

# Interactive Storytelling

Case study

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DSGN 372

# Background

**Project Brief:** Create a single page website utilizing skeleton, css, and html. Tell a story or provide a continuous theme/narrative throughout the responsive webpage.

**Introduction:** My goal with this project was to create a sleek design using simple layout, and minimal high contrast color to drive a compelling, and understandable storytelling experience.

**Problem:** A few problems encountered included representing the progression through time through imagery, and aesthetics. Maintaining A focus on chainsaws while also referencing other relevant forestry associations (textures, environment, ect.)

**Solution:** I will represent the story and design through a variety of aesthetics and stylistic choices. I want the photography to be well sourced, and feel like it matches each time period, and feeling. I hope to be able to drive an interest in the tool, but also create an interesting/fun experience

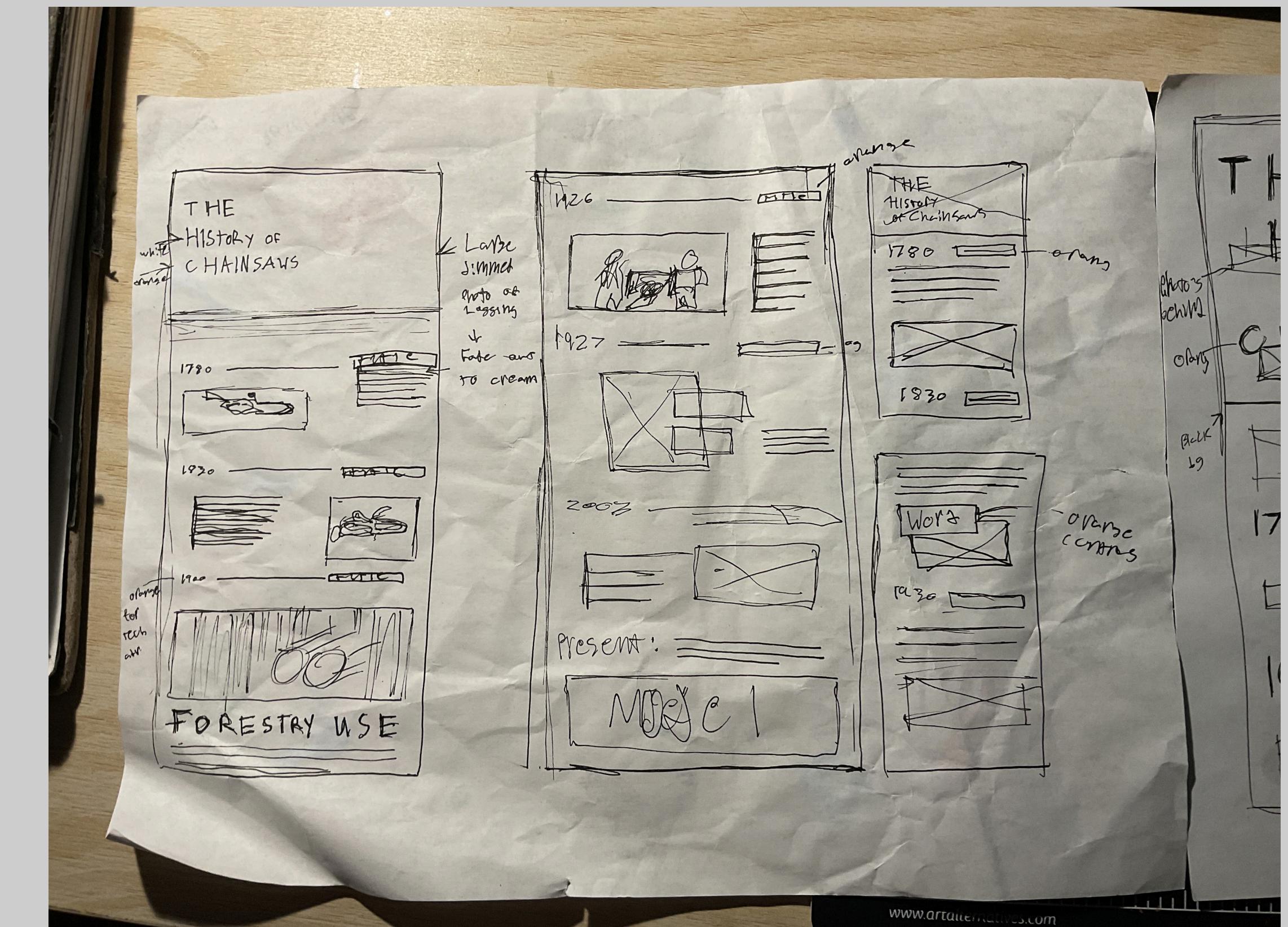
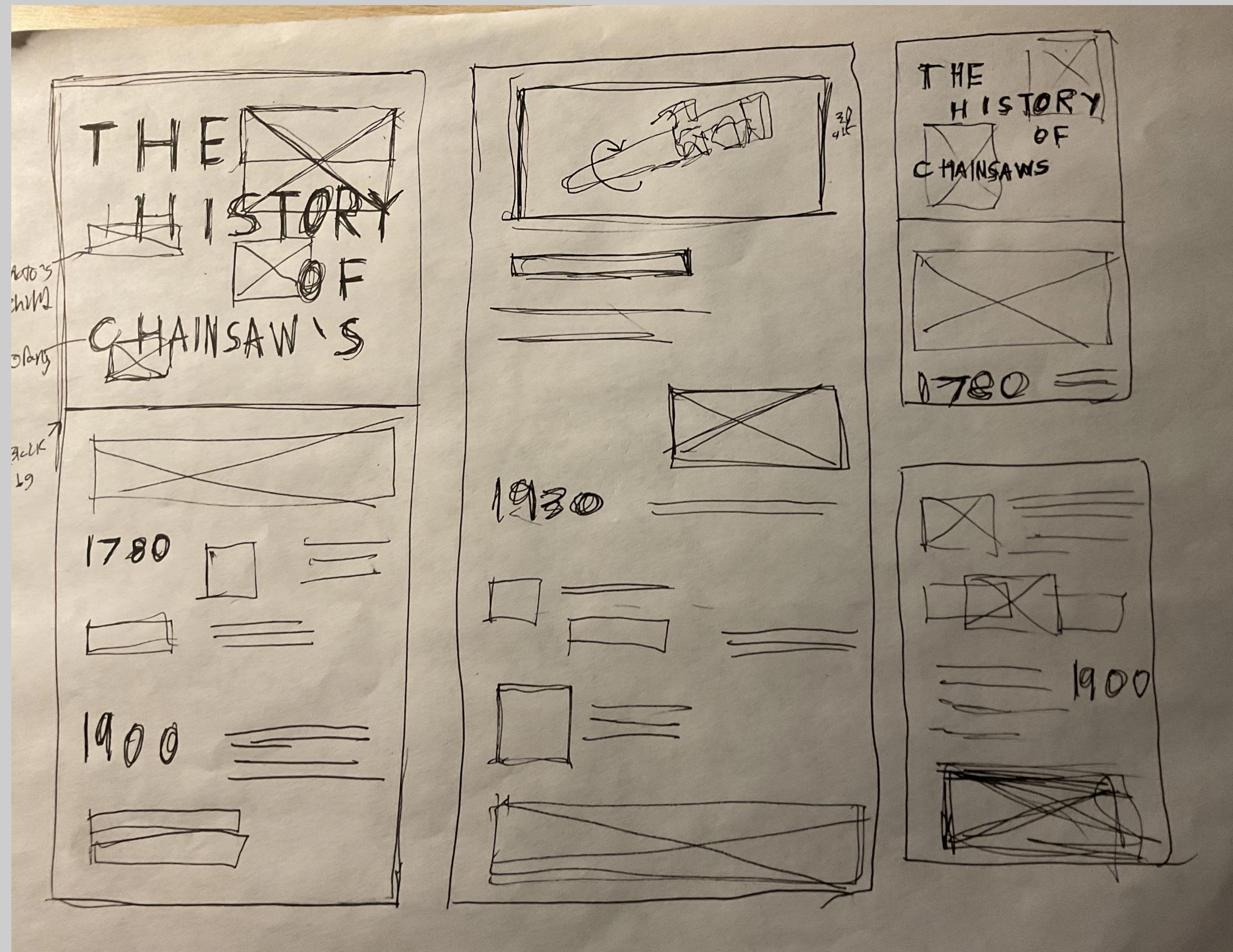
## Research/Inspo

