

On limbless heroes

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ABSTRACT

Usually articles on the history of amputation of limbs, focus on the surgeons, techniques and on the artificial limbs. Some people after amputation of limbs, survived even before the introduction of antibiotics, knowledge about antisepsis, sophisticated surgical techniques and the introduction of modern radiology.

In my 40 years of experience in clinical rehabilitation medicine, I realize that most people with physical disability, do not seek sensation or risks. This article will focus on famous amputees who continued their military career in spite of their injury and disability.

Key words: Amputation, limbs, people, physical disability, pictures

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*" I am the wound and the knife
I am the blow and the cheek!
I am the limbs and the wheel-
The victim and the executioner! "*

Charles Baudelaire 1821-67, Les Fleurs du Mal ,
1861

"Daisy, daisy, who shall it be?
Who shall it be who will marry me?
Rich man, poor man, beggar-man, thief, Doctor,
lawyer, merchant, chief,
Tinker, tailor, soldier, sailor." [And spy..]

Usually articles on the history of amputation of limbs, focus on the surgeons, techniques and on the artificial limbs. Some people after amputation of limbs, survived even before the introduction of antibiotics, knowledge about antisepsis, sophisticated surgical techniques and the introduction of modern radiology.

In my 40 years of experience in clinical rehabilitation medicine, I realize that most people with physical disability, do not seek sensation or risks.

This article will focus on famous amputees who continued their military career in spite of their injury and disability.

They symbolize in my view , not only their survival , but also their victory over disability. Loss of a limb is usually followed by pain, fatigue, disturbance of body image [1], sometimes bodily disfigurement [2], functional limitations, walking disturbances, change of the victim's role in the family and society etc.

Certain medical, surgical or artistic evidence of Surgical amputations or amputees, appear since the 16 th century [3].

Many lower-limb amputees paved their way with the aid of crutches or canes. Metal artificial limbs were heavy, expensive and impractical [4].

The anecdotes which are described herewith, show how people reached remarkable accomplishments despite their physical disabilities.

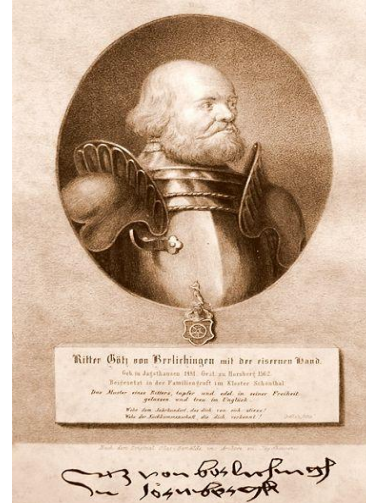
Survival after self-mutilation

Aron Lee Ralston (1975), an American engineer, survived a sports accident in 2003, during which he amputated his own right forearm with simple tools in order to free himself after being trapped in a desert for five days under a dislodged boulder [5].

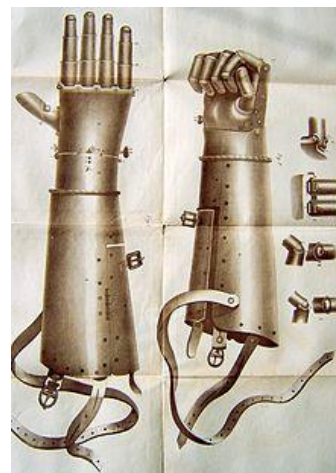
The Greek historian Herodotus [6] Recorded in 424 B.C., the story of Hegesistratus, a Greek who cut off his own foot, in order to escape from the Spartan prison (through a hole he made in the wall). Later he walked with a wooden artificial limb . Eventually, he was caught and executed.

The Roman scholar Pliny the Elder (23-79 A.D.) [7] mentioned a Roman general in the Second Punic War (218-210 B.C.) who had a right arm amputated. He had an iron hand adapted to hold his shield . Famous amputees who continued to fight in the battlefield

An iron prosthesis was adapted to Gottfried "Götz" von Berlichingen (c. 1480 – 1562) [8-10].



