

The History of the Bayonet

by Graham Priest

Throughout the pages of any *Small Arms School Corps Journal* you will find several depictions of the bayonet. On the front and back cover alone there are three. It is inextricably linked with the history of the firearm, and remains the last survivor of those edged weapons from the past that is still carried into action by virtually every 21st century British infantryman. Have you ever wondered how this came about?

It is thought that one day, sometime between 1550 and 1580, Basque hunters ranging over the Pyrenean Mountains now separating France from Spain, 'invented' the design. [1] Imagine the scene as Juan and Carlos each lugged their heavy matchlock *arquebus* into a clearing in search of boar. After a long wait a suitable target breaks cover. Juan fires but the ball hits the shoulder and only wounds. The enraged 'tusker' charges across the open ground. Juan tells Carlos to fire but suddenly realises he has fled taking his weapon with him! As his life passes in front of his eyes "ping!" Juan has a 'great idea'. Grabbing his belt knife he rams the handle into the barrel and stands his ground with the makeshift spear. We will never know whether it killed or just repelled the dangerous adversary, but Juan must have lived to tell the tale. In the local pub that night the story spread and within weeks specially shaped knives were being forged by the local entrepreneurs. Military men soon thought that there was an application for more dangerous game.

It wasn't until 14th March 1662 that the arrangement was adopted in England. [2] The specialist knife came to be known as a *baggonet* or *bayonet*. The etymology of the word would fill a paper in itself. Interested readers are directed to the thoughts of Captain Sir David Sibbald Scott, whose lecture 'On the history of the bayonet', delivered to the Royal United Services Institution on 27th May 1863, gives a comprehensive account of how the name developed. [3] Briefly in the late 1570s the original French word *bayonnette* was the noun for a general knife, probably manufactured by the cutlers of Bayonne quite close to the Basque region. By the first published reference of 1690 the name was used for blades on military firearms. [4] The use of a title, derived from a geographical location, can be compared with other commodities. *Champagne*, is a sparkling wine from a region of France, and *Cheddar*, is a form of cheese from an area of the British Isles.

England was slow to adopt its first issue of captured French *plug bayonets* (originally they were just *bayonets*). Soldiers carried the weapon as a sidearm but retained their swords. Tactics were evolved so that muskets were discharged in volleys then plug bayonets were used when there was no time to muzzle load. They either repelled an enemy or exploited an advance. An English drill book, with mention of the bayonet, arrived in 1675. The pike began to fall into disuse by the Battle of Sedgemoor in 1685 and was obsolete by 1705. [5] (Figs 1&2)



Fig.1 A 'dog lock' musket from the reign of Queen Anne (1702-1714). This had a plug bayonet. (SAS 2387)



Fig.2 An English Plug Bayonet & Scabbard c.1690. Regimental Colonels purchased a variety of designs, mainly with brass mounts and walnut grips. (Derek Complin)

The disadvantage of the plug bayonet was seen at the Battle of Killiecrankie in 1689. [6] Technology was not good enough to produce a standardised barrel diameter so a tapered hilt fitted all sizes. The overwhelming force of the Highlanders' charge was too fast for the royal troops to fix bayonets and the device blocked the muzzle so it could not be reloaded or discharged. A heavy defeat followed. New developments to solve the difficulty saw the rise of the *ring* or *socket bayonet*.

Yet again it was the French who had created a workable design by 1669. [7] An engraving of a long 'spear' cranked to one side of a slotted tubular socket was dated 1697 [8]

The bayonet that allowed continued use of the firearm with minimal impediment revolutionised battlefield tactics. It coincided with the general appearance of a more reliable 'flintlock' musket. The reaction of Lieutenant-Colonel Maxwell of the 25th Foot, although uncertain in date, was known. Maxwell ...ordered his men to screw their bayonets into their muzzles, thinking...(the French)...meant to decide the affair point to point; but, to his great surprise, when they came within a proper distance, the French threw in a heavy fire.... [9]

