‘Enough of him left to be a man amongst men’
Amputees in the aftermath of the Great War

Peter Hodgkinson

Amputation or facial disfiguration was the most prominent indication of veteran status – a vivid childhood memory is of being in Paris in 1960 and seeing an elderly Great War veteran begging on the street, a card hanging round his neck: ‘blessé de guerre’. A bilateral leg amputee, there were bits of old car tyres under his stumps, and he moved himself along with an old-fashioned heavy iron in each hand. This article examines various aspects of amputation and the amputee’s experience following the Great War. It is essentially about the experience of men, but before we make the mistake of thinking that only they suffered amputations, nurse Madeleine Jaffray lost her left foot when her mobile ambulance unit at Adinkerke, Belgium, was bombed in 1917. Canada’s only female war amputee, she adapted as many men did, marrying in 1927 and continuing her nursing career.

Amputation during the Great War

In contrast to the often fatal results of amputation in the Crimean and American Civil Wars (albeit leading to lessons learned), knowledge of pathogenic bacteria had led to aseptic surgery in the 1890s. With improvements in anaesthesia during the war, the Great War amputee had the best chance yet of surviving. It is a truism that war leads to rapid advances in medical practice. British surgeons developed new methods of amputation, e.g. guillotine amputations in cases of sepsis. The prospect of healing, often involving a second operation (removing excess skin and trimming bone), was enhanced. Further, surgeons developed the ability to determine the appropriate level of amputation, and the best way to cut flaps and deal with nerves, tendons and joints to leave the optimal stump for limb fitting.[1] Mortality remained an issue, however. Although 6 per cent of soldiers who underwent amputations at the front died, if uncontrolled infection developed, in an era without antibiotics, the death rate increased to 28 per cent.[2] Overall, however, not only did the Great War soldier have a better chance of survival than previously, he had a better chance of adaptation.

The Central Registry for Limbless Sailors and Soldiers recorded that between June 1915 and 29 February 1920 1,987 officers (1,300 cared for at Dover House, Roehampton) and 41,207 other ranks had attended specialist fitting hospitals (21,931 cared for at Queen Mary’s, Roehampton).[3] The medical Official History (OH) lists 41,208 ‘stabilised’ pension cases for amputations to 31 March 1929 (Table One).[4]

Amputation of one upper extremity	9,074
Amputation of both upper extremities	46
Other amputations of upper extremities	6,501
Amputation of one lower extremity	22,887
Amputation of both lower extremities	940
Other amputations of lower extremities	1,525
Amputation of one upper and one lower extremity	160
Other multiple amputations	75
TOTAL	*41,208*

Table One: Number of pensions awarded for amputations (OH).[5]

Further, in 2022, a team of volunteers from The Western Front Association transcribed the details from the pension ledger records of 25,000 pensioned other ranks (Table Two).[6] One interesting feature of these cards are the estimates of percentage disability, often changing over time.

Amputation whole arm	31
Partial amputation arm	84
Amputation both arms	3
TOTAL	*118*
Amputation whole leg	123
Partial amputation leg	35
Amputation both legs	4
TOTAL	*162*

Table Two: Amputation cases in the pension ledger study (PLS).

Consideration of both these sets of figures produces a broad picture of legs being more vulnerable, requiring amputation more frequently than arms, but arms and hands receiving more partial amputations than lower limbs and feet. In the PLS, of 50 cases of gunshot wounds to the hands, percentage estimated disability ranged from 20 per cent to 40 per cent, (including three cases of amputation of fingers). To state the obvious, hands are one of the crucial features of humans adapting to the environment; and for the returning soldier, to work. Similarly, for most jobs, proper arm flexion is required. In the PLS there were 60 cases of arm or elbow wounds. The average percentage disability in the group with elbow wounds was 38.5 per cent, that of the arm wound group being 28 per cent. If hands are crucial to work, many jobs required the ability to stand or walk for protracted periods. The average percentage disability with a leg wound, in the absence of amputation, was 22.5 per cent, but with a fracture the average disability rose to 37 per cent. In terms of amputation, 100 per cent disability was potentially granted to ‘loss of two or more limbs, loss of an arm and an eye, loss of both hands or all fingers and thumbs, loss of both feet’.[7] The maximum pension was 40/- a week, less than a third of the wage of a skilled coal miner in 1920.