This picture was copied from: [http:// de. academic. ru/dic.nsf/dewiki/560001](http://de.academic.ru/dic.nsf/dewiki/560001)



This picture was taken from: [http:// www.wired.com/magazine/2011/06/pl_prototype_ir onhand/](http://www.wired.com/magazine/2011/06/pl_prototype_ir_onhand/)

This nobleman was a professional soldier from Witemberg. During 47 years he took part in many battles in Germany. He became a national hero. Johann Wolfgang von Goethe, wrote a drama on Götz von Berlichingen (1773). It is amazing to read about his ability to fight with his heavy-metal prosthesis ?!

François de la Noue (1531 – 1591), called *Bras-de-Fer*, Capitaine, chevalier de l'Ordre du roi Seigneur de la Nouë-Briord de La Roche-Bernard (en Beauce) de Montreuil-Bonnin, an Huguenot

officer of an ancient Breton family. He was captured three times in his long military career [11-12].

At the siege of Fontenay (1570) his left arm was severely injured by a bullet and later amputated; at La Rochelle a technician designed and built an artificial iron arm for him. Despite his disability, he continued to take part in many battles.

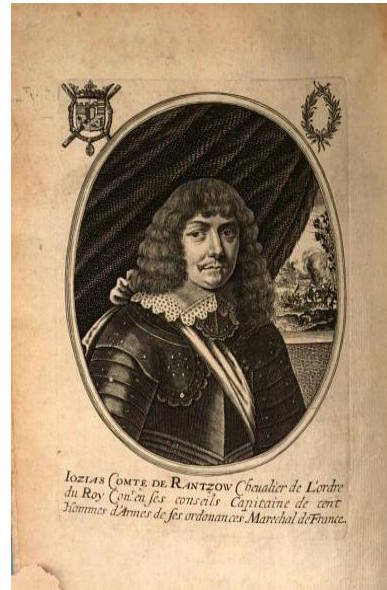


(The picture of François de la Noue, was taken from the site of ref. 12). His book, *Discours politiques et militaires* was published in 1587.

Seigneur de Bothkamp (1609-1650), (Count Josias Rantzau) a German soldier, commander of the Weimar Army, of the "30 Years' Wars", lost, in 1640, a leg, an eye and an ear, and one arm, during the siege on Arras (province of Artois). He was defeated in 1643, Nov 24th, by the Bavarian Imperial army. He died in Paris [13-14].



this picture was copied from: <http://www.niceartgallery.com/Jean,-Le-Romain-Alaux/Retrato-Ecuestre-De-Josias-Rantzau,-Mariscal-De-Francia.tml>



This picture was copied from: <http://www.portrait-hille.de/kap07/bild.asp?catnr1=2889&seqnr=2461>

The merchant and skipper Peter Stuyvesant (c.1592? or 1612 – 1672), served eighteen years as the last Dutch Director-General of the colony of New Netherland from 1647 until it was ceded provisionally to the English in 1664 (New Netherland (Dutch: *Nieuw-Nederlandt*), was a 17th-century colonial province of the Seven United Netherlands that was located on the East Coast of North America. The provincial capital of New Amsterdam (later-New York) was located at the southern tip of the island of Manhattan on New York Harbor),



this picture was copied from: <http://www.paladium.net/usanycMayor-Z.php>



This illustration was taken from: <http://news.stacks.com/content/peter-stuyvesant-historic-knickerbocker-proof/>

"Stuyvesant served in the Dutch Army before receiving his appointment as director-general of New Netherland in 1646. He had served in the West Indies and was governor of the colony of Curaçao. He lost a leg during the unsuccessful assault on the Portuguese island of St. Martin, after which he returned to the Netherlands in 1644" [15-16].