Alternative ways to attach blade and tube continued in most European countries, with England, via the Board of Ordnance from 1730 onwards, using the flintlock 'Land Pattern Musket' (nicknamed 'Brown Bess'). Although barrel lengths changed, the .75 inch calibre and 17 inch triangular bladed bayonet continued in use from the War of the Spanish Succession (1701-1714) until the Napoleonic Wars (1802-1815) and beyond. [10] (Figs.3&4)



Fig.3 The flintlock Land Pattern Musket (nicknamed 'Brown Bess') dated 1729. (SAS 2388)



Fig.4 An early 'Brown Bess' socket bayonet c1730-1740. (Derek Complin)

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At first the barrel length allowed three ranks of infantry (the French often used five), with front troops kneeling, to discharge a volley simultaneously. The 600 or so fixed bayonets of a regiment, with eight companies, could also deter cavalry should the need arise. Severe discipline, accompanied by excellent training, much experience, and a robust firearm, soon established the British Army as one of the premier military forces in the world. This gave the 'redcoat' a psychological advantage when in combat. Much of the later history of the bayonet depended on its aggressive use. As a military reputation was gained opponents had to contend with the idea that a British bayonet charge was unstoppable.

The ingenious engineers of France experimented with many of the most successful locking devices to secure socket and barrel prior to 1777, but Britain remained wedded to the 'common' slotted model with refinements until 1853. [11] When troops tried to employ formal tactics against irregular adversaries in North America they failed. General Braddock's defeat, near Pittsburgh, in 1755 demonstrated the superiority of the firearm used from cover over 'cold steel'. [12] Observation that a skirmisher, armed with a rifled long arm, could overwhelm an infantry formation stimulated the creation of 'elite' regiments of riflemen to counteract the menace. [13] The bayonet did not disappear, as the single shot rifle was slow to muzzle load, but began to take on a more multipurpose function as a sidearm. The flintlock Baker Rifle, together with its brass-hilted *sword bayonet*, provided a distinctive weapon for green-clad regiments after 1800. (Figs.5&6)



Fig.5. The Baker Rifle and 'sword' from 1800. (SAS 21)



Fig.6. The flintlock of the Baker Rifle. (SAS 21)

Tactics with the socket bayonet were still to provide the serious fighting 'point' in battle but the specialist nature of riflemen caused their 'sword' to be an 'object of desire' to other units. [14] Members of the 'volunteer' movement therefore equipped themselves with impractical sword bayonets that had become male costume jewellery!

Stagnant military thinking ignored the rapid improvements to fire-arms caused by the adoption of percussion ignition and mass produced, rifled barrels. The British Army's largely 'colonial' campaigns against poorly armed opponents preserved formal tactics. Elsewhere in the American Civil War (1861-1865) these resulted in enormous casualties through the use of standing ranks and the bayonet charge.

The SASC's foundation, which coincided with the development of rifle-muskets, did not displace the improved socket bayonet. (Figs.7&8)



Fig.7. The Pattern 1853 Rifle-musket which started the history of the *Small Arms School Corps*. (SAS 55)



Fig.8. The Pattern 1853 socket bayonet as used on the Martini-Henry Rifle after 1872. (SAS 358)

Even when the breech-loaded, single shot Snider (1869) and Martini-Henry (1872) long arm appeared they were still unreliable, and needed to be a reasonable length to give 'reach' against cavalry. (Fig.9)



Fig.9. The 1st Pattern Martini-Henry Rifle used with a bushed Pattern 1853 socket bayonet from 1872. (SAS 358)

Sword bayonets, some with saw backed blades; machete profiles or cutlass designs were adopted for use with shorter carbines, carried by non-commissioned officers and other specialists. [15]

Even in 1876 the Martini-Henry Rifle had its socket bayonet blade extended to match the total length of other European military rifles. [16] Two 'colonial' engagements demonstrated that the bayonet and rifle combination was only effective if proper tactics were employed. The dispersal of troops and superior firepower caused the disastrous defeat of British forces at Isandhlwana on 22nd January 1879. At Rorke's Drift a consolidated defence, with use of barriers, volley fire and bayonets reversed the situation. [17]

Even before the previous events had taken place an effective magazine rifle, (Model 1866 Winchester) had provided short-range mass fire at the siege of Plevna, Bulgaria, where Turkish defenders repelled Russian forces in 1877. [18] As such small calibre weapons evolved, with accurate rapid shooting to considerable ranges and a bigger allowance of lighter ammunition the likelihood of the bayonet being necessary for defence was reduced.