Four case studies of amputees from the pension ledger study[8]

Gunshot wound head, right thigh and arm, amputation finger

Gunner Arthur Isaac was born in 1882 and had served in the 3rd Battalion Welsh Regiment in South Africa 1901-2, transferring to the Royal Garrison Artillery. A reservist, he served on the Western Front with 113 Heavy Battery from August 1914 until March 1915, when he was invalided. His pension ledger shows he also lost his right eye, and that it was a wound to the left arm that resulted in the amputation of his left little finger. An initial 80 per cent disability was reduced to 70 per cent in 1922, when he was awarded 28/- weekly for life. Although the ledger notes him to be single, he had one child who was awarded 7/-. The 1921 census saw him living with his widowed mother and describes him as ‘Ex-service man – disabled’. He married the following year, had another son, and in 1939 was working as a fireman in a tinplate works.

Bilateral foot amputee, New Zealand Military Hospital, Oatlands Park, Weybridge (Te Papa (O.031465) public domain).

Amputation right arm

Born in 1894, Charles Kirkland Allwood was working on his grandfather's farm prior to the war. Conscripted, he served as a private in the Loyal North Lancashire Regiment. We do not know where or when he was wounded, but his right arm was amputated. Between 1920 and 1922 he was classified as 70 per cent disabled and pensioned at 28/- a week. In 1921, now married with a one-year-old son, he had returned to farming. Widowed, he married again in 1932, fathering another child, and died in 1975. An amusing insight into his injury is found in the Nottingham evening papers in March 1958 in a court hearing following a road traffic accident. The '63-year-old one-armed farmer', who had been driving for 18 years, was turning into his farm entrance when he hit a motorcyclist. He blamed a parked vehicle for obstructing his vision, but witnesses reported that there was no such vehicle. He was asked in court 'if his disablement… fully occupied his attention', and Allwood replied: 'I do everything single handed, it doesn't make any difference'. He was fined £5.

Amputation left leg at thigh

Corporal Arthur Cecil Avenell was born in 1891. A house painter, he attested as Trooper in the Wiltshire Yeomanry but was transferred to 6th Wiltshire in 1917. In January 1918, at Cambrai, Arthur received a machine gun bullet to the left knee which shattered one of the ball shaped bones (condyles) at the end of his femur. The wound became badly infected, and amputation was carried out through his thigh, 8.5 inches below the hip. He would progress through seven hospitals, but by the end of July his stump had healed and he was deemed ready for the fitting of an artificial limb. After a final period in hospital July-September 1919, his stump having broken down, he was discharged with 70 per cent disability, awarded 30/4 a week for life. His medical journey had lasted 20 months. He married the following year, and as returning to his former job was beyond him, he obtained work as a railway clerk. He and his wife had five sons between 1921 and 1937, and he died in 1969, having become a publican in Oxfordshire.

Amputation right leg

Harold Gaskill was born in 1882 and had worked as a bricklayer. He had served in the Militia from 1900, transferring to the 2nd Battalion North Staffordshire Regiment. A reservist, he went to France in September 1914 and was charged with desertion 13 months later, sentenced to a year's detention. He returned, however, to the 1st Battalion in May 1916 being wounded the following month by shellfire. His right leg was amputated and in April 1920 he was deemed 100 per cent disabled, reduced to 60 per cent 14 months later, his 40/- pension now 24/-. In 1919 he married a woman 14 years his junior, having three children, and in 1921 was working in a government instructional factory as a wood-working machinist. Apparently soon unemployed, he left his wife, being sued for desertion when as a 'war cripple' he was living at a Church Army hostel. The *Derby Daily Telegraph* reported in March 1922 that when together 'they received over £3 weekly in pension and allowances, the latter had now ceased and the defendant's only income was his pension of 24/-'. By 1939 the couple were back together and Gaskill was working as a 'vertical borer, heavy worker'. He died in 1953.