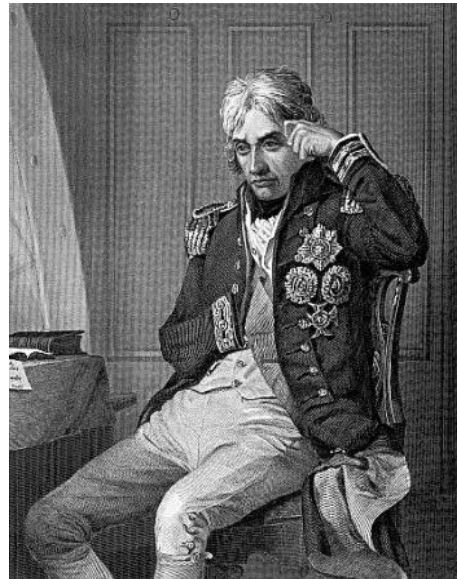
The artillery officer, Nicolas Gargot de La Rochette, chevalier de Saint-Michel (1619-1664), was called, after his right leg amputation: Peg-leg (*Jambe de Bois*). He lost his leg during the siege of La Mothe (in Lorraine area). He served as a Governor of Plaisance (Placentia), Newfoundland in 1660 [17-18].

Lord Horatio Nelson, 1st Viscount Nelson, 1st Duke of Bronté, KB (1758–1805), had a remarkable naval career, although he lost an arm, an eye, and sustained penetrating brain injury. Finally, on board of his commanding ship, during a victorious naval combat in Trafalgar, he sustained a fatal penetrating spinal cord injury [19-20].



This picture was copied from: http://en.wikipedia.org/wiki/Horatio_Nelson,_1st_Viscount_Nelson

"Two Thirds of Cesars boasted-Fame / Thou Nelson must Resign/to Come & see as parkers Claim to conquer only Thine" from a poem by Lady Hamilton for Horatio Nelson [21].



This picture was taken from: http://nl.wikipedia.org/wiki/Horatio_Nelson

On the Death of Lord Nelson Anon *The Morning Chronicle* (November 8, 1805)

Why o'er the dark and troubled deep Is heard at times a mournful noise; while Victors midst their triumphs weep, the vanquish'd in their fall rejoice! Why burst the sobs of yonder Tars, but now triumphant o'er the foe; unmindful of their gory scars, their tears that now first learn to flow?

For NELSON'S death their tears are shed, and grief alone their thoughts employs; Ev'n Vict'ry's self reclines her head, and weeping checks her wonted joys. Thy deeds, great Chief, shall be the theme, Afar on Ganges' hallow'd shores; While Niagara's lightning stream, thy dreaded name in thunder roars.

Stern MARS, as 'midst the fight he raves, shall ev'ry dreadful peal prolong; and NEPTUNE roll his gory waves, To sound their fav'rite's fun'ral song. And while on high her Warrior's tomb Thy weeping country grateful rears; thy laurels o'er it e'er shall bloom, still water'd by a Nation's tears [22].

Louis-Marie-Joseph-Maximilian Caffarelli du Falga- "Le Général À La Jambe De Bois" [23] (1756 - 1799) was a French scholar and military commander.

His two brothers also served as Generals. During the battle of Sambre-et-Meuse, 27/11/1797, he lost his left leg. He returned to active military service with a wooden prosthetic leg. His right arm was amputated above elbow by Baron Dominique Jean Larrey (1766-1842), , in Acre, 24/4/1799.He

died soon after when a septic complication on his stump had appeared.



his portrait was taken from: http://fr.wikipedia.org/wiki/Louis_Marie_Maximilien_de_Caffarelli_du_Falga



This portrait was copied from: http://fr.wikipedia.org/wiki/Dominique_Larrey

Napoleon wrote : "*Our universal regrets accompany General Caffarelli to the grave; the army is losing one of its bravest leaders. Egypt one of its legislators, France one of its best citizens, and science, an illustrious scholar*". He was admitted to the *Academie Francaise* after he published works on mathematics and philosophy.

Józef Longin Sowiński (1831-1777) was an artillery general and one of the heroes of Poland's November 1830 Uprising. During Napoleon's invasion of Russia (1812) Sowiński lost a leg at the Battle of Mozhaysk.

