

# Article by <u>Ralph Cobb</u>

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The Short, Magazine, Lee-Enfield rifles enjoyed a very long service life, upwards of 70 years. In this article, I will address the dozen or so bayonet types most available to U.S. collectors who may have recently purchased a Lee-Enfield No. I Mk. III, No. 4, or No. 5 rifle. Bayonets are not interchangeable between these rifles, so I will discuss each rifle and it's bayonets in turn.

# No. I Mk. III Rifle

The Lee-Enfield No. I Mk. III or Short, Magazine, Lee-Enfield (SMLE) represented the culmination of 19 years of rifle and cartridge development that began with the Lee Metford Mk. I in 1888. No fewer than 14 different rifles were produced from 1888-1907, when the Lee-Enfield No. I Mk. III was adopted for use by the British Army. The No. I Mk. III became one of the outstanding rifles of World War I. It again saw widespread service during World War II by forces of the Commonwealth nations. The No. I Mk. III was manufactured in Britain, Australia, and India, with the final examples being made in India during the 1980s. These last rifles were chambered for the 7.62 x 51 mm NATO cartridge and were designated 2A and 2A1.

# Pattern 1903 Bayonet

The Pattern 1903 bayonet was already in production by the time the No. I Mk. III rifle was

adopted in 1907. It introduced a pommel and grip similar to many Mauser bayonets of the day, but retained the crosspiece and 12-inch, double-edged blade of the Pattern 1888 bayonet.

119,755 Pattern 1903 bayonets were made At the Royal Small Arms Factory (RSAF), Enfield Lock between 1903 and 1907. Private Pattern 1903 contractors were: the Wilkinson Sword Co., Sanderson Bros. & Newbould Ltd., and Robert Mole & Sons. The quantity produced by these three makers is not known, but is believed to have been far less.

RSAF Enfield also converted 66,707 Pattern 1888 bayonets to Pattern 1903, between 1903 and 1908. 25,322 additional Pattern 1888 bayonets were converted at Rifle Factory Ishapore, India between 1912 and 1914. Conversions usually still have their original markings, so a manufacture date prior to 1903 is diagnostic.

Pattern 1903 bayonets are marked on the ricasso with the Royal Cypher of King Edward VII [a crown over "ER" (Edward Rex)], over the mfr. date (mm yy). The maker's name appears on the opposite ricasso, along with the bend test mark (an X), the broad arrow, and other inspector's marks.

Almost immediately, a move was afoot to replace the Pattern 1903. The 12-inch Pattern 1888 blade was too short for use with the No. I Mk. III rifle. The prevailing opinion of the day was that one wanted the overall length of the rifle and fixed bayonet to be at least five feet. This was the minimum length deemed necessary for a soldier of average height to take a cavalryman off of his horse. Most armies held to this view up to the beginning of World War II.



This Pattern 1903 bayonet was made in October 1903 by the Wilkinson Sword Co., London.

#### Pattern 1907 Bayonet

The Pattern 1907 bayonet was adopted to address the need for a longer bayonet to go with the No. I Mk. III rifle. The Pattern 1907 was developed after Britain conducted troop trials with Arisaka rifles and bayonets purchased from Japan.

The Pattern 1907 was manufactured in Britain, Australia, and India. As originally manufactured, the Pattern 1907 was a fairly close copy of the Japanese Type 30 bayonet, with a 17-inch blade and hooked quillion (lower crosspiece). The hooked quillion was eliminated by India in 1914. Britain and Australia followed suit in 1915. Nearly all of the existing Pattern 1907 bayonets had the hooked quillion removed. Today, a Pattern 1907

"hooker" is scarce and pricey. Reproductions have recently surfaced in quantity.

Approximately five million Pattern 1907 bayonets were made in Britain during World War I. The blades were brightly polished and in the white. After the war, the blades were sandblasted to a dull gray during rework. The British makers were: Wilkinson Sword Co., Sanderson Bros. & Newbould Ltd., James A. Chapman, Robert Mole & Sons, and Vickers Ltd. Mole and Vickers produced the fewest bayonets and these command a significant premium today. In addition, Remington made approximately 100,000 Pattern 1907 bayonets in the USA during World War I.

British bayonets are marked on the ricasso with the Royal Cypher [a crown over either "ER" or "GR" (Edward Rex or George Rex)], 1907, over the mfr. date (mm yy), over the maker's name. The opposite ricasso typically displays the bend test mark (an X), the broad arrow, and other inspector's marks.



This Pattern 1907 bayonet was made by Sanderson Bros. & Newbould Ltd. in December 1918.