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(continued)

After the Artillery flirted with a brass-hilted, 'yataghan' sword bayonet a 12 inch bladed *knife* design, adopted in 1888, was used on Britain's effective box magazine, bolt action, Lee-Metford Rifle. [19] (Figs.10&11)



Fig.10. The 'long' Lee-Enfield Rifle from 1895 with a Pattern 1888 bayonet. (SAS 0371)



Fig.11. The Pattern 1888 bayonet mainly used on the Lee-Metford and Lee-Enfield Rifles of 1892 and 1895. (SAS 0371)

At the Battle of Omdurman, 2nd September 1898, Sudanese, Egyptian and British troops, formed behind a thorn *zariba*, used traditional ranks and defence tactics to destroy over 10,000 Dervishes. [20] Despite the fixed bayonets none of the Mahdists reached the perimeter.

Formal fighting methods, with rifle & bayonet fell into disrepute during the South African War (1899-1902) a year later. This time, despite possession of an outstanding firearm, infantry bayonet charges against well-concealed Boer marksmen armed with the Mauser Rifles caused huge numbers of casualties at Modder River, Magersfontein, Spion Kop and elsewhere. The short-term use of mounted riflemen, barbed wire and concentration camps, won the war but did not really alter military thinking. [21] Strategists were aware of the huge technological advances in transport (motor vehicles and powered flight), improvements in communications (telegraph & telephone), and changes to firearms (machine-gun, automatic pistol and more powerful artillery), but were unable to abandon tried techniques.

In 1907 Britain copied the example of Japan (1897 Arisaka Rifle) and the United States of America (1903 Krag-Jørgensen) when it gave the infantry a handier Short Magazine Lee-Enfield Rifle. (Figs.12&13)



Fig.12. The Short Magazine Lee-Enfield Rifle with Pattern 1907 bayonet that was used in both World Wars. (SAS 0664)



Fig.13. The Pattern 1907 bayonet with the hooked quillon removed in 1915. (SAS 0664)

This had a 17 inch bladed sword bayonet to maintain essential 'reach'. [22] The First World War (1914-1918) perpetuated outdated practices with rifle and bayonet that were totally ineffectual. As static warfare was established elaborate defences with trench systems, bunkers, barbed wire and machine guns were immune to either volley fire or bayonet charges. Despite constant assault failures the 'need' for bayonet drill, as part of the basic training

of an infantryman, continued. [23] A belief in the superiority of 'cold steel' on the battlefield was used to turn a civilian recruit into a disciplined soldier. The physical exercise involved was useful but much use was made of outdated thinking.

By February 1925 British researchers had begun to question the traditional role of the bayonet. [24] A report stated, *It has been conclusively proved during the war, and since, with our present system of training with the bayonet, that "reach" is not the main factor but that handiness is... Physical Training Staff ... came to the conclusion that a 6-inch blade is sufficiently long to deal with the most thickly clad of our enemies - potential or otherwise... In the war the utility of the bayonet as a cutlass or dagger proved to be negligible - hence the demand for trench knives, clubs, &c... The long broad blade glints, and is conspicuous when fixed, at a great distance, even in moonlight and when Verey lights are fired.* [25] The sword bayonet was criticised as a poor tool for clearing brushwood and cutting up firewood, but was praised as a poker. The 'unhandiness' of the rifle for bayonet fighting and shooting, particularly snap shooting, was also highlighted.

By 1931 the prototype No.4 Mk I 'spike' bayonet, on the socket principle with a 'thrust' function, was adopted for the No.4 Mk I Rifle. [26] (Fig.14)



Fig.14. The No.4 Mk I Rifle with assorted spike and bladed bayonets used from 1925-1948. (Priest & Humphries Collections)

Events rapidly overtook this weapon, so that with adaptation, it became the standard rifle and 'cold steel' during the Second World War (1939-1945). Cheapness and ease of production became essential ingredients. [27] As a minor part of the arms programme 'cost' in terms of finance, time and materials was important. As value for money the 'pig sticker' was one of the most efficient bayonets ever devised.