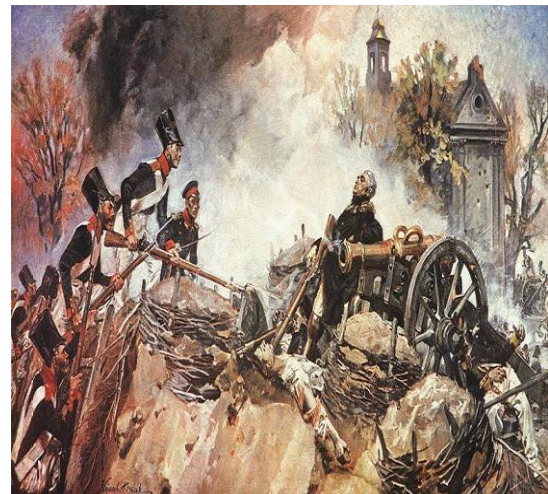
The *Virtuti Militari* and Legion of Honor were awarded to him. After the Congress of Vienna, he returned to Poland and served as commander of the Warsaw Arsenal of the Kingdom of Poland Army. In 1820 he became commandant of the Application School for officers.

During the Uprising against Russia in 1830, Sowiński became an artillery commander of the Warsaw garrison and head of the Government Commission of War (*de facto* Ministry of War . He

was killed in- action, standing bravely with his artificial leg [23].

"On September 6, 1831, Russian forces launched the final assault on the outnumbered Polish defenders of Warsaw. Fighting went on for two days. General Jan Sowiński (1777-1831), a veteran of the Prussian and Napoleonic Armies who had lost a leg in Russia in 1812, commanded the key position of Redoubt 54 and the churchyard of Wola. When the Russians finally succeeded in capturing the stronghold, no one was left alive and General Sowiński's dead body was found still standing erect, propped upon its wooden leg, leaning on a cannon" [24].

Sowiński at the Redoubt of Wola. Wojciech Kossak (1857-1942) 1922. Oil on canvas. Muzeum Wojska Polskiego, Warszawa.



This picture of Swinski's death, appears at: <http://www.zincavage.org/paintings-index.html>

A General in Napoleon's Army, Pierre Yrieix Daumesnil (1776-1832), was also called *Jambe de bois*. He lost his leg at the Battle of Wagram.

His famous words after the battle were: *Quand vous me rendrez ma jambe, je vous rendrai ma place!* ("I shall surrender Vincennes when I get my leg back") Sadly, the brave soldier died in the cholera epidemics, 1832 [25].

□ Louis-Gaston de Sonis (1825-1887), was a French Army General who lost his left leg in the battle of Loigny during the Franco-Prussian War. Appointed general of the army- corps at the age of 45. He said: "*Fight bravely against the demon of sadness. Oppose it by a fresh submission to the will of God, and serve God in joy, with great simplicity of heart*" [26].

John Wesley Powell (1834 – 1902) a U.S. soldier, geologist, explorer of the American West, and director of major scientific and cultural institutions. He is famous for the 1869" Powell

geographic Expedition", a three-month river trip down the Green and Colorado rivers that included the first known passage through the Grand Canyon [27-28].



Pierre Daumesnil's picture was copied from: <http://mondomicile.centerblog.net/527-general-de-cavalerie-yrieix-daumesnil>



De sonis picture was copied from: <https://nobility.org/2011/12/01/gaston-de-sonis/>



Taken from reference no. 27

At the Battle of Shiloh, he lost one arm. He suffered from phantom pain but returned to the Army and took an active part in battles.

"Then limbs can be cut off without pain: the flesh is dead to all feeling, and does not heed the deep thrust of the knife, because the soul within it is asleep. It is, therefore, because the body lives by admixture with a weak soul, that it is subject to the weakness of pain."...[28].

Phantom Pain & Sensation. In the 16th Century, French military surgeon Ambroise Pare' (29-30) was the first to medically document the phenomena of phantom limb Pain

"For the patients, long after the amputation is made, say they still feel pain in the amputated part. Of this they complain strongly, a thing worthy of wonder and almost incredible to people who have not experienced this."

Ambroise Pare'. 1551 [31]. Subsequent studies by Charles Bell (1830), Magendie (1833), Rhone (1842), Guéniot (1861) and others provided detailed descriptions of the phenomenon and, in 1871, Weir Mitchell coined the term 'phantom limb'.