Pattern 1907 bayonets were made at Rifle Factory Ishapore, India, from 1911 to 1940, where they were known as the No. 1 Mk. I. These bayonets are marked similarly to British version, except that the Royal Cypher will read "GRI" (George Rex Imperator) and the maker mark will read "R.F.I."

Pattern 1907 bayonets were also made in Australia from 1913 to 1927 and again from 1940 to 1945. These may be found marked either: "Lithgow", "MA" (Mangrovite Arsenal), or "OA" (Orange Arsenal). The wooden grips of Australian Pattern 1907 bayonets are often found marked "SLAZ", for the Slazenger Sporting Goods Co., who made grips during World War II.

The Pattern 1913 bayonet was produced concurrently with the Pattern 1907 and looks very similar. All pattern 1913 bayonets were made in the USA by Remington and Winchester. However, the Pattern 1913 bayonet will not mount to the Lee-Enfield No. I Mk. III rifle (note the different muzzle-ring heights). The Pattern 1913 bayonet mounts to the British No. 3, Pattern 14 rifle (and the U.S. Model of 1917 rifle). To avoid confusion, the grips of Pattern 1913 (and US M1917) bayonets had two deep vertical grooves, while Pattern 1907 grips were smooth.



Pattern 1907 Grip

Pattern 1913 (U.S. M1917)

Grip

# India Pattern Bayonets

Beginning in 1941, India issued a series of bayonets with 12.2-inch blades, based on the Pattern 1907. The first of these, the No. 1 Mk. I\* (spoken: number one, mark one, star), was simply a cut down Pattern 1907. These can be of British, Indian, or Australian manufacture. They are readily identified, as the fuller runs right through the point of the shortened blade. The No. 1 Mk. I\*\* (spoken: number one, mark one, double-star), differed only in having a two-inch false-edge ground into upper blade.



India Pattern No. 1 Mk. I\*\* converted at Rifle Factory Ishapore.

The No. I Mk. II and No. I Mk. II\* were newly made bayonets with 12.2-inch unfullered blades. These retained the standard P1907 hilt and grips. The only difference between these two marks being that the former had no false-edge. No. 1 Mk. II bayonets were made at Rifle Factory Ishapore. During World War II, three additional manufacturers began producing bayonets. These were Metal Industries Lahore (MIL), the Bengal and North West Railways (NWR), and an unidentified maker using the initials "J.U."



This No. 1 Mk. II\* was made in 1943 in the workshops of the Bengal and North West Railways in Moghulpura. The blued finish on this piece is simply superb.

The No. 1 Mk. III and No. 1 Mk. III\* were also newly made bayonets with 12.2-inch unfullered blades. Again, the difference between the two marks was the absence or presence of a false-edge. Mk. III's had crude, squared-off pommels and rectangular grips. Instead of the beautiful blued finish of the No. 1 Mk. II series, they were finished with stoving (black paint).



This No. 1 Mk. III\* was made in May 1945 at Rifle Factory Ishapore. All total, 751,149 bayonets were produced by India from September 1939 to August 1945.

## No. 4 Rifle

The No. 4 rifle was a refinement of the original No. I Mk. III SMLE. The original SMLE design was very sound. However, the No. 4 benefited from a heavier barrel and improved sights. First adopted in 1939, No. 4 rifles were manufactured in Britain, Canada, and the USA. They stayed in production post-war and saw front-line service well into the 1950s. Match rifles and sniper variants were subsequently chambered for the 7.62 x 51 mm NATO cartridge and saw continued service for many more years.

#### No. 4 Mk. I Bayonet

The No. 4 Mk. I spike bayonet was the result of a 20 year series of studies, experiments, and troop trials seeking to find a lighter, handier, substitute for the venerable Pattern 1907 bayonet. As interest in replacing the No. I Mk. III rifle also began to take hold, different mounting systems were tried. These included a number of folding bayonets intended to remain fixed to the rifle. Although some knife bayonet designs were considered, most types submitted utilized a cruciform blade.

Although touted as having many advantages over the Pattern 1907, the No. 4 Mk. I was a throwback. With the exception of Russia, socket bayonets had long gone out of fashion in modern armies. Approved in November 1939, the No. 4 Mk. I was short, light, sturdy, and unappealing. Since the Government arms factories were already running at capacity producing rifles and machine guns, private contracts were let for bayonet production. Many of these contracts went to firms not previously associated with arms production.



