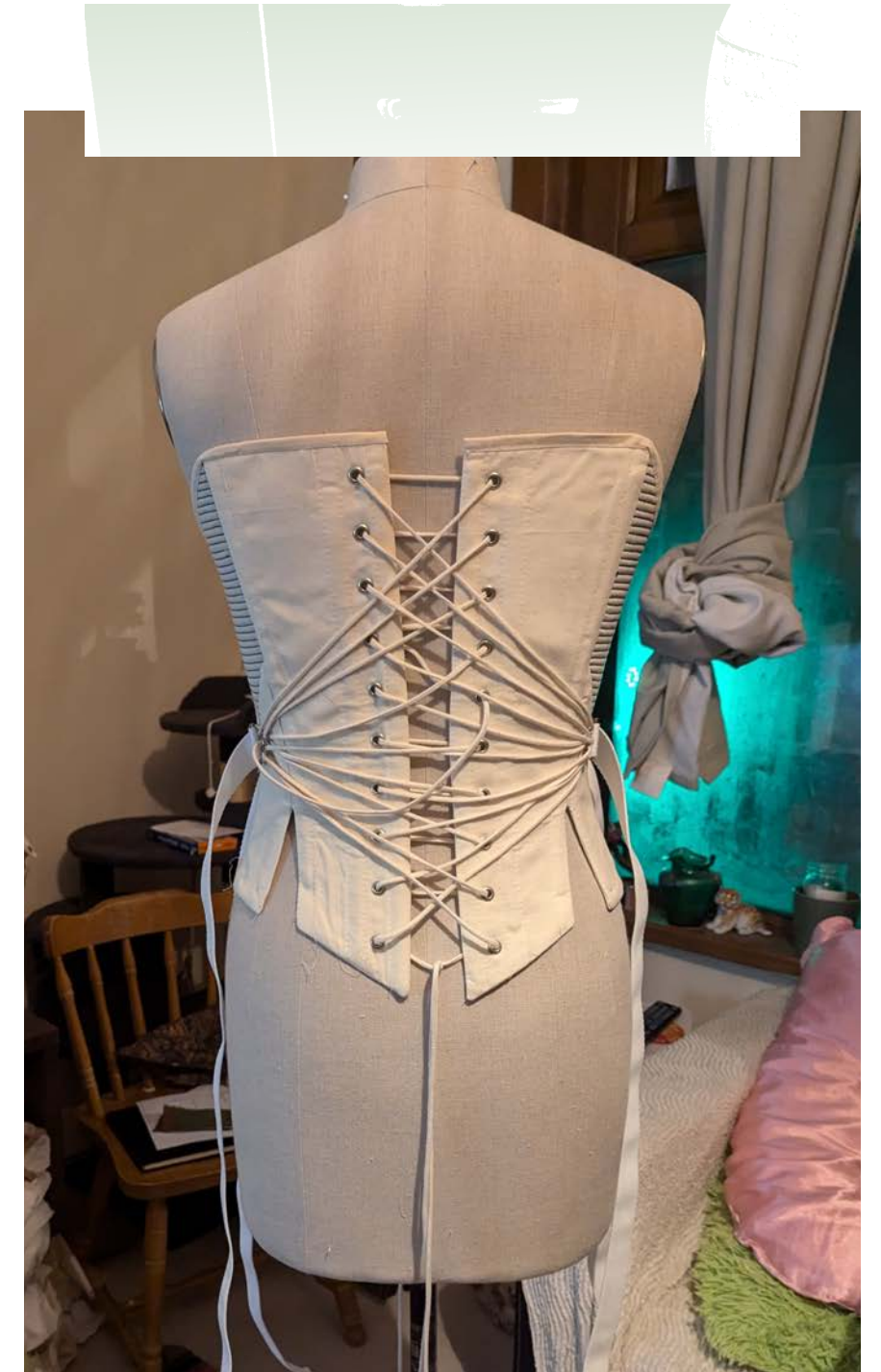
I then pinned calico on to match the panels I'd outlined, and traced over the tape, giving me a pattern for the new stomacher.

Cording Adjustments



Originally I had been cutting pattern pieces in fabric FIRST and then cording them, but this meant that the panels would shrink dramatically after I corded them, which was throwing off the shape of the corset. I started to cut these panels out of a larger piece of corded material to avoid this, which also sped up the cording process, but created a bit more waste.

