

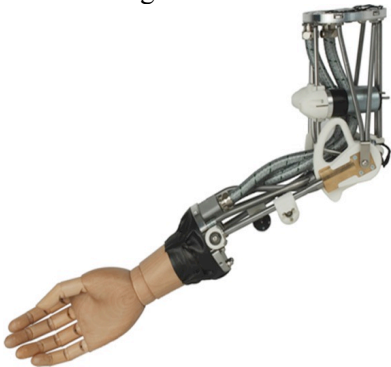
Artificial Limbs

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Have you ever imagined how your life would be without one of your limbs? It would be a difficult reality to accept, for those are things we take for granted. Yet with today's modern technology it is somewhat easier to deal with this disability. Advances in artificial limb technology have made it more convenient and less noticeable for all those people that require the aid of an artificial limb.

The earliest known example of an artificial limb was found in a tomb in Capua, Italy. It dates back to 300 B.C. and is known as the Capua Leg. In the 15th and 16th century artificial limbs were made by blacksmiths and given to wounded soldiers, these limbs were made of iron and other metals. In the 19th century there was an upswing in artificial limb development due to all of the wars of the era. Since this moment artificial limbs have developed more rapidly due to greater government funding.



In the recent years artificial limbs have become increasingly more convenient and less noticeable for the wearer. This is due in part to the new materials used for making the replacement limb. The use of new plastics and other such materials have allowed the limbs to become stronger and lighter. Electronics have become more common in the field of artificial limbs. Myoelectric limbs, which control the limbs by converting muscle movements to

electrical signals, have become much more common place than cable operated limbs. Also

the manufacturing of limbs has been changed with the use of computers. Computers have made the manufacturing easier by allowing for more precise measurements of the stump so the limb will fit better, and it also takes the length of the person into account so the limb suites the person's body.



Where will the future of artificial limbs take us? Well there are many ways artificial limbs may go. One way being evaluated is utilizing the beak of a giant squid to develop new joining materials. The way it works is that the beak changes density from the hard tip to a softer base where it attaches to the muscle around the squid's mouth. This would allow the squid to use its beak without any fear of damaging its softer tissue, and they hope to bring this to artificial limbs so it no longer pains the wearer. There are also aspirations to bring the use of robotics into artificial limbs, to make them more convenient and life like for the user.

References

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