Amputation both thighs

Ernest Astbury was born in 1890. A librarian, he served as a private in the Royal Welsh Fusiliers. We do not know when he was wounded but his pension commenced in September 1917, 100 per cent disabled with both legs amputated at the thigh. In 1918 he was living with his parents and was working as the clerk of the Flintshire War Pensions Committee, a job he started in December 1917, although by 1921 he was 'out of work' although the same role was listed. His degree of adaptation is indicated in the *Flintshire County Herald* on 10 July 1931 when as a 'war cripple' he was driving and stopped his car and got out to attend to a defect when his vehicle was hit by a lorry. In 1939 he still lived with his mother and was described as 'incapacitated'. He never married and died in 1951.

Artificial limbs

Adaptation for the amputee involved artificial limbs. An international exhibition was held in July 1915 at the newly opened Queen Mary's Hospital, and it was soon recognised that not only were American artificial limbs better, but that Americans would be needed to amplify inadequate British production. British artificial arm design at this time was particularly rudimentary, and mechanical artificial hands proved to be too problematic (the hook being relied upon). A soldier observed: 'I will again have ten fingers, two made from wood. They will bend with the aid of small hinges. But I do not think I could ever stand it. It would be too cumbersome and annoying'.[9] Most men discarded artificial arms. Wooden legs were heavy – Private Thomas Bland, with a high thigh amputation, noted: 'I couldn't walk far… I broke it with a hammer so I got a new, lighter (metal) one'.[10] The Ministry

of Pensions (MOP) refused to issue the more expensive metal leg until 1920 and only relented more fully in 1922 after estimating that the cost of a wooden leg over 12 years was £120, that for a metal leg amounting to £96.[11] The initial hurried fitting of prostheses revealed problems of adaptation, and schools were established at the limb fitting hospitals to provide instruction in best use.

Limb fitting at Queen Mary's, Roehampton (IWM Q33686 & Q33679).

Lieutenant-General Sir Walter Congreve's artificial arm (The Rifleman's Museum, Winchester – author's photo).

Following amputation, the stump would take about three months to harden and shrink, following which fitting could begin. By 1920, 20,000 men had received artificial limbs at Roehampton (the figure would rise to 26,260), and 5,000 of these had been placed into jobs by the hospital's employment bureau.[12] Courses were established in architecture, art and design, bakery, basket, brush and boot making, carpentry and cabinet making, chemistry, cinema and clerical work, confectionery, diamond polishing, draughtsmanship, electrical work, engineering, hairdressing, leather work, metal turning and fitting as well as silver mounting, photography, tailoring, telegraphy and toy making. The average stay was six weeks, shortened to four for leg amputees and two for arm amputees. Thomas Bland, a pre-war miner (awarded 19/3 a week for life), was one of 4,166 who went on from a course at Roehampton, in his case to train for a year as a cobbler, and he started his own business. Private charitable efforts provided the vast amount of long-term care and rehabilitation for disabled ex-servicemen (Queen Mary's was established via public appeal) – 6,000 such charities were registered by the end of the war. Britain was the only war nation that relied on voluntarism.

The War Seal Mansions, built by theatre entrepreneur and philanthropist Sir Walter Stoll, provided 138 apartments for disabled veterans and their families. We will meet Privates Foote and Liffard below, who applied to live there. The Princess Louise Scottish Hospital for Limbless Sailors and Soldiers (now Erskine) was launched after a public appeal in 1916, specialising in the aftercare of amputees in limb manufacture, fitting, training and employment. By October 1919, more than 5,250 men had been fitted with new limbs and 2,145 with parts of new limbs.[13] A range of vocational training was provided, but veterans showed reluctance to be employed in the sheltered workshops, partly fearing their pensions would be adversely affected (but partly, earlier on, taking unskilled jobs whose wartime wages had significantly increased). In 1917 the MOP noted that only 15 per cent of disabled servicemen participated in national training schemes. Dudley Myers, secretary of Queen Mary's Employment Bureau frequently used the word 'apathy' in relation to amputees' reluctance to take up vocational training, and in dealing with what he perceived as a major issue, set up a service to negotiate with the MOP.[14] The Ministry of Labour took over responsibility for retraining, and as the government moved to close entry to the Industrial Training Schemes in 1922 in the face of the post-war trade depression, it was reported that only 63,000 ex-servicemen had been trained, 23,300 were in training, and 29,000 were on a waiting list.[15] Most of those involved were not the most severely disabled.