Adjusted Bodice Toile



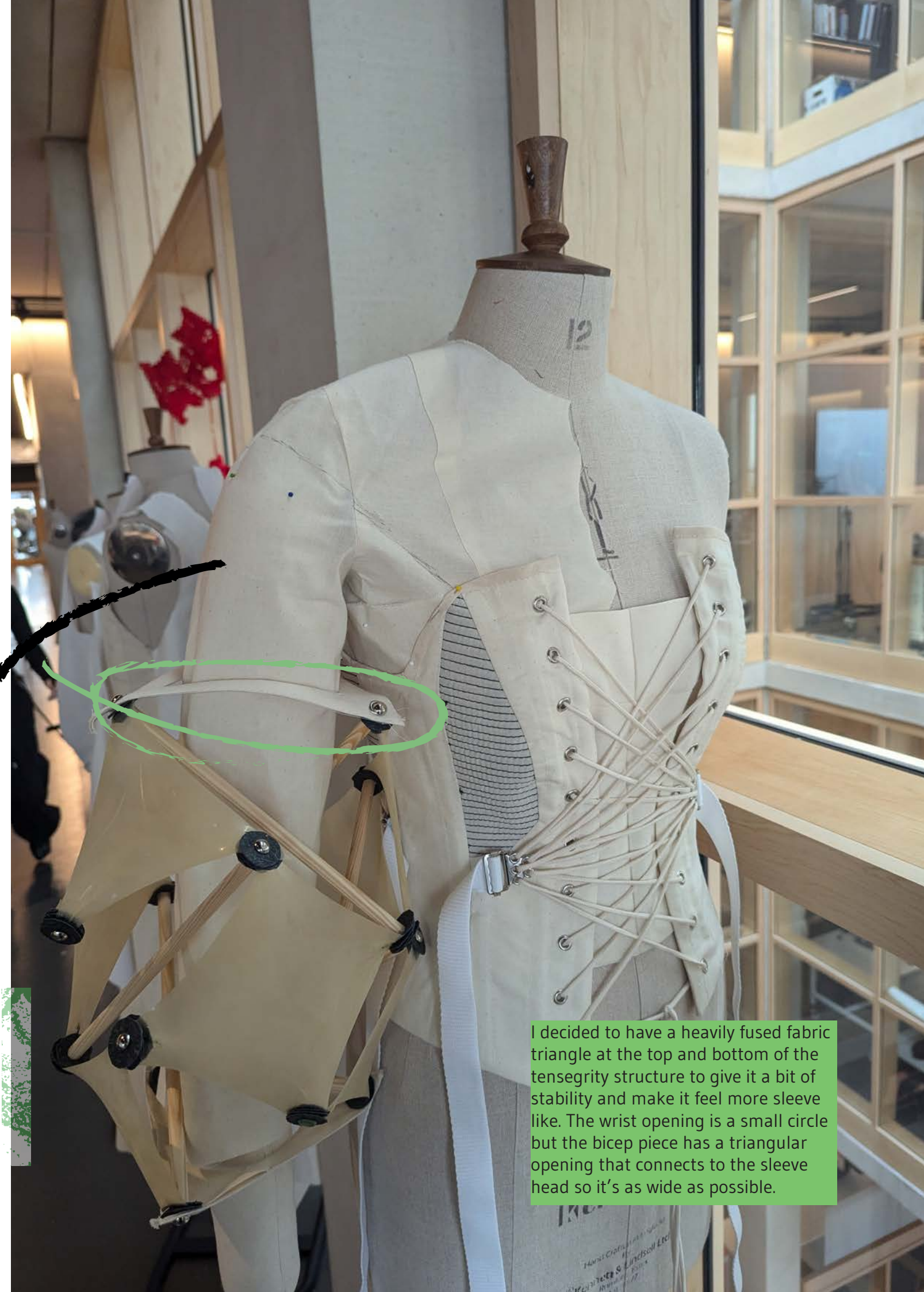
After these adjustments this next toile worked perfectly! I loved the proportions of everything and the fit seemed really great. One small change was to how the front was laced, as I was able to tie it in a way that would remove the straight horizontal bits of lacing, which made the front a lot less busy. I kept them at the back as it makes the lacing a bit more functional, and with the back being open it felt like it worked well.

Sleeve Head Development

I tried draping a few different sleeve head ideas for how to attach the latex structure to the corset, but none of them were working quite right.



I thought rather than draping, the best option would be to start from a block to try and ensure the sleeve was as functional as possible. I made this sleeve and half bodice from a block pattern so that I could cut away at it until it was the shape I wanted.



I decided to have a heavily fused fabric triangle at the top and bottom of the tensegrity structure to give it a bit of stability and make it feel more sleeve like. The wrist opening is a small circle but the bicep piece has a triangular opening that connects to the sleeve head so it's as wide as possible.



I cut away most of the block and drew on lines where I wanted the pattern to end.



Trying to keep the sleeve on the shoulder didn't feel right and I didn't think it would stay up anyway.