The No. 4 Mk. I bayonet, with it's distinctive cruciform blade, was forged and milled from one solid piece of steel. Only 75,000 were made, all in 1941. Singer Manufacturing Co., a U.S. company well known for their popular line of sewing machines, produced all 75,000 No. 4 Mk. I's in their factory at Clydebank, Scotland. As illustrated above, Singer marked the No. 4 Mk. I bayonets with the Royal Cypher of King George VI ("G crown R") over "No. 4. Mk. I" over "S M". Surviving examples are scarce and desirable. However, keep your eyes peeled. I found one sleeping in a gun shop and paid \$15 for it.

# No. 4 Mk. II Bayonet

Before production of the No. 4 Mk. I bayonet had even commenced, a simplified design

was approved that eliminated machining of the cruciform blade flutes. Over three million No. 4 Mk. II bayonets were made during World War II, in Britain, Canada, and the USA. The wartime makers were: Singer Manufacturing Co., Clydebank, Scotland; Crown Corporation Small Arms Ltd., Long Branch, Ontario, Canada; and, Savage Stevens Co., Chicopee Falls, Massachusetts, USA.

Singer used two different markings on their No. 4 Mk. II's: the same pattern marking as was used on the No. 4 Mk. I; and, alternatively, their dispersal code "N67". Long Branch used a superimposed "L" and "B". Savage-Stevens Co. used several variations of the letter "S". There were squared-off "S" inside a square; plain large "S"; and, plain small "s" variants.

A brief note about dispersal codes: Dispersal codes were a letter (N=north; M=middle; or S=south), followed by one, two, or three digits. Dispersal codes were used to obscure the identity of contractors and subcontractors. This served to make it more difficult for the Luftwaffe to target firms making essential war materiel.



Although little known, a small production run of approximately 5,000 No. 4 Mk. II bayonets took place during the Korean War by Canadian Arsenals Ltd., Long Branch, Ontario, Canada. These few were the last No. 4 spike bayonets ever produced. Note the Canadian Arsenals Ltd. trademark logo at the lower right of the socket.

# No. 4 Mk. II\* Bayonet

The No. 4 Mk. II\* bayonet represented a further simplification of the spike bayonet. No longer forged in one piece, the socket and blade were separate. The component parts could now be made by subcontractors dispersed around Britain and then assembled. This was cheaper and made bayonet production less vulnerable to German bombing raids. The machining on No. 4 Mk. II\* bayonet sockets was typically much cruder and deep tool marks are often evident.

Well over a million No. 4 Mk. II\* bayonets were made during World War II, all in Britain. The manufacturers were: Prince-Smith, & Stells & Co. Ltd., Keighly, Yorkshire; Howard & Bullough Co., Accrington, Lancashire; Lewisham Engineering, 9 & 11 Malyons Road, Ladywell, London; and, Baird Engineering Co., Belfast, Northern Ireland.

Prince-Smith & Stells and Howard & Bullough were both pre-war makers of textile manufacturing machinery. Prince-Smith produced over 1.1 million bayonets. They used four different identifying markings on their bayonets: "P.S. & S. Ltd."; "P.S.K."; "P. S." over "K" inside a circle; and, their dispersal code "N56". Howard & Bullough was one of the smaller producers, turning out 161,026 bayonets. Bullough marked their bayonets with "H & B" and their dispersal code "N30".

Lewisham Engineering was established on the bombed out site of the South East London Indoor Sports Club (destroyed in the blitz bombings of 1940-41), specifically to make bayonets. The factory was built during 1942 and went on to produce 84,566 bayonets. Lewisham bayonets are marked with "L. Eng." over their dispersal code "S376", all inside a rectangle.

Baird Engineering Co. was the smallest British producer of No. 4 bayonets, with only 75,000 reported produced. Baird bayonets had the spike secured to the socket by a steel pin. The other No. 4 Mk. II\* makers welded the spike to the socket.





This No. 4 Mk. II\* bayonet was made by Baird Engineering Co. The finish on Baird bayonets was very fine, rivaling that of the early No. 4 Mk. I's. Baird bayonets were marked with an oval surrounding "BEC" over their dispersal code "N96".

## No. 4 Mk. III Bayonet

The No. 4 Mk. III was the ultimate simplification of the No. 4 bayonet. The socket was no longer a forging, but was fabricated by welding seven stamped steel pieces together. The blade was then welded to the fabricated socket. Some No 4. Mk. III's utilized blades salvaged from the run of Sten submachine gun spike bayonets that were made & then abruptly scrapped during the war.