**Content Breakdown:** chainsaws have a variety of components and pieces that would make for an interesting composition, using the chain to track scroll or interact with the composition would be interesting visually. Text will be dates, and significant technological advancements, proceeded by bodies of text, I hope to use effective yet unique and interesting typography. I hope to also use some gifs incorporated with the scroll, and maybe creates some sort of interaction. Start with the surgery, then to logs, then to single person, then just modern.

**Target demographic:** target demographic is probably ages 30-60 with a blue collar, or farm work background. In addition they have some sort of technological background and enough of a curiosity to make it on the internet, and to the website. They defiantly have some sort of relationship with art or design, because they are driven to my website visually. Hopefully this website will drive their appreciation/obsession with chainsaws, and they will come out of the website knowing the history but also excited about chainsaws.

# Design

# Wire Frames



Classic

Search

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# Fiat 600

1955 - 1969

It was designed by Dante Giacosa, the famous engineer who worked incessantly from 1951 on to develop a four-seater runabout, with a rear engine, that was both light and sturdy. And above all, with a price that made it accessible to the people who built it.

It was 1955, and Italy was about to embark on a new era of political and social history: in fits and starts, life was getting back to normal after the tragedy of the war, which had left behind a present full of uncertainty and an equally precarious future.

[f](#) [i](#) [t](#)



Helvetica  
Helvetica Bold  
Helvetica Light



# Initial Design

1780-2025

## THE HISTORY OF CHAINSAWS

1780 — Medical Origins

The first real steps toward the chainsaw happened in the late 18th century due to a specific medical problem. Scottish doctors John Aitken and, soon after, James Pott independently created a small, hand-cranked device similar to a chainsaw. It was mainly used for symphysiotomy, a risky but often life-saving procedure to widen the pelvic opening to deliver a baby by cutting the pubic symphysis. The design was a flexible chain with cutting teeth, moved by a simple wire handle. This hand-powered tool allowed for more controlled cutting than regular surgical knives.

1830 — Osteotome

The idea of a chain-based cutting tool was then picked up in orthopedics. In 1830, German orthopedic surgeon Heinrich Kuntze based on the original concept and invented the osteotome. This was a strong, specialized medical chainsaw made for cutting bone. It had a long metal frame with a handle to move an endless chain with small cutting teeth around a guiding blade. This setup is basically the same design we have today, although now it's mostly electric. At the time, it was still hand-powered and used for delicate bone surgeries; the osteotome was a key step, showing how a moving, toothed chain could cut precisely and efficiently.

1900 — Forestry Age

## THE TRANSITION TO FORESTRY

1926 — Electric Chainsaw

A major step forward came in 1926 when Andreas Stihl, a German mechanical engineer, patented the first electric chainsaw, calling it the "Chain Saw for Electric Power". This machine, while a big deal, was typical for its time: it weighed about 140 pounds, took two people to operate, and cost a fortune. Made specifically for logging, Stihl's electric chainsaw, despite its size, was a key moment showing that powered wood cutting was a workable, if not yet easy, way to cut down trees.

1927 — Gas Chainsaw

The need for more portable and independent tools in forestry quickly led to another important development: Just a year after Stihl's electric model, in 1927, Ernst Lepp, founder of the Husqvarna company, introduced one of the first gasoline-powered chainsaws, the "Type A". This was a game-changer. By using a compact gasoline engine, the chainsaw didn't need to be plugged in, making it a truly mobile tool for the timber industry. While the chainsaw was still very heavy for today's standards and required a lot of strength to use,

1950 — One-Man Saw

Chainsaw development, like many industries, slowed down during World War II as resources and labor were diverted to the war effort. After the war, the demand for timber increased due to reconstruction and economic growth. This renewed need for timber led to a new wave of innovation in chainsaw technology, and the introduction of the one-man saw.