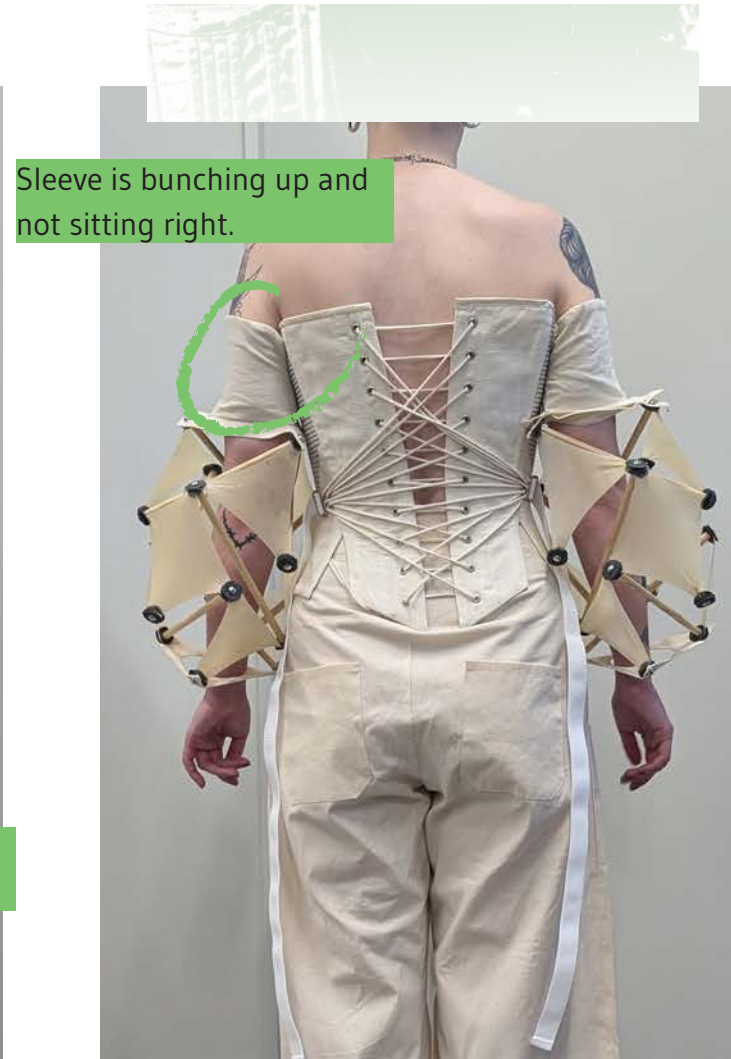


I eventually decided having this off the shoulder angle looked best so this is what I went with.



The final sleeve head pattern I settled on looked a little strange but worked well enough, and I liked the shape.

Toile Fitting



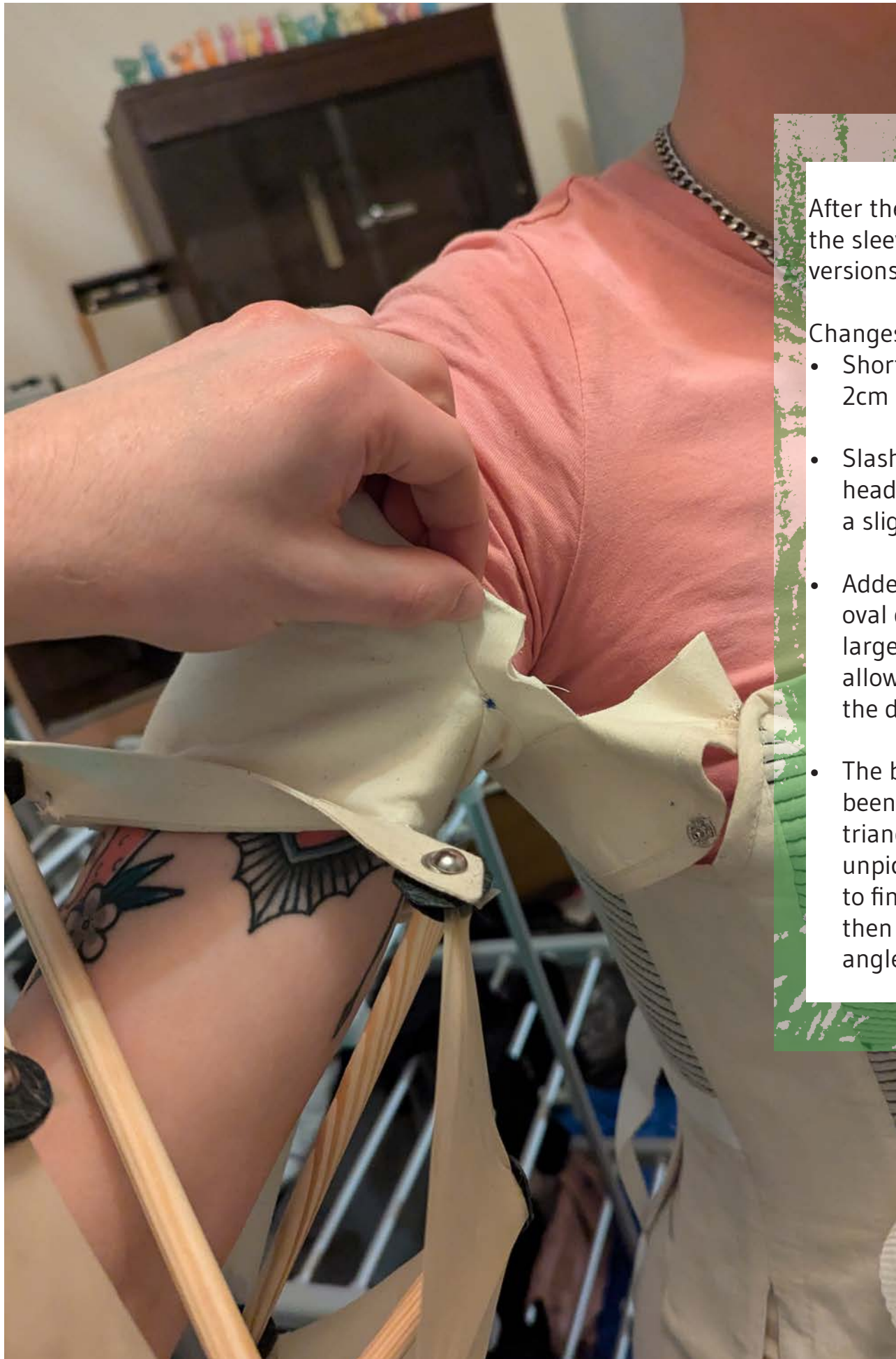
Overall I was very happy with how the toile looked in the fitting! There were a few tweaks to do, but overall the fit was very good. The main problem area was the sleeve head, which was bunching and not sitting right, and also slightly longer than I wanted.

Sleeve Head Tweaks

After the fitting I made quite a few changes to the sleeve head and went through a few toiled versions.