The development of mass-produced machine-carbines, and assault rifles undermined the traditional role of the bayonet even further. (Figs.15&16)



Fig.15. The 'Machine Carbine, L2A3' or 'Sterling Mk.4' derived from the Patchett 9mm calibre design of 1944. (SAS 952)



Fig.16 A commercial No.5 bayonet with black plastic grips and flat rivets. The blade is engraved with the title 'STERLING'. (Late John Watts - *The Bayonet Book*, 1975)

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After 1947 the total domination of such firearms depended more on rapid firepower than the ability to support a blade. The needs of urban & jungle warfare, the use of mechanised infantry on land, sea and air, plus financial considerations affected the bayonet. Many countries provided an integral 'spike' but after 1944 the British Army returned to a detachable knife bayonet. [28] (Figs.17&18)



Fig.17. The Fabrique Nationale Fusil Automatique Légère bought by Britain in May 1954 and called the Self-Loading Rifle or 'SLR'. The bayonet is the L1A3. (SAS 2551)



Fig.18. An L1A3 bayonet used on various versions of the SLR (SAS 2551)

Some practical reasons involved the training role, emergency back up, effective deterrent when guarding prisoners or for crowd control and ceremonials. [29] The symbolic nature of the bayonet encouraged the return of glittering blades despite the obvious drawback when used in clandestine operations.

Many nations have continued to develop the bayonet as a 'Swiss Army Knife' type of tool, which if required will fit on a firearm. [30] Although the weapon has been used in combat in the latter decades of the 20th Century and even recently in Iraq, much more has been made of its utilitarian functions. [31] Elaborate designs, which cut electric cables, saw through ropes and even open beer bottles are all in existence. [32] Such weapons probably have more of a perceived, than real, value in modern warfare. A preference for more ammunition or an attachment to the weapon with some military advantage might be more valid.

Designers nearly adopted a simple bowie-bladed socket bayonet for the XL64 'Phase II' (1976-1978) versions of the 'SA 80' system. [33] (Figs.19&20)



Fig.19. An experimental version of the SA 80 (XL64E5) which used a bowie bladed socket bayonet during trials in 1976-1978. (SAS 2041)



Fig.20. The experimental bayonet used on the XL64E5 and other trials weapons. (Priest Collection)

However the current L85A2 Rifle carries the multipurpose L3A1 bayonet, often with the L1A2 scabbard assembly which has a saw, sharpening stone and wire cutter assembly. An integral bottle opener lug on the early bayonet was abandoned. (Fig.21)



Fig.21. An early L3A1 bayonet with the bottle opener on the guard issued in 1985. (Priest Collection)

Some countries, notably Israel and South Africa, have ceased the general issue of bayonets. Most other armed countries continue to design, develop and deploy the weapon. (Figs.22&23)



Fig.22. The L85A1 Individual Weapon and L3A1 bayonet. (SAS 2180)



Fig.23. The L3A1 Bayonet Fixed. The bayonet also has a multi-tool facility as wire cutter and saw. (SAS 2180)

Whether as emergency pike, assault weapon, badge of distinction or tool, the bayonet remains the badge of the Infantry.

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Ed—About the article writer

Graham Priest is a retired headmaster with an interest in socket bayonets and acknowledges he doesn't know why he has such an interest. However, this has led to having



his own collection, and he has also written a couple of books (one in the Warminster collection library - on WWII No. 4 rifles & bayonets) and over 100 specialist articles.

He has also lectured to the Arms & Armour Society at the Tower. His spare time allows him to help with weapon displays etc. Big boys' toys!

Graham is one of the 'Friends of the Infantry & SASC Weapons Collection'.

END NOTES for this Article are on the next page.