Dr S Weir-Mitchell: "The Birth and Death of Pain"

"...the birth of pain! Let centuries roll away; come back with me to nature's primal day. What mighty forces pledged the dust to life! What awful will decreased its silent strike! Till through vast ages rose on hill and plain Life's saddest voice, the birth-right wall of pain. The keener sense, and even growing mind, Served but to add a torment twice refined. As life, more tender, as if grew more sweet, The cruel links of sorrow found complete When yearning love to conscious pity grown Felt the mad thrills, that were not its own..." Sir John Hughlings -Jackson an eminent British neurologist, like Henry Head, mentioned phantom limb by its present name in a paper published in 1884 and gave Mitchell full credit for its delineation: " a man losses his arm by amputation just below the elbow; he knows nothing of anatomy, and yet when the end of his ulnar nerve id faradized the stump being healed), he describes the movements which we should see if we faradized the ulnar nerve in a healthy man. Obviously, these "movements" of the lost limb are the results of excitation of motor centers roused into activity by incoming currents from the sensory nerves contained in the ulnar nerve stump" [32] .

The 19th & 20th Centuries. Great strides towards better amputation techniques and prosthetic fitting, were done during these centuries. More amputees were seen in hospitals, institutions and in the streets: they sustained injuries in the battle fields, in car traffic, sports or work related accidents. Some lost limbs due to degenerative diseases. Improved legislation and better social

atmosphere , allowed the limbless to return back into the main stream of life.



ca. 1864, [U.S. Army surgeon, Dr. S. Baird Wolf, about to amputate an arm]: a Photographic History 1845: taken from: https://twitter.com/Irr_Anatomist/status/401701684889800704.

Joseph Trumpeldor 1920-1928



A picture was taken from: <http://www.isracast.com/pages/bigimage.aspx?id=2497>

A legendary Jewish hero. Trumpeldor joined the Russian army in 1902 and served in the Russian-Japanese war two years later. During the siege of Port Arthur he lost his left arm and was taken prisoner, receiving a high Tsarist order of merit for his gallantry and zeal. In 1912, he settled in Palestine. He was a founder of the Zion Mule Corps in 1915 and served in Gallipoli where he was shot through the shoulder. At the end of the war, Trumpeldor returned to Russia where he witnessed the Russian revolution. Following his return , and his involvement in the defense of Tel Hai against the Arabs, a settlement in the Galilee, he was fatally wounded. He was killed together with seven other defenders and it is claimed that as he lay on his death bed, one of his final utterances

was, "Never mind, it is good to die for one's country" [33].

Dulce et decorum est pro patria mori is a line from the Roman lyrical poet Horace's *Odes* (III.2.13). "It is sweet and right to die for your country". Well, the shell- shocked poet from World war I, Wilfred Owen, disagreed with them; the poem, "*Dulce Et Decorum Est*", describes a gas attack during World War I and is one of his many anti-war poems that were not published until after the war ended. In the final lines of the poem, the Horatian phrase is described as "the old lie." It is believed that Owen intended to dedicate the poem ironically to Jessie Pope, a popular writer who glorified the war and recruited "laddies" who "longed to charge and shoot" in simplistically patriotic poems like "*The Call*" [34].

Sir George Mansfield Smith-Cumming , 1878-1909, had entered the foreign section of Naval Intelligence in 1898, creating a post-imperial intelligence service. In he was involved in a road traffic accident in France, in which his son was killed. It was said, that in order to escape the car wreck he was forced to amputate his leg using a pen knife. "*Hospital records have shown however that while both his legs were broken, his left foot was only amputated the day after the accident*". Anyway, he became a legendary commander of the SIS (MI6) Secret Intelligence Service and the Head of the SIS Operations during World War I [35-36].



This picture appears at: <http://1y2gm.foroactivo.com/t1031-la-inteligencia-britanica>

Major-General Sir Howard Karl Kippenberger, (1897–1957). A New Zealander Soldier, lawyer, and editor, who fought in both World Wars and was awarded a Distinguished Service Order for his leadership during the Battle of Crete [37].

An anti-personnel mine which was exploded near Monte Cassino railway station, caused a double amputation of both feet.



the portrait was copied from: http://en.wikipedia.org/wiki/Howard_Kippenberger

Virginia Hall, 1906-1982 , nickname "Cuthbert", was a World War II Allied spy.



This picture was copied from: <http://projects.militarytimes.com/citations-medals-awards/recipient.php?recipientid=22199>

"Wanted: The Limping Lady -The intriguing and unexpected true story of America's most heroic—and most dangerous—female spy " [38].