This period saw a significant improvement that really changed how chainsaws were used: the introduction of the chainsaw bar and guide bar, and much more efficient engines. These improvements were key to making single-operator chainsaws possible. No longer needing two people to use a chainsaw became a reality, and an accessible tool. During this active post-war time, many brands still known today, like Stihl, Husqvarna, McCulloch, and Homelite, were major players, each helping to improve and popularize the single-operator chainsaw.

1970 — Popularity increase

By the mid-20th century, chainsaws were standard tools for many different uses. Loggers used them for their jobs, arborists for tree care, and homeowners for property maintenance and cutting firewood. This was also a time of many important innovations to improve performance and operator safety. Anti-vibration systems were added to reduce operator fatigue and noise levels. Chain brakes were developed to stop the chain and bar faster, and the chain brake became common. Chain brakes were designed to grab the chain at a specific point, usually where the guide bar tip hits something and causes the saw to jerk up and back towards the operator. The chainsaw was becoming a more user-friendly tool, which led to it being found in more homes and workshops.

1990 — Modernization

In the second half of the 20th century, chainsaw development continued to focus on operator safety and convenience. Manufacturers introduced quieter engines to cut down on noise, handle designs were improved for better ergonomics, and anti-vibration systems led to better anti-slip/lock designs for both the chain and guide bar. Safety features like the chain brake appeared during this time. However, these early technologies remained often held back by the battery technology of the day, which limited the shorter runtimes than gas models, so they were mostly used for lighter tasks.

2010 — Present Chainsaw

The start of the 21st century brought a big change in battery technology, mainly with the development and improvement of lithium-ion cells. This had a huge impact on the cordless tool market, as batteries finally provided the power and runtime needed for tough tasks. This led to the creation of the first cordless electric chainsaws. These models offered benefits like less noise, no emissions, and easier maintenance, making them a popular choice. As battery technology continued to improve, "smart" technology is the latest development in chainsaws. Features like variable speed control, better engine performance, and diagnostic sensors that can tell users about maintenance needs or problems, are becoming more common, making the tool even more efficient and user-friendly.

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1900 — Forestry Age

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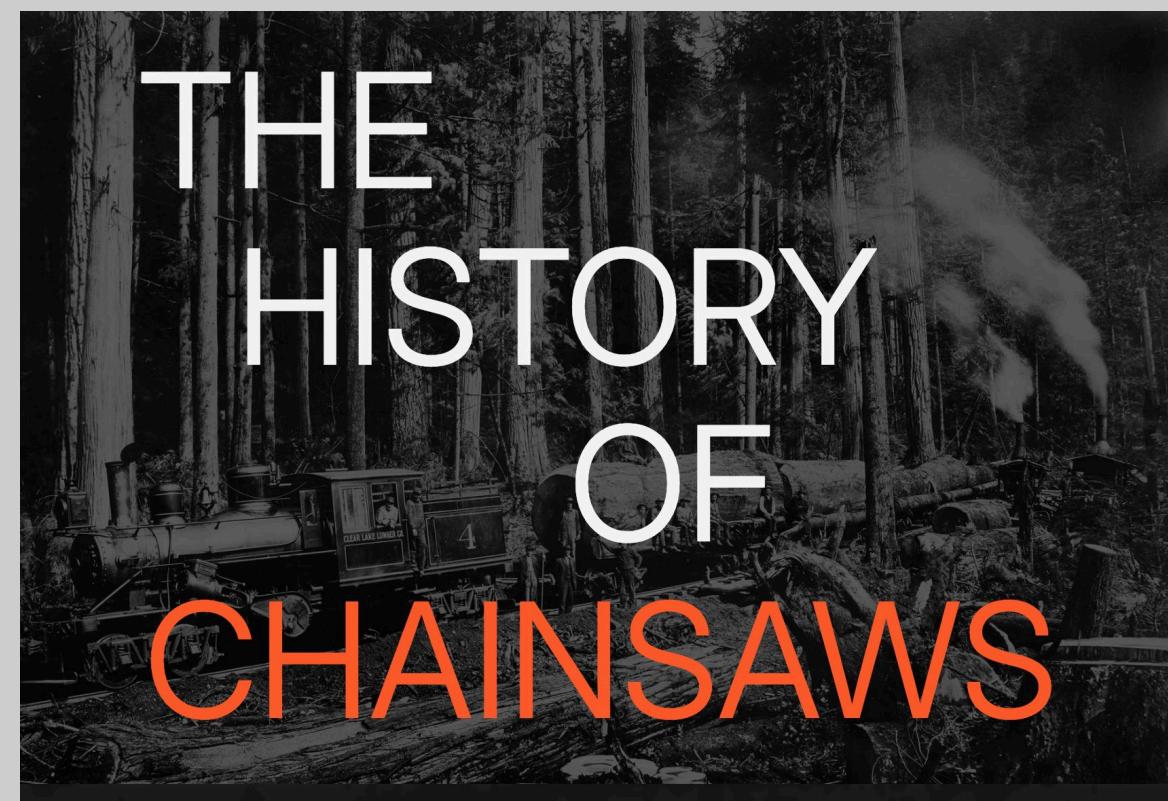
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**Testing/Feedback:** User Testing in class revealed few things, including making sure contrast with type on top of photos was strong enough to maintain readability. Concerns about ability's to code overlay style text like my figma prototype had. In addition a variety of other technical questions with coding.