196,200 No. 4 Mk. III bayonets were produced before the war ended, all by Joseph Lucas Ltd., Chester Street, Birmingham. Pre-war, Lucas manufactured automotive electric products, like gauges, bulbs and switches. If you've ever seen a British sports car, just about everything electric inside it was made by Lucas.

Despite it's crude appearance, the No. 4 Mk. III functioned quite well. The only identifying marking on the No. 4 Mk. III is the dispersal code "M158" stamped on the top of the socket. The No. 4 Mk. III was declared obsolete in 1946.

## Mine-Probing Equipment for No. 4 Bayonet



A bizarre twist to the No. 4 bayonet story was the wartime addition of a bayonet lug to the helve (handle) of the British Army's entrenching tool. With the No. 4 bayonet fixed, the helve was used to probe for land mines.

## No. 7 Mk. I/L Bayonet

The No. 7 Mk. I/L (number seven, mark one, land service) was intended to address a number of desires: 1) Replace the No. 4 spike bayonet (that nobody liked); 2) Utilize the bowie blade of the No. 5 Mk. I Jungle Carbine bayonet (that everybody liked); and, 3) Serve a dual role as a fighting knife. The No. 7 Mk. I/L was a very innovative and complex design. The No. 7 Mk. I/L effectively integrated the No. 4 socket and a synthetic composition grip, with the blade & crosspiece of the No. 5 bayonet. As a result, the No. 7 Mk. I/L would mount to the No. 4 rifle, the Mk. V Sten machine carbine, and the Sterling L2 submachine gun.

176,000 No. 7 Mk. I/L bayonets were produced. The design was perfected by the Wilkinson Sword Co., who produced 1,000 bayonets in 1944. Mass production was carried out by four manufacturers from 1945-1948. The four makers and their production are as follows: Birmingham Small Arms, Ltd. - 25,000; Elkington & Co. Ltd., Birmingham - 20,000; Royal Ordinance Factory, Poole – 30,000; and Royal Ordinance Factory, Newport – 100,000. Examples are found with both reddish-brown and black grips.

The No. 7 Mk. I/L bayonet shown below was made by Elkington & Co. and is marked with their dispersal code "M78". Elkington was a legendary producer of fine silver plate. Elkington & Co. invented the electroplating process in the 1830s.





When the pommel is stowed, the No. 7 Mk. I/L looks like a conventional knife bayonet. In this configuration, it would mount to the Sterling L2 SMG. In order to mount to the No. 4 rifle (shown) or Mark V Sten, the pommel rotated 180 degrees to become a socket.

Despite all of it's ingenuity, the No. 7 Mk. I/L came to illustrate the old adage that a camel is a horse, as designed by committee. After an errant fired bullet struck the crosspiece during testing, the Ministry of Defense became concerned that the No. 7 Mk. I/L bayonet flexed too much when mounted to the No. 4 rifle. They ultimately decided only to issue it with the Sten Machine Carbine and Sterling L2 Sub Machine Gun. However, a few No. 7 Mk. I/L's were issued to units with the No. 4 rifle for ceremonial use.

#### No. 9 Mk. I Bayonet

With the decision not to issue the No. 7 Mk. I/L bayonet with the No. 4 rifle, there remained a strong desire to replace the No. 4 spike bayonet. The No. 9 Mk. I was a much simpler affair than the No. 7 Mk. I /L, with a sturdy socket pinned to the bowie blade of the No. 5 bayonet.

Production commenced in 1947, even before the No. 9 Mk. I was officially approved. Approximately 200,000 No. 9 Mk. I bayonets were produced at the Royal Ordinance Factory, Poole from 1947-1949. Subsequently, 366,902 No. 9 Mk. I bayonets were made at RSAF, Enfield Lock between 1949-1956, with an additional 10,000 produced in 1962. Many of the RSAF, Enfield Lock No. 9 Mk. I bayonets were serial numbered to newly made post-war No. 4 rifles.

RSAF, Enfield Lock marked their bayonets on the socket with a superimposed "E" and "D" followed by a dash and the two-digit year of manufacture. Poole marked their bayonets inconspicuously on the ledge (the flat in front of the socket hole) with a "P" inside a small circle.



This No. 9 Mk. I bayonet was made in 1953 at RSAF, Enfield Lock and was issued with No. 4 Mk. II rifle, serial number PF331051, manufactured at the Royal Ordinance Factory, Fazakerly, near Liverpool.

No. 9 Mk. I bayonets were also made in Pakistan between 1953 and 1966. The Pakistan Ordinance Factory (POF), Wah Cantonment, Pakistan, produced approximately 35,000 No. 4 rifles. Although not documented, the number of bayonets produced was likely similar. POF No. 9 Mk. I bayonets were very well made, equal to their British cousins in both dimensions and quality.

