

PROSTHETIC FENCING GRIP

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GOAL:

To create a fencing grip that accommodates people with hand disabilities to still be able to fence either in parafencing or in the regular fencing league. My prototype targets those with finger amputees and partial hand amputees.

I plan to integrate the prosthetic into the fencing grip to make the sport more specialized and accepting of people with physical disabilities.



CHALLENGES

- The individuality and the specific factors of each person.
- Making it adaptable to their fencing style
- Getting it patented and accepted by IWAS (International Wheelchair & Amputee Sport Federation)
 - There are illegal and legal fencing grips and specific requirements to allow you to compete with it.
- CADing it in SolidWorks.
- Modeling it for the specific client.



CAD

- I will use a CAD file I found online of the regular, typical fencing grip to give me a base in which I can add the prosthetic on physically. I will then re-CAD it with the prosthetic and re print it to test the functionality.



PROTOTYPE PART 1:

I printed out both of them and I will start prototyping the actual prosthetic part with tape or another flexible material. I need to map out the positioning of my hands while holding the grip and then I can start making the prosthetic aspect of the grip.



PROTOTYPE PART 2:

I made markings of where possible prosthetics could be implemented and the next step would be to put on the prosthetic part tailored to the client's amputation. It would need to be flexible and durable to last through a bout and for longer periods of time.



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