

BSA .303 ‘Long Lee’ Target Rifles

Production History and Markings

by Jeff Edman

Photos by Ron Paxton

Collectors occasionally find a military pattern Long Lee-Enfield—sometimes in nice condition with superior wood, or if lucky, fitted with a high quality target sight—and wonder why it has no date, no crown, no model number, and no government acceptance marks. The rifle is a “Volunteer” or commercial pattern rifle, purposely built for private sale by the Birmingham Small Arms Company, one of two government contractors. They were made on the same machinery and to the same (or higher) standard as the rifles they were producing for the British government. In some cases, these rifles were sold (in batches) to foreign or colonial governments, but were most often purchased by competitive target shooters throughout the British Empire.

These commercial rifles are a window to the past, representing a time of great change and experimentation in firearms, and an era when the British government actively encouraged civilian marksmanship.

This article examines the production history, dates, and markings useful to the collector and historian, and describes how the commercial models differed from the government-owned rifles. The following remarks concern the commercial Long Lee service pattern rifles made by BSA, being the commercial equivalents of the Lee-Metford, Lee-Enfield, and Charger-Loading Lee-Enfield (CLLE, a.k.a. “Territorial”) rifles.¹

Production History

The British War Office adopted the .303 magazine rifle (soon afterwards named the “Lee-Metford” after the designers of its action and rifling, respectively) in 1888, and negotiated with the Birmingham Small Arms and Metal Company (BSA&M) to produce the rifle in quantity for the British government. By the summer of 1890, production of the Mark I rifle was well underway at the Small Heath factory, and negotiations began with the Lee Arms Syndicate (the patent holders) to obtain a license to produce the rifle for private sale.² As with most patents, the British government handled royalty arrangements with patent holders for rifles in government service, but for private sale rifles, BSA&M had to pay royalties for every rifle they sold to anyone other than Her Majesty’s Government. BSA&M began to produce commercial rifles (of the Mk I pattern) in the Fall of 1890.

In a series of upgrades in the 1890s, the Lee-Metford evolved from the Mk I to the Mk I* and Mk II, and then (with a change from shallow Metford 7-groove rifling to ‘Enfield’ 5-groove rifling) to the Lee-Enfield Mk I and Mk I*. BSA&M continued to supply these rifles to the government, and also make commercial versions. By 1898, the company (having reverted to its original name, BSA, after selling off its ammunition business) had manufactured over 13,000 commercial rifles, with



Figure 1. BSA Long Lee-Enfield target rifle by Alex Martin of Glasgow.

Lee-Enfield Magazine Target Rifle

WITH SPECIALLY SELECTED MATCH BARREL.

.303 BORE. British Government Mark I* Pattern, with Safety Locking Bolt.

Target Rifles are carefully tested at 100 yards, for alignment of sights and grouping of shots, and are guaranteed accurate.

They are also submitted to Government Inspection, and stamped with the Viewer's Mark, and a Certificate can be sent out with each Rifle.

This Rifle can also be supplied with "METFORD" TARGET BARREL.

Sighted for "Cordite"
Ammunition only.

TRADE MARKS.



B.S.A.



These Rifles are specially made and selected for match shooting.

The majority of competitions and prizes at Bisley and other prominent meetings at home and abroad have been won with target rifles of B.S.A. manufacture.

Price - - 142/6 each.
,, (for one dozen) 135/- ,,

EXTRAS—Specially Selected Heart Stock - - from 7/6 each.
Nose Cap and Lower Band lined with Asbestos to admit of equal Barrel Expansion—B.S.A. Patent 16464/03. For full particulars of this device see p. 12 } 3/9 "

The Birmingham Small Arms Company Limited,
BIRMINGHAM.

roughly half of them going to foreign contracts and the rest to private purchasers.³

Who bought these rifles and why? Although BSA delivered some batches to customers abroad (such as Cecil Rhodes' British South Africa Company and the Emir of Afghanistan⁴), most of the commercial Long Lees in the years leading up to 1914 were privately purchased by competitive target shooters. These included civilians, active members of the armed forces, and members of Volunteer units (later, Territorials), who shot for prizes in a variety of matches.