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Endnotes (Reference material to numbers given in the article)

- [1] Evans, R.D.C., *The Plug Bayonet*, Private Pub., Baildon, England, 2002, p. 5.
- [2] *Ibid.*, p. 9.
- [3] *Journal of the United Services Institution*, Scott, Capt. Sir S.D., 'On the history of the bayonet', Vol.7, 1863, pp. 333 - 347.
- [4] Chasteney, Chevalier, Seigneur de Puységur, J. de, *Memoires Historiques et Militaires sous Louis XIII et la Minorité de Louis XIV*, Vol. 1, Chez Jacques Morel, Paris, France, 1690, pp. 612 - 613.
- [5] Haswell, J., *The British Army*, Thames & Hudson Ltd., London, England, 1975, pp. 27 -28.
- [6] Scott, Capt. Sir S.D., *Op. cit.*, p. 342.
- [7] Lazard, P.E., *Vauban, 1633 - 1707*, Librairie Felix Alcan, Paris, France, 1934, p. 452.
- [8] Saint Remy, P. Surirey de, *Memoires d' Artillerie*, Vol.1, Rollin, Paris, France, 1697, Plate 104, p. 336.
- [9] Scott, Capt. Sir S.D., *Op. cit.*, p. 343.
- [10] Bailey, De W., *Pattern Dates for British Ordnance Small Arms, 1718 - 1783*, Thomas Pub., Gettysburg, U.S.A., 1997, p. vii.
- [11] Priest, G., *The Brown Bess Bayonet, 1720 - 1860*, Tharston Press, Norwich, England, 1986.
- [12] Mc Cardell, L., *Ill-Starred General. Braddock of the Coldstream Guards*, University of Pittsburgh Press, Pittsburgh, U.S.A., 1958.
- [13] Myatt, F., *The British Infantry, 1660 - 1945*, Blandford Press, Poole, England, 1983, pp. 60 - 81.
- [14] Blackmore, H.L., *British Military Firearms 1650 - 1850*, Herbert Jenkins Ltd., London, England, 1961, pp. 111 - 131.
- [15] Walter, J. (editor), *Arms & Equipment of the British Army, 1866*, Greenhill Books, London, England, 1986, p.200.
- [16] Watts, J. & White, P., *The Bayonet Book*, Birmingham, England, 1975, p. 314.
- [17] Barthorp, M., *The Zulu War, A Pictorial History*, Blandford Press, London, England, 1980, p.78.
- [18] Banks, A., *A World Atlas of Military History, 1860 - 1945*, Seeley Service & Co., London, England, 1978, p. 41.
- [19] Evans, R.D.C., *British Bayonet Letters Patent, 1721- 1961*, Baildon, England, 1991.
- [20] Barthorp, M., *War on the Nile, Britain, Egypt & the Sudan 1882 - 1898*, Blandford Press, London, England, 1984, p.169.
- [21] Barthorp, M., *The Anglo Boer Wars, The British and the Afrikaners 1815 - 1902*, Blandford Press, London, England, 1987, p. 165.
- [22] Skenneron, I.D. & Richardson, R., *British & Commonwealth Bayonets*, Margate, Australia, 1986, pp. 181 - 192.
- [23] Evans, R.D.C., *A Bibliography of the Bayonet*, Baildon, England, 2000, pp. 21 - 51.
- [24] Priest, G., *The Spirit of the Pike. British Socket Bayonets of the Twentieth Century*, Uppem Pub., Wiltshire, England, 2003, pp. 12 - 17.
- [25] Ordnance Board, *Proceedings*, Minute 659, 'Bayonet for Proposed New Mark of S.M.L.E. Rifle', 25th February 1925, pp.14 -18.
- [26] Priest, G., *Op. cit.*, pp. 25 - 32.
- [27] *Ibid.*, pp. 45 - 113.
- [28] Watts, J. & White, P., *Op. cit.*
- [29] Priest, G., *Op. cit.*, pp. 175 - 193.
- [30] *Armed Forces Journal International*, Barger, M., 'US Army Bayonet: Outclassed, Outdated, but a new One Is Scheduled- In the Year 2000?', May 1985, pp. 62 - 64.
- [31] Ripley, T., *Bayonet Battle*, Sidgwick & Jackson, London, England, 1999, pp. 230 - 246.
- [32] Brett, H.M., *The Military Knife & Bayonet*, World Photo Press, Tokyo, Japan, 2001.
- [33] Raw, S., *The Last Enfield*, Collector Grade Publications, Canada, 2003, p. 314.