The fitting of a prosthesis was far from the end of the matter. One issue that has been hitherto largely ignored in the literature on First World War impairment is pain. The first such study on this matter utilising the PIN 26 series in the National Archives identified 100 cases of amputees, 76 per cent of whom reported chronic pain (arising some seven years later).[16] Residual limb pain was noted in 47 per cent. (Phantom limb pain and sensation was recorded far less frequently than in modern patients, which may have been due to reluctance to report). The study also noted how amputees were cursed with associated conditions, notably osteoarthritis (but also obesity and insomnia). The largest pension file is that of Lieutenant Francis Hopkinson, survivor of a hip level amputation. Unable to benefit from a prosthesis 'he lost his job and his fiancée and was regarded by his doctors as a malingerer' and spent some 60 years on elbow crutches. He suffered osteoarthritis and chronic residual and phantom limb pain, treatment for which included three amputations, and later received conflicting diagnoses of 'psychosis' and 'psychoneurosis', an indication of his doctors' defeat.[17]

Psychological reactions

Only two of the amputees identified in the PLS were pensioned for a comorbid psychiatric disorder. This figure of 0.7 per cent can be compared with the PLS total of 2.6 per cent of other pensionable wounding or illnesses attracting a further psychiatric diagnosis. This raises the question as to whether the medical journey for amputees was too narrowly focused. Psychological aspects of impairment, however, are obviously not restricted to psychiatric classification.

The first transition was from soldier to patient. During their time as a patient, amputees had to form a relationship with their stump – Julie Anderson describes men who, 'called the stump "it" or "my baby",' as if the altered limb was a new part. The stump,

Bilateral amputees, Queen Mary's Roehampton (IWM Q108161).

indeed, could behave as alien – spasms led doctors to refer to 'jumpy stumpy'. This, it was understood at the time, was a reflection of emotional trauma. Some stumps 'were classified as either neurotic or neurasthenic'.[18] This was the primary psychological focus in the early stages, but treatment was rudimentary, virtually never involving articulation of trauma.

Beyond limb fitting, the second transition was the return to civilian life. Here, the effects of altered status on self-esteem could be corrosive. The Great War proved to be end of the trajectory of societal preoccupation with 'manliness'. The Victorian era had emphasised self-improvement in every respect – physical, educational and employment. Masculine identity was predicated for most upon the ideal of the man in work providing for his family. Work in turn provided other reinforcements for masculine identity: the working man's club, participation in a group who played or attended football matches together etc. At home, amputees may have had to exist propped up in an armchair 'in the one living room of the household, where ordinary domestic routines continued'.[19] Modern disability studies and the emphasis on gendered roles observes how the amputee, at worst divorced from 'his "masculine" public sphere of work' (or normal work and associated social benefits) 'and, possibly, from community social life found himself confined to the "feminine" private sphere of home'.[20] Whilst this article is not an examination of the pensions system and the various obstacles it placed in the path of the pensioner, the application process, perversely, necessitated individuals to emphasise weakness and neediness to gain financial support, and to maintain this to retain it.

There were evident consequences for families, who had to rearrange their lives around the impaired home-comer. In the face of the perceived failures of the activism of the British Legion, a British Limbless Ex-Servicemen's Association was formally convened in 1931 and became more politically outspoken. They stated that the limbless were 'more in need of a wife than the average man'. MOP officials, however, spoke of 'veteran-marrying speculators'.[21] Women, of course, had to care for both children and husband, whilst also often being providers, sometimes living in appalling conditions. A K1 volunteer, Private George Foote suffered a left foot amputation and a paralysed right arm. Working occasionally as a lift attendant he lived with his wife and three children in one damp basement room. He was rejected for re-training (too impaired) and was out of work for four years.[22] Some families, unable to afford accommodation, became unhomed, living (sometimes split up) with relatives. Private Edward Lifford, a single arm amputee, lost his job and his son and daughter had to be placed in an orphanage (where his son was killed by a motor car).