The most famous event was the meeting of the National Rifle Association of Great Britain at Bisley Camp in Surrey each summer, which drew competitors from all across the British Empire.⁵ Although some government rifles were made available for these matches, many dedicated marksmen purchased their own rifles of the highest quality. In 1897, following the rearmament of the Volunteers with Lee-Metfords, this rifle became the standard Service Rifle for Bisley, and commercial sales began to take off.⁶

In 1902, the government adopted a shorter, lighter version of the Lee-Enfield, suitable for both infantry and cavalry.⁷ This was the famous SMLE (Short, Magazine, Lee-Enfield), which served through both World Wars. Although BSA manufactured the short rifle in great numbers, it continued to produce the older "Long" Lees as well, partly for government resupply and partly for the commercial market.

In their 1909 catalog, BSA introduced the commercial version of the new Territorial model, which could be had in the standard military pattern or "Target Quality."⁸ This model (named for the new volunteer force with whom it was associated) was simply the Long Lee updated with a charger bridge for loading from 5-round clips (similar to the SMLE), along with improvements to the sights. BSA was still offering the Territorial model for sale as late as 1935, fully 32 years after the Long Lee had been officially replaced as the main British service pattern.⁹

Although many matches had no restrictions, some of the most prestigious NRA contests were in

LEE ENFIELD MAGAZINE RIFLES

"TERRITORIAL" CHARGER LOADING PATTERN

*'303 bore :: Long :: Mark I**



ALTHO' the latest Short Pattern Rifle described on page 1 must be used in the majority of competitions run under British National Rifle Association Rules, there are a few long range events open in which this very accurate rifle with its longer barrel may be used.

It shoots the pointed bullet high velocity Mark VII ammunition very well indeed, and is preferred by marksmen—particularly in the Colonies—because of its longer barrel and consequent longer sighting radius.

SPECIFICATION

Length over all	49½ inches
.. with bayonet	61¾ "
.. of barrel	31¼ "
.. of stock from trigger to centre of butt end ..	13½ "
Weight of Rifle	9 lbs. 6 ozs.
.. of Rifle with bayonet ..	10 , 4 "
Magazine Charger loading ..	10 shots
Sighted for '303 Mark VII high velocity pointed bullet ammunition.	



BAYONETS

These can be supplied if required.
Prices will be quoted on application.

THE '303 MARK VII HIGH VELOCITY CARTRIDGE



Bullet weight ... 174 grains.
Muzzle velocity of bullet, 2,450 ft. per second.
Striking power of bullet at the muzzle, 2,317 foot-lbs.

B.S.A. GUNS LIMITED
Proprietors - - - - - THE BIRMINGHAM SMALL ARMS CO. LTD.
BIRMINGHAM **England**

NOTE—
We do not manufacture or supply cartridges. They can be obtained from any gun dealer.

Figure 3. BSA advertisement, July 1921. Although popular in competition for over 12 years, the Territorial would no longer be allowed in Service Rifle matches at Bisley after 1922. It continued to be popular abroad.

the Service Rifle (S.R.) category, which set strict limits on how much a rifle could be modified yet still conform to the military specification. Characteristics of weight, length, stock, trigger pull, and sights had to fall within certain limits in order to qualify for entry, and rifles could be inspected for compliance. As long as the rifle met the specification, the purchaser could opt for the highest quality he could afford, and BSA offered plenty of options. Figure 2 shows the options available to the private purchaser in 1907, including specially selected (and sighted) match barrels, heart walnut stocks, asbestos packing of the nose cap and lower band, choice of Metford or Enfield rifling, and inspection by a Government Viewer. By 1912, a nickel steel barrel could be had for an extra 11/3, and a huge variety of aperture sights had by then become sanctioned for use in matches.¹⁰

BSA typically sold these rifles through retailers (the gun trade), which included famous gunmakers and target rifle specialists, such as John Rigby, Westley Richards, W.W. Greener, Webley, Wilkinson, Alex Martin, Daniel Fraser, C.W. Andrews, Charles Riggs, A.G. Parker, L.R. Tippins, G.E. Fulton, and many others.¹¹ They might enhance the BSA base model with features of their own, perhaps offering their own barrels. At the least, reputable gunmakers would test fire the rifle and adjust the sights, guaranteeing accuracy. Rifles that passed through one of these gunmakers will often carry that company's ledger number on the barrel or trigger guard.