Changes:

- Shortened the overall length of the sleeve by 2cm
- Slashed and spread both the top of the sleeve head and its attachment to the bodice to give a slight bit of ease.
- Added a gusset under the armpit, I tried 2 oval designs (one smaller and one much larger) but settled on a diamond shape that allowed a good amount of movement and fit the design quite well.
- The bottom edge of the sleeve head had been too flat for it to smoothly join to the triangle on top of the tensegrity structure. I unpicked this seam on my previous version to find out how it naturally wanted to sit, and then adjusted the pattern to be slightly more angled.



Coconut Leather Sample



The corded panels were quite helpful to break up the coconut leather, allowing for a bit more ease and movement.

I sampled half of the corset in the coconut leather to see if it would work using this material. There were a few problems but overall it actually worked quite well. The main issues would be how to finish it, and whether or not the stiffness would be a problem anywhere.



Trying to bag out the tabs was a nightmare, and even though I managed to do it eventually, the edges were quite rough and the corners were impossible to get sharp.

Lining and Topstitch Sampling

As the coconut leather doesn't fray I thought the best solution might just be to leave the edges raw. I still wanted to line the corset though, so I did some small samples to test folding and topstitching a lining to a raw edge.

I really liked this silk I found so chose to use it for the lining, as well as the fabric for the corded panels and the sleeve head.



I thought about using an orange topstitch but I didn't like how this quick sample looked.

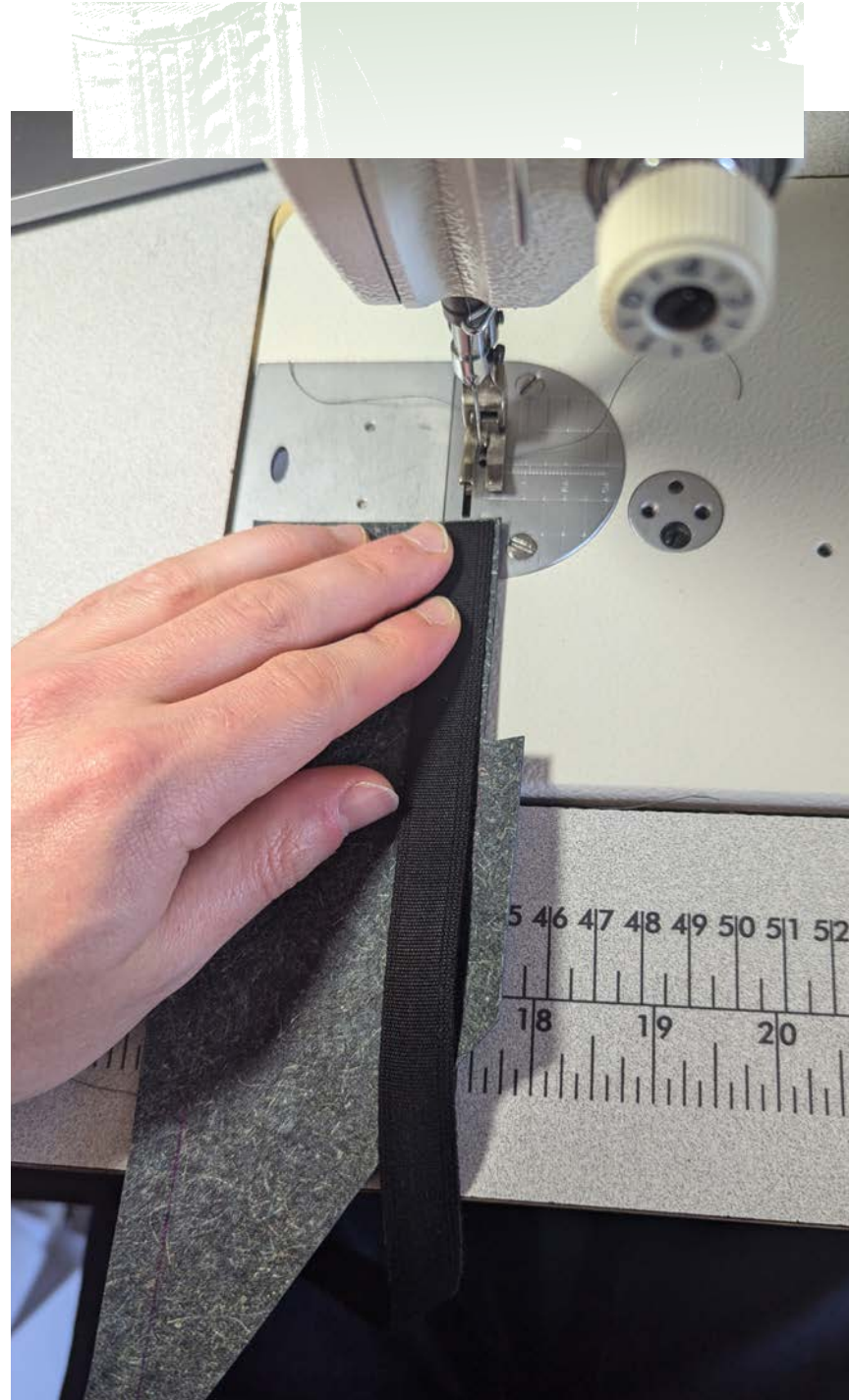


The silk had a good amount of structure which I think was needed for this kind of finish. I wasn't 100% confident this would work for the full corset, but I liked how my sample tests were looking.

Making of the Final Corset



Cutting the coconut leather was slightly tricky but I found the best way was to just tape the patterns straight to it.



The boning channels were sewn on about 2mm from each edge as I wanted to leave space for the lining to be topstitched down.



I fully sewed the lining together and pressed the 1cm seam allowance down as precisely as possible. Luckily the lining fabric I'd chosen worked quite well for this and wasn't too slippery.