# Coded Design



## Osteotome

1830

This idea of a chain-based cutting tool was then picked up in orthopedics. In 1830, German orthopedist Bernhard Heine improved on the original concept and invented the osteotome. This was a strong, hand-powered device used for cutting bone. Heine's osteotome used a crank handle to move an endless chain with small cutting teeth around a fixed point. This is where the core design and principle of a modern chainsaw, Even though it was still hand-powered and used for delicate work, it was a major step forward in the early step, showing how a moving, toothed chain could cut precisely and efficiently.

1900



## Forestry Age

The growing timber industry needed better tools. Felling trees with axes and crosscut saws was hard and slow. This need pushed inventors to try out mechanized alternatives. The early chainsaw-like devices for logging were very different from the earlier surgical tools. They were generally big, heavy, and awkward, often needing two or more people to operate. These were early attempts at using the continuous cutting idea for forestry, but they weren't very practical due to their size and the basic power sources available.

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1970



## Modernization

In the second half of the 20th century, chainsaw development continued to focus on operator comfort, ergonomics, and safety. Manufacturers introduced gas engines to cut down on weight. Handle designs were improved for better grip and control, and ongoing research led to better and more efficient materials for the guide bar. Battery-powered chainsaws also started appearing during this time. However, battery technology was still in its infancy, so these models were mostly used for smaller tasks.