Born in Baltimore, USA, Hall was appointed in 1931 to the staff of the American Embassy in Warsaw, Poland. Later she served in Estonia, Austria and Turkey, where a serious accident caused her losing the left leg below the knee . An artificial limb was fitted.

In 1940, she was recruited by the British Special Operations Executive (SOE). As a "free-lance reporter" she could move around Europe while taking an active part assisting the *Maquis*, spying missions, aiding POWs to escape, etc.

In 1943 she arrived in the UK, and after training, she returned to France to assist the Allies.

She was the only civilian woman to be awarded the Distinguished Service Cross. After the War she joined the CIA [30].

Sir Douglas Robert Steuart Bader, (1910 - 1982). Before the War, Bader's both legs were mangled in the plane crash and amputated. At the RAF hospital, he met Marcel Dessoutter , who had lost one leg in an air accident. Dessoutter had developed a firm which produced artificial limbs. Gradually Bader taught himself to walk on these prostheses. He volunteered the RAF when the War started. He became a famous "ace" and was awarded the DSO. In 1941 his plane he was flying collided with a German Messerschmit, and the Nazis captured him. After trying to escape several times he was transferred to Colditz Prison , where he stayed until 1945,the end of the war [40-43] .



<http://www.donny.co.uk/Doncaster/news/?ID=466>

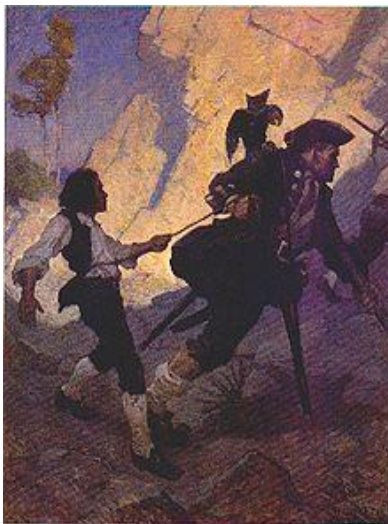
The story of Alexey Petrovich Maresyev (Алексе́й Петро́вич Марёсьев; May 20, 1916 – May 19, 2001) a Soviet fighter "ace" during World War II, became the basis for a novel by Boris Polevoy, *Story of a Real Man*. The novel was the basis of Sergei Prokofiev's last opera, *The Story of a Real Man*. "On April 4, 1942, he was shot down. Despite being badly injured, Alexey managed to return to the Soviet-controlled territory but his legs had to be amputated below the knee. After a year of intensive exercises in order to master the control of his prosthetic devices, he returned to flying in June 1943. He was awarded the Golden Star of the "Hero of The soviet Union" . In 1956, he obtained a Ph.D. in History, and started working in the Soviet War Veterans Committee. Eventually he became a member of Supreme Soviet" [44] .

Real and imaginary Literary heroes with limb amputation Literary heroes with limb amputation, are numerous. Just to recall *Treasure Island* , by Robert Louis Stevenson, with Long John Silver.

Captain hook in "Peter Pan " , by Sir James Matthew Barrie, (1860 – 1937), the dancing girl in "The Red Shoes " (1845) by Hans Christian Andersen.



Long John Silver leading Jim Hawkins in *The Hostage*, illustration by N. C. Wyeth 1911, on: <http://pirates.hegewisch.net/whosilver.html>



<http://www.wikipaintings.org/en/n-c-wyeth/jim-long-john-silver-and-his-parrot>

As an amputee, Captain Ahab, suffered immensely of phantom-pain. Indeed, the following conversation occurs between Ahab and the ship's carpenter, who is making him a new artificial limb: "Look ye, carpenter, I dare say thou callest thyself a right good workmanlike workman, eh? Well, then, will it speak thoroughly well for thy work, if, when I come to mount this leg thou makest, I shall nevertheless feel another leg in the same identical place with it; that is, carpenter, my old lost leg; the flesh and blood one, I mean. Canst thou not drive that old Adam away?" "Truly, sir, I begin to understand somewhat now. Yes, I have heard something curious on that score, sir; how that a dismayed man never entirely loses the feeling of his old spar, but it will still be pricking him at times. May I humbly ask if it really be so, sir?" [Moby Dick - Chapter 108] or Captain Ahab in Moby Dick (1851).