Making the Cording Panels



The cording panel took a lot longer to make than my toile version and I ran into a few problems. I fused the silk with the same heavy fusing as my calico toile, but it was still much more slippery and harder to thread the cording into.



I made a mistake at some point that meant the rectangle of fabric I'd cored wasn't tall enough for the pattern pieces. I decided to still use this piece by instead cutting them on the bias, and having the cording run diagonally on the finished corset.

Being on the bias allows these pieces to have a bit more stretch, which is helpful as the coconut leather is extremely stiff and the garment needs some areas that are more flexible.



I actually ended up much preferring how these panels looked compared to the horizontal cording on my toile, and think it made more sense for the design.

Making the Sleeve Heads

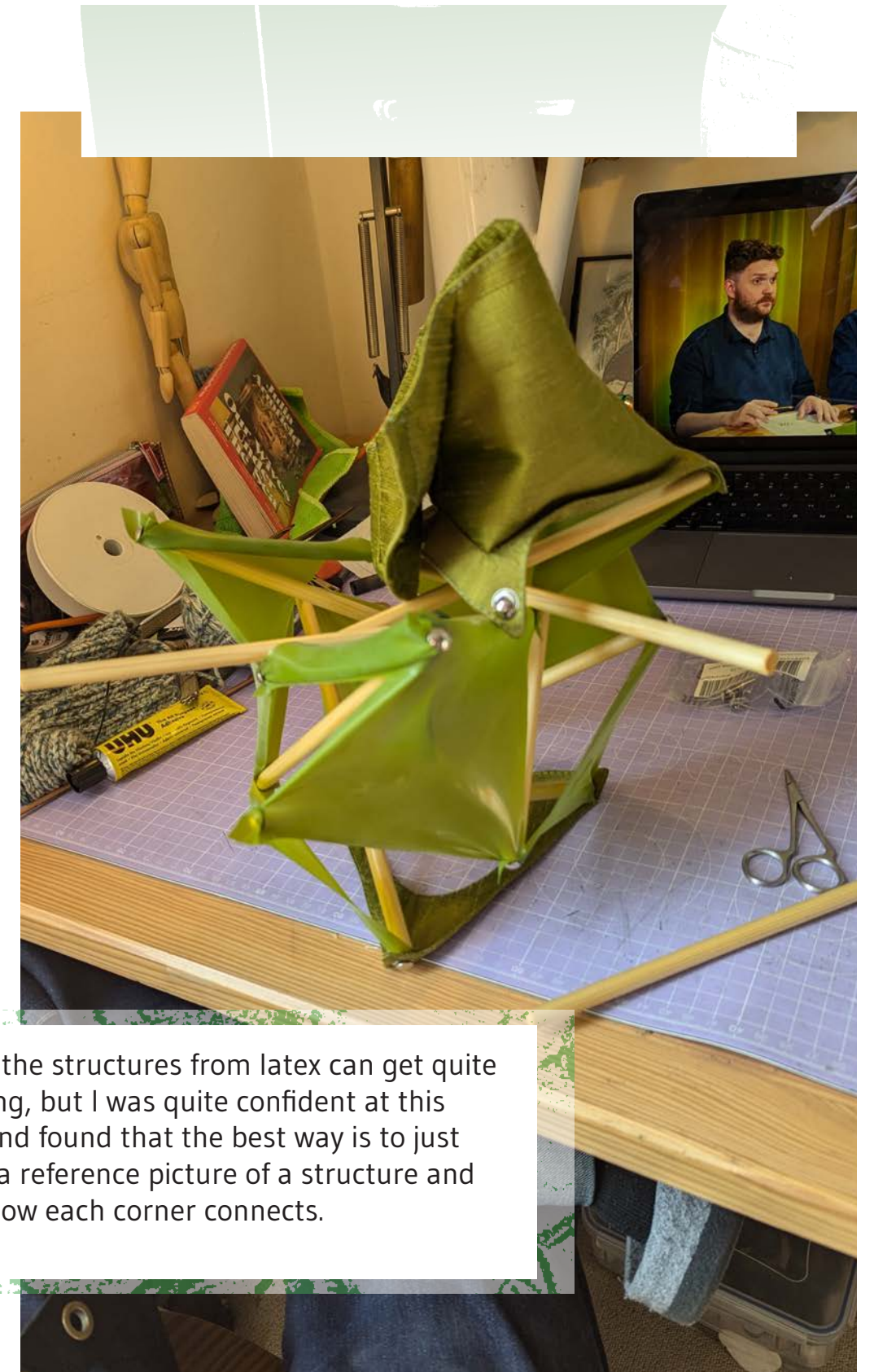
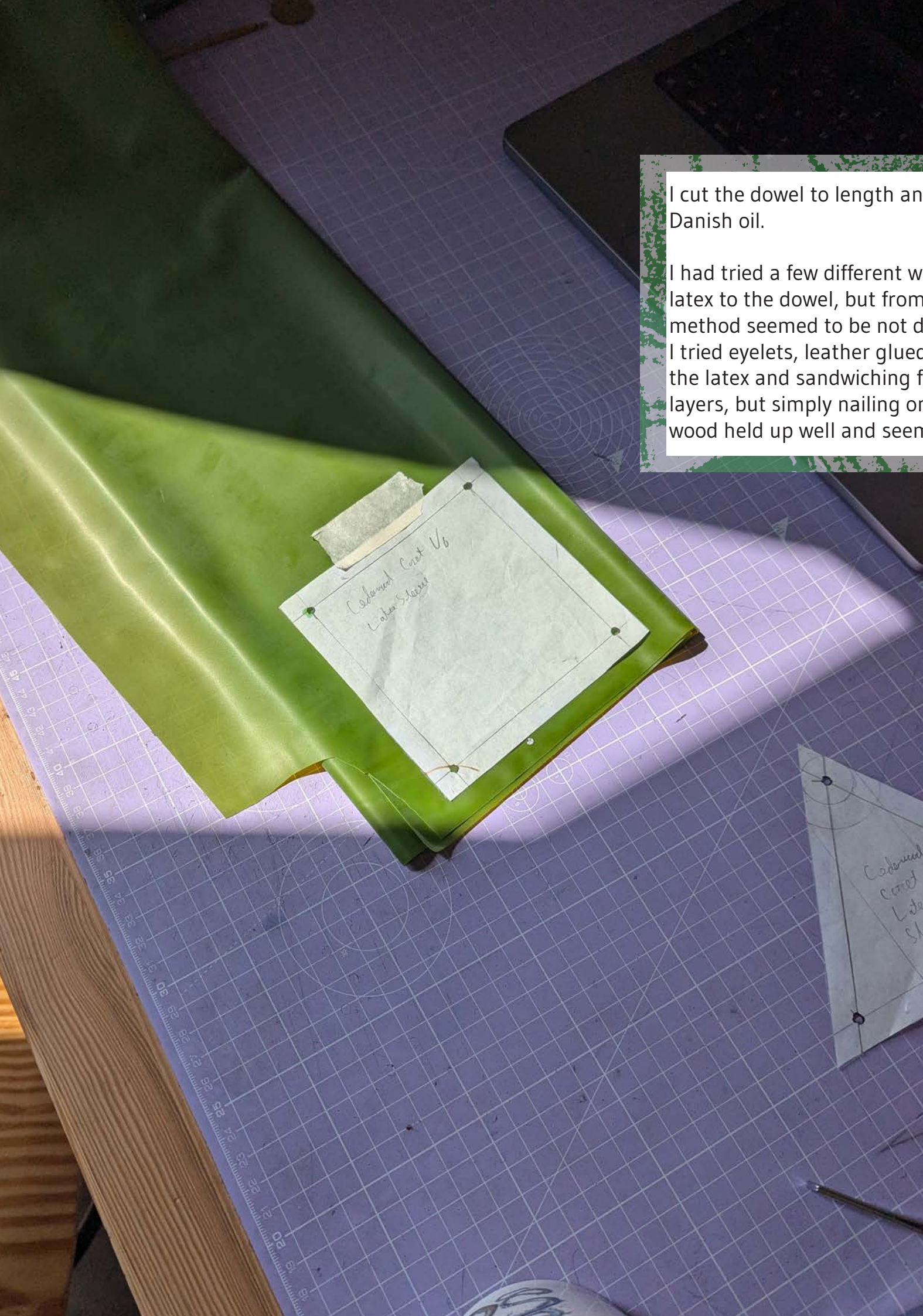
I ran into a problem with the fabric fraying whilst making the sleeve heads. The outer layer is fused with a heavy fusing which stopped this, but in hindsight I should have fused the lining layer as well. When I used this same fabric type in the coat in my second look I used a fusing tape around the edges to stop this from happening.



