

LASER FOUNDATION

History of Hair Removal



HAIR REMOVAL THROUGH THE AGES

For thousands of years, various civilizations have explored different hair removal methods, for aesthetic, fashion, and religious purposes.

The ancient Egyptians made use of a technique called “*sugaring*”- similar to *waxing*- which is still in use today and involved the application of a sticky, syrup-like paste to the skin, which would then bind to the hair, removing the hair when the paste was vigorously pulled off the skin. The Egyptians were also suspected of developing a *chemical compound to dissolve hair*, by using ingredients such as arsenic, starch and quicklime. The mixture was applied to the skin’s surface and the ingredients would chemically breakdown the substance of the hair. This technique is safe and 100% natural.



Further East, in Indian, Middle Eastern, and Asian societies, a mechanical hair removal method, involving the twisting of cotton threads, was applied to pull hair from the skin. Today we refer to this method as *Threading*, and it remains a popular method for shaping eyebrows and removing hair from other facial areas, such as the cheeks and chin. The twisted threads are held between the mouth and fingers and are run along the skin in a motion that catches the hair between the threads and pulls it from the skin.



The ancient Greek and Roman societies made use of more superficial methods to remove hair from the surface of the skin. Romans would use a tool called a “*Strigil*” which was an instrument with a curved blade, similar to the modern razor, which was run over oiled skin, to cut or shave off the hair on the surface of the skin. Ancient Greeks would vigorously rub *pumice stones* over their skin, to break and buff away hair on the surface of the skin, and were also known to burn the hair, using an open flame over their skin.



It should also be noted that hair removal has played a role in iconic fashion statements throughout time. For example: Queen Elizabeth I, would remove all her eyebrow hair, to achieve the much-admired look of a high forehead during the 16th century.

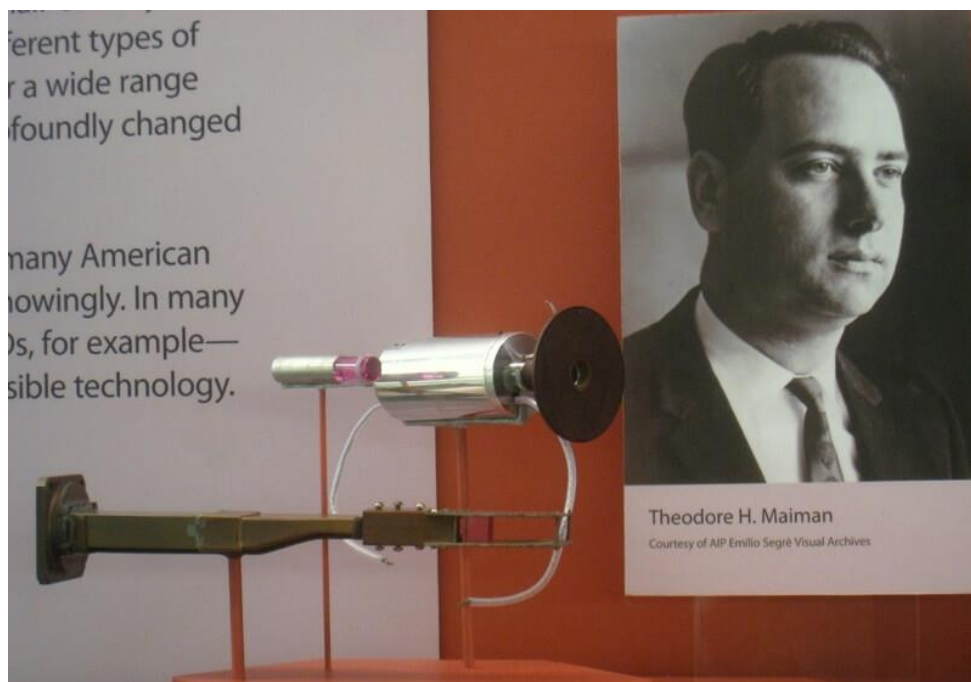
HISTORY OF LASER HAIR REMOVAL

In the 1960s, the first laser hair removal device was developed by Theodor H. Maiman. He would be known as “the father of the electro-optics industry”. Colleagues at the time didn’t truly grasp the potential of laser technology, with one Irnee d’Haenens claiming that *“A laser is a solution seeking a problem.”*

Maiman found so little support for finding a real-world application of the laser that he started two separate laser manufacturing companies in the 60s, Korad and Maiman Associates.

Prior to Maiman’s invention of the laser in 1960, the underpinnings of laser technology had been theorized by Albert Einstein, and a device known as a maser (Microwave Amplification by Stimulated Emission of Radiation) had been available since 1953. Maiman wanted to extend the microwave capabilities of the maser to the optical range, with a device creating short wavelength light.

Maiman’s first laser was a ruby laser, and like most first-time inventions, it was a slow and inefficient version of what we would see decades later. Some researchers tested it on hair, and they found that while it could minimize hair growth, it also resulted in severe skin burns.



In 1964 the Food and Drug Administration (FDA) approved a new laser for hair removal, the Nd:YAG. This laser reduced hair but still didn't produce any permanent results.

The Alexandrite laser was then invented in the 1970s. Radiation was forced through an alexandrite crystal, causing a reduction in hair growth. This method was safer than earlier lasers, but it still didn't have enough heat to stop hair growth permanently.