Despite a temporary romantic societal fascination with the maimed, a wife or fiancée would likely have struggled with the attractiveness of their partner, at least initially, yet the case studies above reveal post-amputation marriage and children. Marriages broke down, however, as in the case of Harold Gaskill. Divorce was a difficult and expensive matter at this time, and many couples will have simply parted, escaping the official record. Romantic matters, predictably, were complicated and surprising. The *Western Mail* reported on 5 April 1930, under the headline 'Legless Lover', the divorce of Flying-Officer WT Lewis and his wife, Winifred, who had eloped with Lieutenant FH Robinson RAF, a double amputee. The reverse occurred with bilateral amputee Sergeant EA Layton, taken to court by his wife after her detective followed him to a London hotel with an unknown woman. 'War cripple divorced', *Reynold's Newspaper* announced on 21 July 1919.

Unfailingly cheerful – Queen Mary's, Roehampton (IWM Q27815).

Ex-soldiers could also be violent – the extent of this problem will similarly never be known. Undoubtedly alcohol was often implicated. Right leg amputee Private James Peterkin, with 'one arm practically disabled, and (who) suffered from shell shock', was 'Fined for Assault: a sequel to unrequited love', the *Western Times* reported on 1 July 1919. He had assaulted his landlady when 'mad drunk' and several days later threatened to murder her and kill himself when she said, 'there is nothing doing'. He was fined 20/-. Amputees were reputedly an awkward lot – Queen Mary's noted that once away from Roehampton 'some men were so troublesome that the Royal National Orthopaedic Hospital would not accept any more cases. Many men left the hospitals refusing their operations'.[23] The superintendent's reports from the Star and Garter home note drunkenness, rudeness and threats of (and no doubt actual) violence.[24] These reactions are likely the result of one of the groups of symptoms of what is known in the modern world as Post-Traumatic Stress Disorder. These symptoms involve increased physiological arousal – poor sleep, irritability and angry outbursts, jumpiness, poor concentration and hypervigilance. This is due to the persistent presence of stress hormones (e.g. adrenalin), normally released briefly to allow the body to deal with an immediate threat. The chronic stress of trench life, wounding and recovery likely led to permanent overarousal. This is an undoubtedly overlooked psychological reaction which would have impinged on family and work environments.

Initially presented as unfailingly cheerful, depression was a likely and possibly hidden outcome for many amputees. We will never know how many ex-servicemen committed suicide in the aftermath of the war. The *Newcastle Daily Chronicle* reported on 11 August 1931 how Private CJ Wignall, 60 per cent disabled with a right leg amputation, having already slashed his throat with a razor and jumped from a window, did so again from a hospital window, this time slashing his throat after his jump with a piece of broken glass. Sergeant Harry Flood, MM & bar, underwent amputation of his left arm above the elbow (finally 60 per cent disabled). He married in 1926, and was employed by the MOP, but killed himself by choking to death on his handkerchief in a psychiatric hospital in May 1938, following desertion by his wife, allegedly in favour of a professional cricketer.[25]

Impairment and disability

The literature of the time and the pension processes used only the word 'disability'. Modern disability studies make a distinction between impairment and disability. 'Impairment is based purely on physical difference', while disability is a social and cultural construction: 'the former does not simply "cause" the latter, social barriers do, such as restricted access to medical activities, educational institutions and welfare provision'.[26]

As Joanna Bourke has observed, the limbless 'joined a wider population of disabled men, women and children'.[27] Prior to the war, she observes that the majority of civilian amputees were the children of the poor (often street accidents), and workers in heavy industry. In 1919, there were 8.6 'crippled' children per every 1,000 in Britain.[28] During the 1920s there were over 200,000 industrial injuries of varying severity a year, 40,000 in the coal industry alone.[29] On one hand, therefore, the impaired of the Great War were a very significant group; on the other, they need to be placed in the wider context of the prevalence of impairment in post-war society. Within that context, some disability writers assert that amputees held a potentially privileged position, bearing a 'heroic' mark of self-sacrifice, easily perceived. The soldier pensioned for invisible illness or (even worse) psychological injury, however, did not. In practical terms, both had government pensions, whilst the injured civilian worker did not.