Making the Sleeve Structures

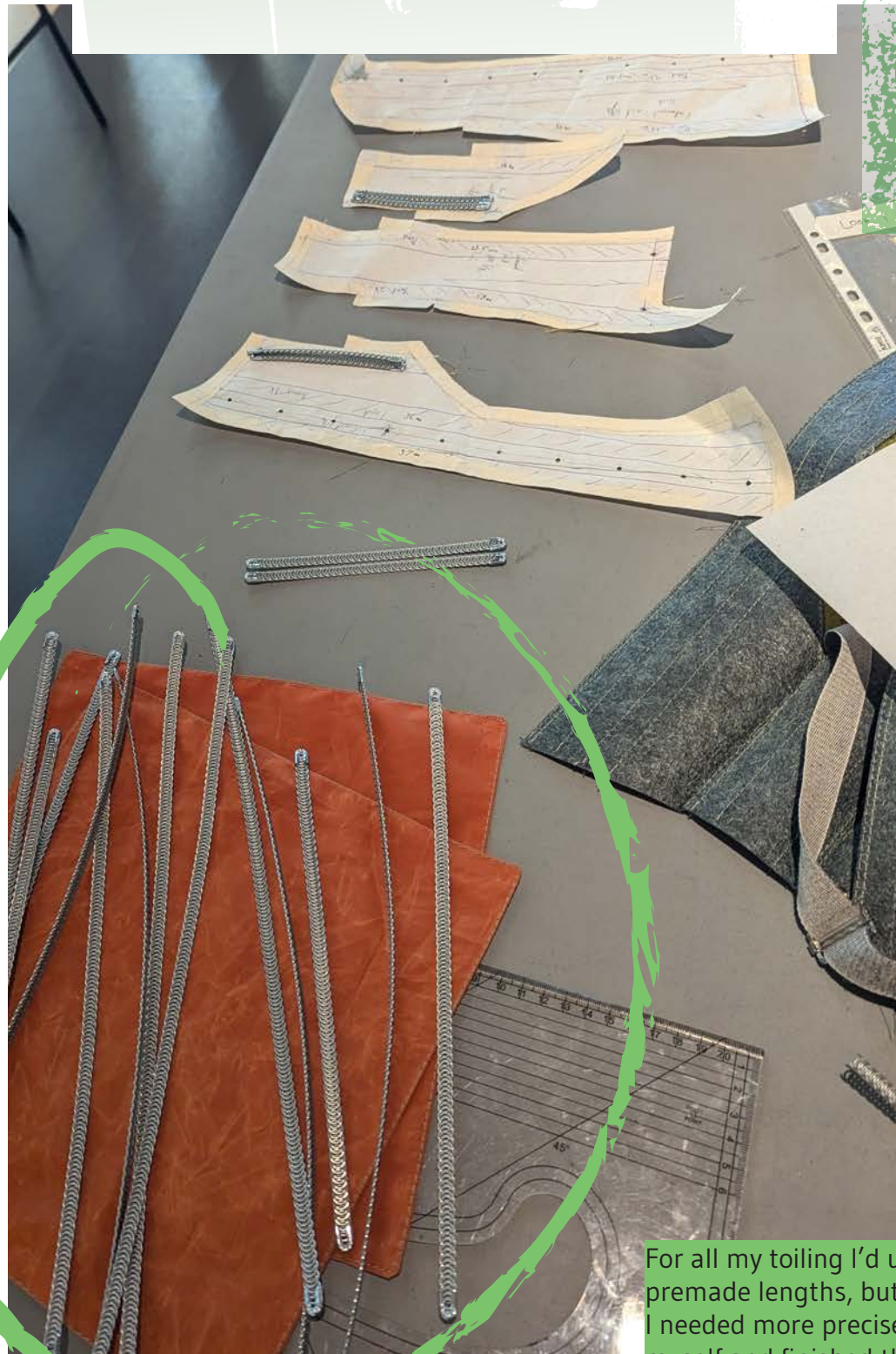
I cut the dowel to length and finished it with Danish oil.