Socket of a No. 9 Mk. I bayonet manufactured in 1957 at the Pakistan Ordinance Factory, showing the markings unique to this variant.

# South African Pattern No. 9 Bayonet

South Africa produced its own distinctive version of the No. 9 bayonet to supplement it's stock of British-made No. 9 Mk. I bayonets. Instead of the bowie blade of the British No. 9, the South African Pattern No. 9 blade is double-edged. The blades on these bayonets are said to have been salvaged from Uzi sub machine gun bayonets (designated S1 in So.

Africa). However, this has not been documented and the S1 blade design may simply have been copied. The blade is shorter than the British No. 9 Mk. I and is held to the socket by two steel pins.



The South African Pattern No. 9 bayonets are believed to have been made in the 1960's by the Armaments Corporation of South Africa (ARMSCOR), Lyttelton Engineering Works, near Pretoria. ARMSCOR is the South African state-owned arms manufacturer. The South African Pattern No. 9 bayonets are unmarked. The quantity made is not known.

## No. 5 Rifle (Jungle Carbine)

The No. 5 rifle was an attempt to make a shorter and lighter version of the No. 4, better suited to the close-in fighting experienced in the Pacific Theater. In addition to having a short barrel and distinctive cone-type flash hider, designers went to great lengths to eliminate all excess weight. Commonly referred to as the "Jungle Carbine", the No. 5 rifle was not popular and saw only limited service in the British Army. Following World War II, many were relegated to police service in Asian countries.

# No. 5 Mk. I Bayonet

The No. 5 Mk. I bayonet was practical, handy, and effective as both a bayonet and fighting knife. The No. 5 Mk. I would mount to the No. 5 rifle and to the Sterling L2 submachine gun. Unlike the unpopular No. 5 rifle, the No. 5 Mk. I bayonet was very well received. It introduced an attractive 8-inch bowie blade, whose influence is evident in the No. 7 Mk. I/L, No. 9 Mk. I, L1A1, and subsequent British bayonets.

Production commenced in late 1943, nearly a year before the No. 5 Mk. I was officially approved in December 1944. 316,122 No. 5 Mk. I bayonets were produced by the end of 1945. Early examples have the wooden grips held by a single screw and a press stud without the screw slot. These early examples are very scarce today. All No. 5 bayonets are pricey and the early 'one-screw' examples command a significant premium. As a result, the No. 5 bayonet has been faked or reproduced to a much greater extent than other Enfield bayonet types.

Wartime production was carried out by four manufacturers: Wilkinson Sword Co, London - 188,354; Viners Ltd., Sheffield – 42,000; Radcliffe – 75,000; and Elkington & Co. Ltd., Birmingham – 10,768. An unknown quantity were produced post-war at the Royal

Ordinance Factory, Poole.

Wilkinson marked their No. 5 bayonets with the initials "W.S.C." and/or their dispersal code "S294". Viners marked theirs with "VNS" or their dispersal code "N79". Radcliffe (about which very little is known) marked theirs with their dispersal code, "N187". Elkington marked theirs with their dispersal code, "M78". Post-war ROF, Poole bayonets are marked with a "P" inside a small circle.

No. 5 Mk. I bayonets were also commercially produced by Sterling Ltd. for sale with the Patchett machine carbine and at Rifle Factory Ishapore in India. Sterling bayonets are marked on the blade with "Sterling" inside a rectangle. Ishapore bayonets were made in small quantity. More recently, a large quantity of RFI-marked reproductions has surfaced. The majority of RFI-marked No. 5 Mk. I bayonets encountered today are reproductions.



This No. 5 Mk. I bayonet was made in 1945 by the Wilkinson Sword Co. Ltd., 53 Pall Mall, London S.W. 1.

#### Conclusion

The lengthy service life of the Short, Magazine, Lee-Enfield (SMLE) rifles spawned a wide variety of bayonets. This has provided today's collector with many options for dressing up their Enfield rifles. Most of these bayonets are currently available and affordable to recent Lee-Enfield rifle purchasers. Only a few: some of the scarce Pattern 1907 variants; the No. 4 Mk. I cruciform spike; the No. 5 Mk. I; and, the No. 7 Mk. I/L are becoming pricey. No matter what your taste, there's an Enfield bayonet that fills the bill.

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For more information on bayonets and bayonet collecting, visit my website at <u>www.worldbayonets.com</u>.

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