Thereafter, Laser hair removal technology was stuck at an impasse for decades. Lasers were too ineffective for long term hair removal needs, and many doctors and scientists had given up on the idea.

Years later, Dr Richard Rox Anderson and his new team member Dr Melanie Grossman, who both worked at Harvard Medical School, started investigating laser hair removal.

In 1994 they released their first paper on laser hair removal and created a laser that uses a concentrated light beam. The beam is directed at the skin and travels into the hair follicle. The light damages the follicle and stops future hair growth. Anderson was the first of their human trials, in accordance with his golden rule: "Do unto yourself before you do unto others."

The process was similar to previous studies, but Anderson and Grossman managed to perfect the laser's intensity and application duration on the skin. This method was approved by the FDA in 1997.

Anderson would continue to conceive and develop many more laser treatments including those for tattoo removal, pigmented lesions, birthmarks and more.

Anderson's specific laser hair removal technique would go on to lay the foundation of modern laser hair removal as we know it today.

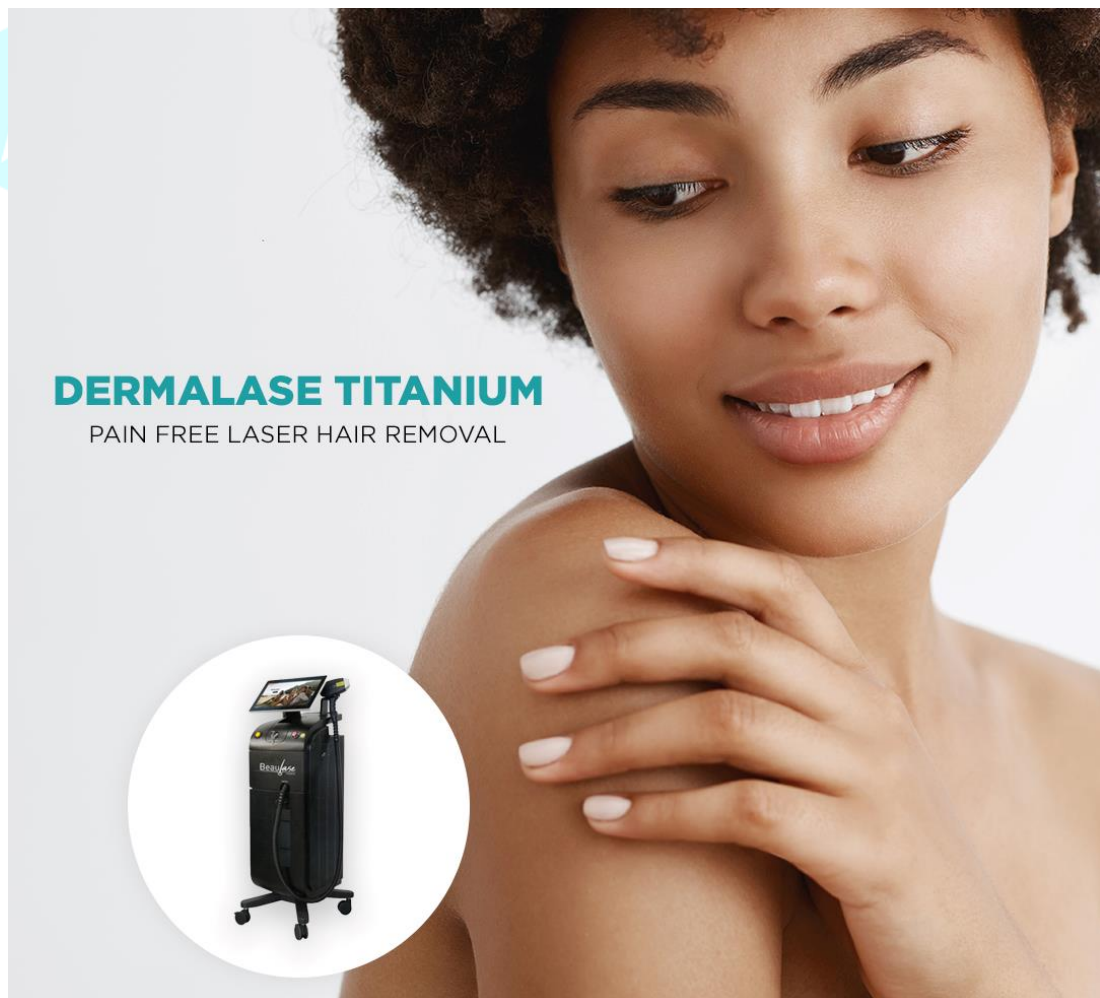
Today laser hair removal is more affordable, and devices are more sophisticated than ever before, with success rates going up to 90% permanent reduction of hair growth in most patients.

Modern technology allows for:

- ✓ Treatment of darker and tanned skin types
- ✓ Less risk of damage to skin and surrounding tissues due to shorter and more controlled pulse rates
- ✓ Cooling technologies assisting in a pain free and comfortable experience.

The following are the leading technologies used:

- Ruby Hair removal
- Alexandrite hair removal
- Diode
- nD: YAG



DERMALASE TITANIUM
PAIN FREE LASER HAIR REMOVAL

The advertisement features a close-up portrait of a woman with dark skin and curly hair, smiling gently. In the bottom left corner, there is a circular inset showing the Dermalase Titanium laser device, which is a black, upright machine on wheels with a control panel and a handpiece. A registered trademark symbol (®) is visible on the right side of the image.