I had tried a few different ways of nailing the latex to the dowel, but from all my tests the best method seemed to be not doing anything special. I tried eyelets, leather glued to the corners of the latex and sandwiching fabric between 2 latex layers, but simply nailing one layer of latex to the wood held up well and seemed quite hard to rip.



Making the structures from latex can get quite confusing, but I was quite confident at this point, and found that the best way is to just look at a reference picture of a structure and follow how each corner connects.

Making Continued

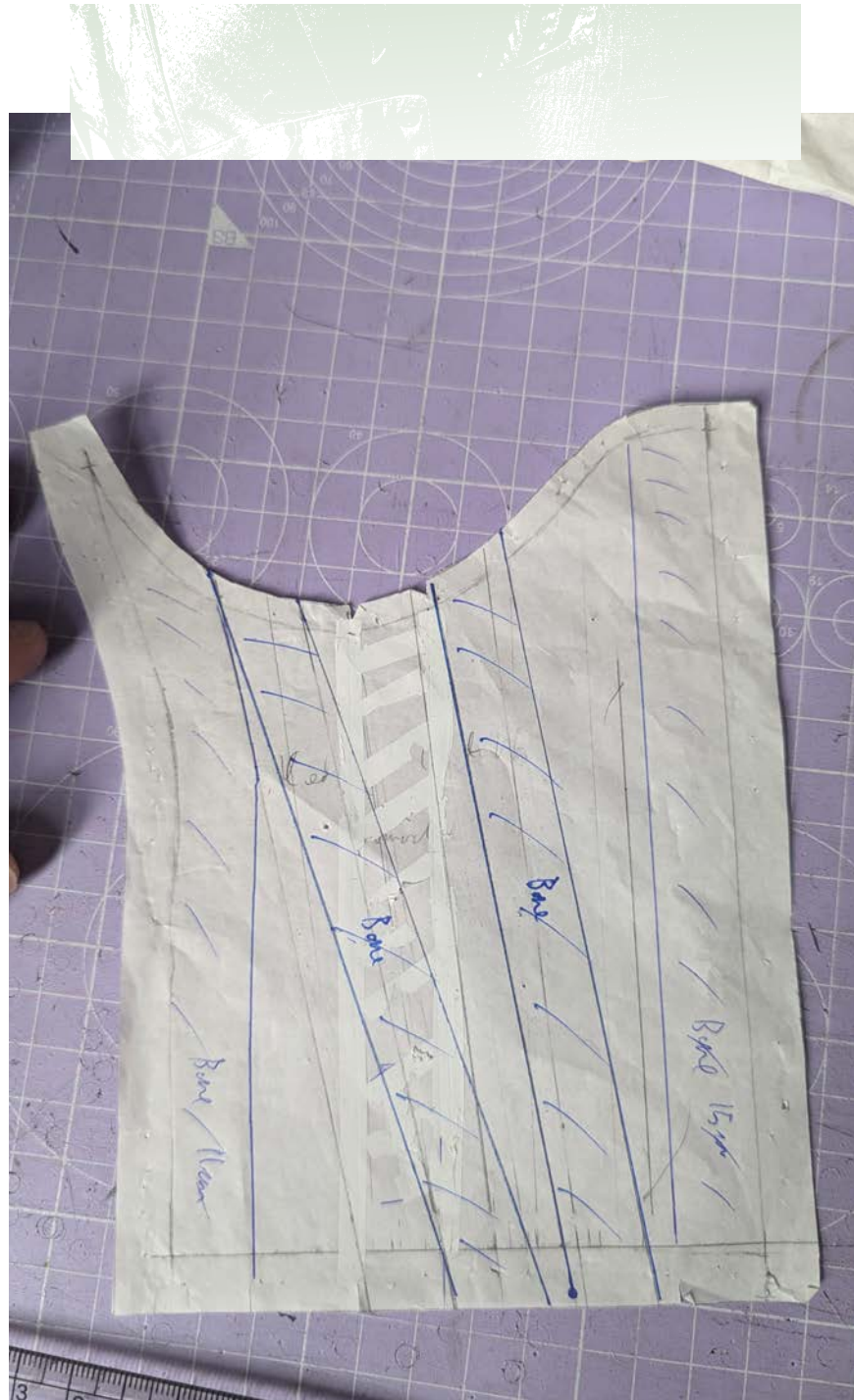


For all my toiling I'd used boning cut to premade lengths, but for the final garment I needed more precise lengths so cut it myself and finished the ends.

