# PROSTHETICS

Past, present and future of prostheses



((Every loss is a perfect opportunity.))

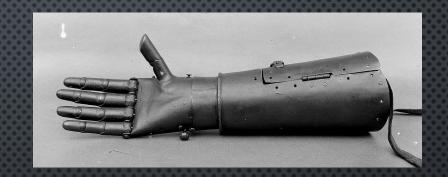


Brought to you by: Eugene F.

### BASICS



PROSTHESIS - IS AN ARTIFICIAL DEVICE THAT REPLACES A MISSING BODY PART, OR A PART OF BODY THAT BECAME DYSFUNCTIONAL.



Iron prosthetic hand believed to have been owned by Götz von Berlichingen (1480–1562)

Usually two basic kinds of prostheses are specified:

- Upper-extremity prostheses
- LOWER-EXTREMITY PROSTHESES

MOST COMMON MATERIALS TO BE USED FOR MAKING PROSTHESES:

- PLASTICS (POLY-ETHYLENE, -PROPYLENE AND ETC.)
- LIGHTWEIGHT METALS (AL AND TI)
- Composites (Carbon Fiber)

### EARLY HISTORY

PIONEERS OF PROSTHETICS



First ever prosthesis to be found — 3000-2800 BC, an eye prosthetic on the territory of ancient Iran

Second are Egyptians — a wooden toe found on a body from the New Kingdom circa 1000 BC



Early prosthetics – rather primitive inventions to restore minimal functionality to a missing body part.

#### PRESENT TIME

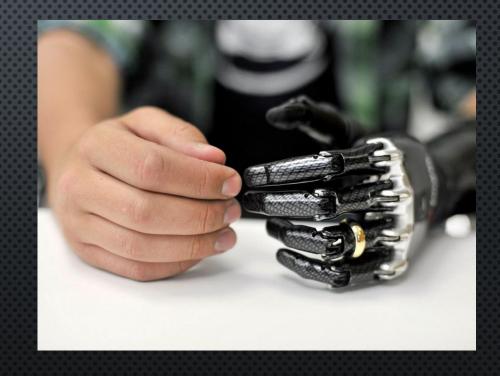
#### CURRENT STATE OF THINGS



THE CURRENT LEVEL OF WORLD SCIENCE ALLOWS YOU TO CREATE NEURAL AND BIONIC PROSTHESES.

NEURAL PROSTHESES ALLOW PEOPLE TO MANIPULATE IT, RESTORING BASIC FUNCTIONS.

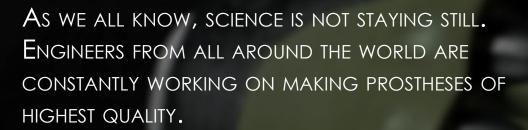
BIONIC PROSTHESES ALLOW PEOPLE TO NOT JUST USE IT, BUT ALSO PROVIDES ITS OWNER WITH TACTILE SENSATIONS.



Current level of prosthetics development is just a starting point. But the achievements are already impressive.

## THE FUTURE

MAKING PREDICTIONS



THEREFORE, I FIRMLY BELIEVE THAT WE CAN DEVELOP PROSTHESES THAT CAN FULLY RESTORE THE FUNCTIONS OF PARTS OF THE BODY OR EVEN ENHANCE THEM.