Sport was an integral part of military life, and became part of rehabilitation, including the limbless. In the social sphere, 'sport gave disabled ex-servicemen a space to renegotiate their position, restoring their masculine identity'. Patients at Roehampton played football and tennis, and races were organised. An 'Arms and Legs' cricket match (without crutches) took place in August 1917 in Fletching, Sussex, The Star and Garter home organised tennis, bowls and croquet for those with prostheses. At the Prince of Wales Hospital in Cardiff, a golf course was constructed, allowing for practice with artificial limbs. In July 1923, the British Legion's Imperial Sports Rally included a 250-yard race for single leg amputees, although the event was largely spurned by the public.[30]

In terms of the restoration of masculine identity, particularly as family provider, employment was a key issue for the amputee. Younger men faced a particular challenge – 70 per cent of amputees were under the age of 30.[31] 24-year-old Private Wilfred Whitfield lost an arm to shellfire. He returned to the drawing office of the ironworks in Middlesborough where he worked pre-war. Marrying in early 1923, he was sacked later that year. He related that his manager told him:

> You ex-service men are a nuisance, too filled with your own importance. You have come back thinking the world was made for you. You are behind in your experience, we have to economise and there are better men for less money. You have a pension and no children.

A one-legged veteran was sacked the same day. After 26 weeks of unemployment benefit, Whitfield was reliant on his war pension. After a three-week spell as a night watchman, 'my confidence in myself went. I got used to the glance at the empty sleeve if I asked for a draughtman's job'. Sick benefit was denied him because of his war pension. His wife finally obtained a job as a drawing-office tracer and in November 1927 he had an introduction to the chief draughtsman of the business. His interviewer 'never seemed to have noticed' the empty sleeve – Whitfield had concluded that 'I was better without it on a drawing board'.[32]

Whitfield's impairment created no difficulty for him, disability was entirely a social issue, related to attitudes to ex-servicemen, the limitations of the benefits system and the economic upheavals of the era. The market for the impaired veteran was to some extent artificially protected from national trends via the King's National Roll, where employers agreed to take a quota of 5 per cent of disabled ex-servicemen in return for permission to display a 'Seal of Honour' (and preference in obtaining government contracts from 1920). In 1922, 30,000 firms had enrolled, employing 360,000 disabled servicemen.[33] A quirk in official calculation, however, allowed the possibility for preference of the lightly impaired, so the significantly impaired amputee was disadvantaged. The impaired veteran might have been placed at the top of the queue over his civilian counterpart in some situations, but he was still in over-supply. Up to May 1920, 70 per cent of the unemployed were ex-servicemen,[34] but the figure was still 22 per cent in 1936.[35] Whitfield was lucky initially but fell foul of two matters. Firstly, employers (outside of the King's Roll) had no incentive to give jobs to disabled men; and secondly,

as Whitfield's boss voiced, veterans may have also have had specific attitudinal issues – many 'felt that they were qualified for better positions than they had held before entering the service'.[36] From the employer's perspective, pensioned veterans were thought likely to be off work with general ill-health more frequently, and amputees in particular might be prone to more accidents to themselves and other workers, resulting in compensation issues.

The above represents part of the true scope of 'disability', and it is complex, 'dependent on so many different factors and intersections, and dependent on personal dynamics'.[37] The case studies presented above certainly indicate amputees adapting in one way or another. The only Great War quadruple amputee (below elbows and below knees) to survive, Canadian Private Ethelbert 'Curley' Christian, married a hospital volunteer aid in 1920, the couple having a son. His adaptation, mastering artificial limbs and mechanical hands, also took the form of becoming a founder of 'The War Amps' in 1918. 'When you are surrounded by others who are accomplishing things, it stimulates you to try', he stated, describing new amputees as 'diffident, bashful, frightened'. Within The War Amps, 'that vanishes. We're all among our own kind. We boost each other mentally and we learn things physically'. On his death it was said: 'Curley never grieved. There was enough of him left to be a man among men'.[38]

Peter Hodgkinson is a Consultant Clinical Psychologist and author of nine books on various aspects of the Great War.

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