And in Moby Dick - Chapter 16 "... but it was the sharp shooting pains in his bleeding stump ..".... Herman Melville (1819 – 1891) and "Moby Dick" attracted many researchers discussing various medical and psychiatric aspects [45-47].



<http://www.metmuseum.org/collections/search-the-collections/373512>

A few writers or musicians lost limbs during war and became famous: Frédéric Louis Sauser (1887-1961), "Blaise Cendrars", "La Main Coupée" The Severed Hand, "J'ai", "J'ai Saigné", "Moravagine", Paul Wittgenstein (1887 – 1961) "was an Austrian-born concert pianist who became known for commissioning new piano concerti for the left hand alone, following the amputation of his right arm during the First World War. He devised novel techniques, including pedal and hand-movement combinations, that allowed him to play chords previously regarded as impossible for a five-fingered pianist." [46].

"Electronic searches were performed to investigate the evolution of one-handed piano compositions and one-handed music techniques, and to identify individuals responsible for the development of music meant for playing with one hand. Particularly, composers such as Liszt, Ravel, Scriabin, and Prokofiev established a new model in music by writing works to meet the demands of a variety of pianist-amputees that included Count Géza Zichy (1849-1924), Paul Wittgenstein (1887-1961), and Siegfried Rapp (b. 1915). Zichy was the first to amplify the scope of the repertoire to improve the variety of one-handed music; Wittgenstein developed and adapted specific and novel performance techniques to accommodate one-handedness; and Rapp sought to promote the stature of one-handed pianists among a musically sophisticated public able to appreciate the nuances of such maestros" [47].