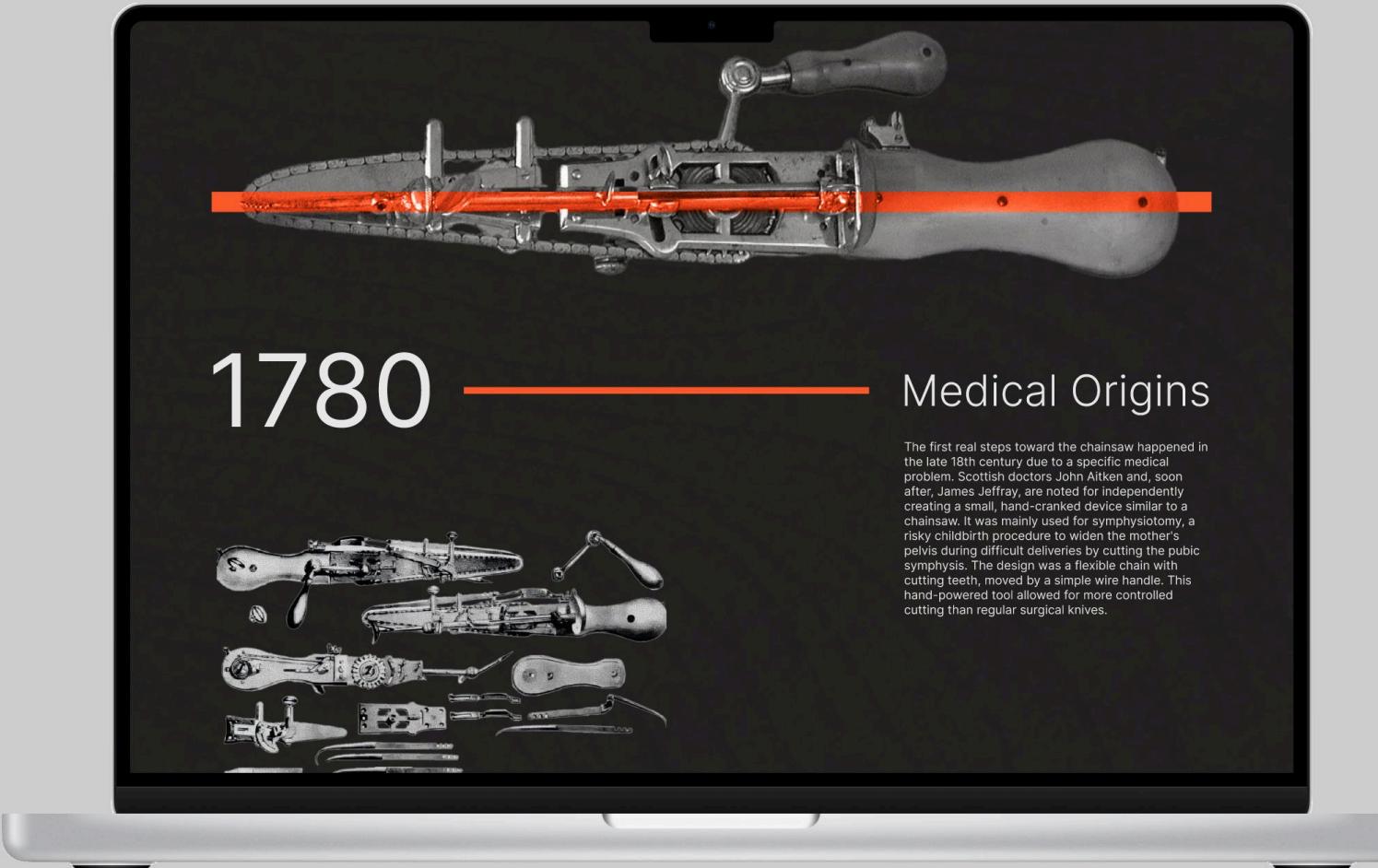


## Popularity Increase

By the mid-20th century, chainsaws were standard tools for many different uses. Loggers used them for property maintenance and cutting firewood. The widespread use came with many important innovations, such as the addition of anti-vibration systems to reduce operator fatigue and health risks. Automatic chain oilers were developed to keep the chain sharp and last longer. Critically, safety features like the chain brake became common. Chain brakes were designed to stop the chain if it got stuck. A "kickback" occurred - a dangerous event where the guide bar hit something and causes the saw to jerk up and back. As these safety features were added, chainsaws became a safer, more integrated system, which led to it being found in more homes and workshops.

1990

# Outcome



## Challenges

I found immediately my design ambitions had to be toned back to a level that was attainable for my coding level. This was interesting because you begin to think much more simply, and the grid becomes much more present, and effective.

Making a responsive website is hard. I've always have had a little less precise of a design process, but the troubleshooting against all my little tweaks I did to get one format, in another size is proved quite the challenge. I was not able to perfect the responsiveness but was able to use a variety of media queries to try.

Another challenge I had was organizing my code, the traditional mark up for html and coding makes sense, it is just not a habit I have gotten into when I am writing the html.

## Reflection

I feel like this project has taught me a lot, from designing for web in figma, and developing that skill to learning to use HTML, CSS, Skeleton. Seeing the ability of code, and how it can be utilized as a tool in web design but also other facets of design.

I think I could see myself trying more Digital Design as a creative method, and tool. I really enjoy motion design, and seeing the possibilities intersecting between motion design, and the interactive ability of web is an area I am interested to explore.