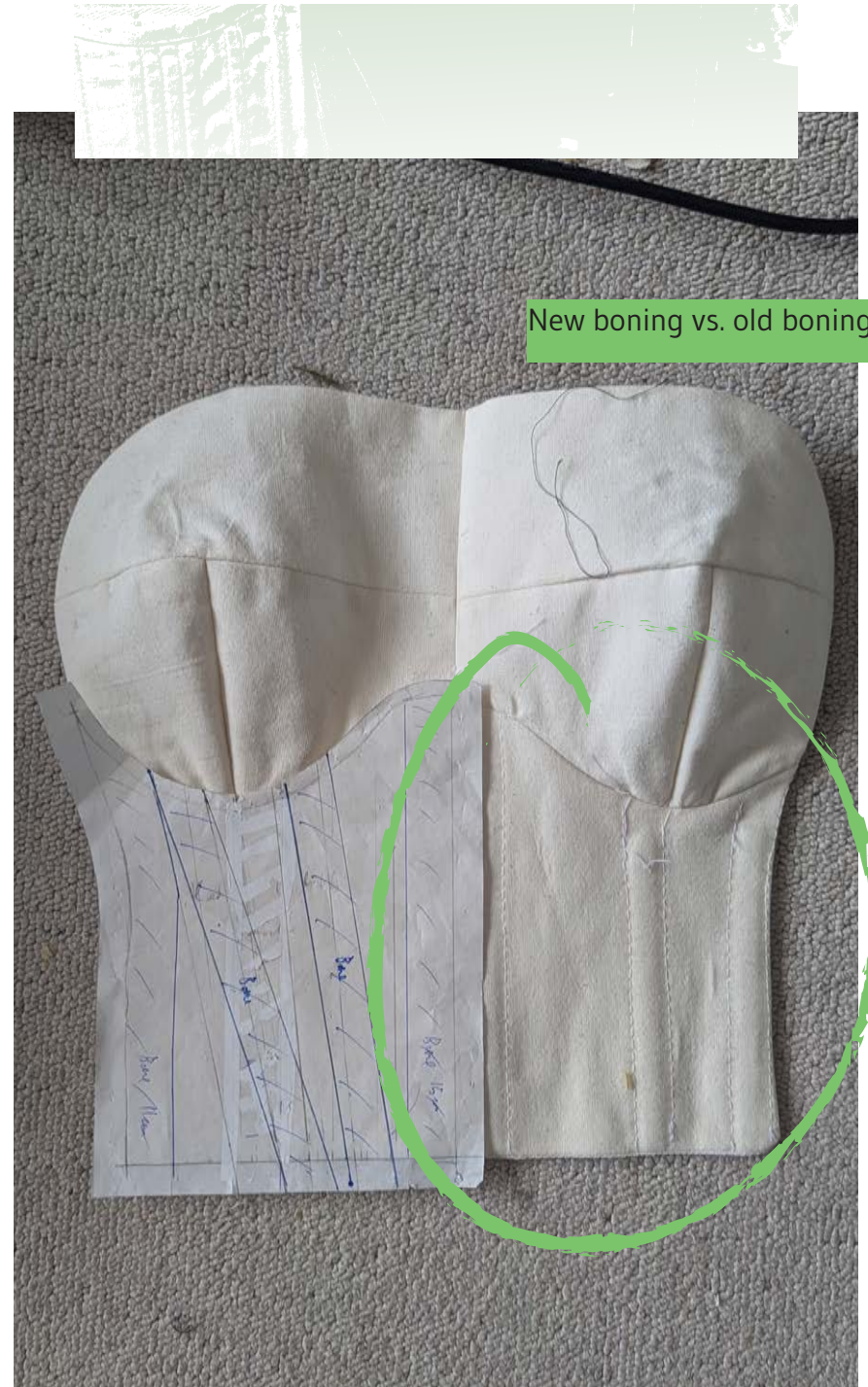
I was a bit unsure of this lacing I chose, but I wanted to use the same type across all 3 looks to connect them aesthetically, and thought this would be a good fit.



Stomacher Boning Tweaks



I changed the boning on the stomacher panel from being all vertical, to having some fan out diagonally.



This was to give the stomacher a bit more structure, as this toile version had a tendency to crumple slightly as there was no horizontal support



I'd been deciding whether or not to use this fabric for this piece for a while, as I wasn't sure if it would too loud for the design. I thought the contrast would work well though, and it was a slight reference to a Victorian jacket that I'd seen in the LCF archive, which had a contrast chest panel made of floral lace.

Sewing the Stomacher



I was a bit unsure what colour topstitch thread to use for this fabric. I ended up sewing the boning channel on with a bright green silk thread from the wrong side, before topstitching with a lighter green from the right side, and liked this effect.



Final Garment