REFERENCES

1. Sousa AI, Corredeira R, Pereira AL. The body in persons with an amputation. *Adapt Phys Activ Q.* 2009 Jul;26(3):236-58.
2. Racy JC. Psychological aspects of amputation, in Moore WS, Malone SJ (eds): *Lower Extremity Amputation.* Philadelphia, WB Saunders, 1989, chap 26.
3. Kirkup JR. *A History of Limb Amputation.* London, Springer verlag, 2007. 184 p
4. Ohry A, *Amputation: Medicine and art. The history and its representation in art.* Beit Harofe, Tel Aviv, May 14, 1978. The Mishan Chair of History and Philosophy of Medicine, Sackler School of Medicine, TAU, Israel.
5. Ralston AL. *Between a Rock and a Hard Place* Dawson WR, Harvey FD, Herodotus as a medical writer. With notes by F.D. Harvey. *Bull Inst Class Stud Univ Lond,* 1986;33:87-96.
6. Pennuto C. Pliny the Elder and medical gymnastics of Jerome Mercuriale. *Arch Int Hist Sci (Paris),* 2011;61(166-167):307-18.
7. Klimpel V. [Famous cases for amputation]. *Wurzburg Medizinhist Mitt.* 2004;23:313-27.
8. Ohry A. People with disabilities before the days of modern rehabilitation medicine: did they pave the way? *Disabil Rehabil.* 2004 May 6;26(9):546-8.
9. http://en.wikipedia.org/wiki/G%C3%getz_von_Berlichingenhttp://huguenotsfrance.org/france/celebrities/la_noue.htm [cited 2104 February 4].
10. <http://www.museeprotestant.org/Pages/Notices.php?scatid=6¬iceid=767&lev=1&Lget=EN> [cited 2104 February 4].
11. http://fr.wikipedia.org/wiki/Josias_Rantzau [cited 2104 February 4].
12. Henckel M & Jastrau V, *Josias Rantzau: et livsbillede fra det syttende aarhundrede .* 1892. Gyldendal, 239 p,
13. <http://www.let.rug.nl/usa/biographies/peter-stuyvesant/> [cited 2104 February 4].
14. Klimpel V. Famous cases for amputation. *Wurzburg Medizinhist Mitt,* 2004;23:313-27. German
15. http://fr.wikipedia.org/wiki/Nicolas_Gargot_de_La_Rochette [cited 2104 February 4].
16. http://www.biographi.ca/en/bio/gargot_de_la_rochette_nicolas_1E.html [cited 2104 February 4].
17. Wilson G, *Horatio Nelson: the one-eyed Admiral? Clin Experiment Ophthalmol.* 2005 Oct;33(5):516-7.
18. Keynes M, *Horatio Nelson never was blind: his woundings and his frequent ill-health.* *J Med Biogr.* 1998;6(2):114-9.
19. <http://www.theguardian.com/uk/2011/mar/08/la-dy-hamilton-poem-lord-nelson> [cited 2104 February 4].
20. http://www.rc.umd.edu/editions/warpoetry/1805/1805_8.html [cited 2104 February 4].
21. <http://joseph.lohou.perso.sfr.fr/plusquellec/lmjc/affarelli.htm> [cited 2104 February 4].
22. http://portalwiedzy.onet.pl/36096,,,sowinski_jozef_longin,haslo.html [cited 2104 February 4].
23. http://www.la-croix.com/Culture/Voyages/Perigueux-la-ville-au-general-jambe-de-bois-_NG_-2013-01-11-898060 [cited 2104 February 4].
24. http://en.wikipedia.org/wiki/Louis-Gaston_de_Sonis [cited 2104 February 4].
25. <http://www.pbs.org/wgbh/amex/canyon/peoplevents/pandeAMEX05.html> [cited 2104 February 4].
26. <http://explorethecanyon.com/grand-canyon-raft-tours-john-wesley-powell-adventure/> [cited 2104 February 4].
27. Goyal PK, Williams AN. "To illustrate and increase Chyrurgerie": Ambroise Paré (1510-1590). *J Pediatr Surg,* 2010 ;45(10):2108-14.
28. Mirskiĭ MB, *Ambroise Pare'--reformer of surgery.* *Khirurgiia (Mosk),* 1999;(11):66-9. (Russian)
29. Keil G. So-called initial description of phantom pain by Ambroise Paré: "Chose digne d'admiration et quasi incroyable": the "douleur's parties mortes et amputees". *Fortschr Med,* 1990 ;108(4):62-6.
30. p.55 in: *Selected Writings of John Hughlings-Jackson.* Vol1, Hodder & Stoughton, 1931, London.
31. <http://www.jewishvirtuallibrary.org/jsource/biography/trumpeldor.html> [cited 2104 February 4].
32. http://en.wikipedia.org/wiki/Dulce_et_decorum_est_pro_patria_mori [cited 2104 February 4].
33. <http://www.spartacus.schoolnet.co.uk/SScumming.htm> [cited 2104 February 4].
34. http://en.wikipedia.org/wiki/Mansfield_Smith-Cumming [cited 2104 February 4].
35. <http://www.teara.govt.nz/en/1966/kippenberger-howard-karl> [cited 2104 February 4].
36. <http://www.smithsonianmag.com/history-archaeology/hall.html> [cited 2104 February 4].
37. <http://www.nwhm.org/education-resources/biography/biographies/virginia-hall/> [cited 2104 February 4].
38. <http://www.essortment.com/sir-douglas-bader-world-war-ii-ace-21926.html> [cited 2104 February 4].
39. Brickhill P., *Reach for the Sky: The Story of Douglas Bader, DSO, DFC.* London: Odhams Press Ltd., 1954.
40. Burns M, *Bader: The Man and His Men.* London: Cassell Military, 1998.
41. Turner JF, *Douglas Bader: A Biography of the Legendary World War II Fighter Pilot.* Airlife, 1995.

42. http://en.wikipedia.org/wiki/Alexey_Maresyev [cited 2104 February 4].
43. Rosenblatt L. The limits of pity in Bartleby and Moby Dick. *Med Humanit*, 2008 ;34(2):59-63
44. McCarthy P. Forms of insanity and insane characters in Moby Dick. *Colby Libr Q*, 1987;7(3):39-51.
45. Ross JJ. The many ailments of Herman Melville (1819-91). *J Med Biogr*. 2008;16(1):21-9.
46. http://en.wikipedia.org/wiki/Paul_Wittgenstein
47. Drozdov I, Kidd M, Modlin IM, Evolution of one-handed piano compositions. *J Hand Surg Am*. 2008;33(5):780-6.