In some ways, commercial BSA rifles are like time capsules, because they might retain features that had long since been made obsolete or upgraded on government rifles. For example, many shooters preferred Metford rifling, which BSA continued to offer as an option, long after it had been superseded in military service.¹² Collectors today should not look to changes in government patterns as indicators of when a commercial rifle was manufactured. BSA did not necessarily jump to update its commercial offerings according to the latest military refinements promulgated in the List of Changes. Nor were private owners concerned with the upgrades that were routine in the service. Privately owned target rifles made

MARTIN'S RIFLES

Were selected for the British Rifle Team in 1902, and have been represented in every International Team since.

MARTIN'S TARGET TERRITORIAL RIFLE (with risks of nickelling reduced to minimum.)	£8 & 29
PLAIN QUALITY TERRITORIAL RIFLE	£6
ORDINARY QUALITY LEE-ENFIELD RIFLE , Government viewed.	£4 10
MARTIN'S .375-303 MATCH RIFLE (as used by J. E. Martin in winning Wimbledon Cup 1908.—Score 74 at 1100 yards).	£10
MARTIN'S MATCH REARSIGHT , Silver scale adjustable for wind.	£6 6
MARTIN'S LENS & OPTICAL SIGHTS .—See booklet.	

B.S.A. Martin Sights on Toppins' Mounting **35/-**

All Target Rifles are shot, grouped and corrected by **J. E. MARTIN** (who made 105 in Stock Exchange last year).
RIFLE AND REQUISITE PRICE-LISTS free.

B.S.A. Aperture Sights reduced to **21/-**

ALEX. MARTIN, Armourer to
20, EXCHANGE SQUARE, GLASGOW.
And at EDINBURGH and ABERDEEN.

GREENER'S -303

Government-Viewed LEE-ENFIELD Match barrels can be fitted to rifles same day as received. They are made of Greener's celebrated Wrought Steel, and are guaranteed to make "possibles" through the ranges.

PRICE **£2 2 0**

Government-Viewed Territorial-model barrels and sights fitted to privately-owned rifles,

£3 3 0

Conversions at equally low rates.

The "King's Prize" .303 bore Government-Viewed Magazine Rifle, a certain prize winner—
Lee-Enfield model, £8 8 0 ;
Territorial model, £7 7 0 and £9 9 0 .
Illustrated catalogue of Match and Miniature Rifles and accessories post free.

W. W. GREENER,
68 Haymarket, St. Mary Sq., Bungalow.
London, S.W. Birmingham. Bisley.

TIPPINS' RIFLES

WON

KING'S 1910, 1909, 1906.
ST. GEORGE'S 1910, 1909, 1908.

MANY OTHER FIRST PRIZES EVERYWHERE.

Price **£8.** *New Barrels* **£3 3s.**

TIPPINS' B.S.A. SIGHT-MOUNTING is approved for 1911, with B.S.A. or B.S.A.-Parker, or other suitable leaf.
It is the best sight for Territorial Rifle, and won the Grand, Territorial, Elkington, and All-Comers' Aggregates at Bisley, 1910. PRICE 35s.

L. R. TIPPINS & SON
MISTLEY, MANNINGTREE.

Figure 4. Advertisements in *N.R.A. Journal*, May 1911.

no such trip to the armorer. What did concern the private owner were any changes in NRA rules, which might concern aperture sights, accessories, or the definition of “service rifle.” And of course, one thing that serious competitors did was replace their barrels. One marksman commented that, for maximum accuracy, he replaced his barrel every 1,000 rounds!¹³ Collectors who are puzzled at discrepancies between the markings on an action and a barrel should take note. A rebarreled target rifle does not suffer from any loss of authenticity. This was simply part of its useful life.

Even after the SMLE was introduced, marksmen often chose to retain the Long Lee, either for its heavier barrel or because they were invested in it. The NRA Service Rifle category continued to offer a place for the Long Lees through 1922, when it was decided that the future S.R. matches would be shot with the short rifle only.¹⁴ The Long Lee target rifle, however, continued to be used extensively abroad, especially in places like Australia, where it continued as a favorite until the 1930s.¹⁵ BSA, therefore, continued to offer the Territorial target rifle throughout the SMLE era, especially for these markets. Rather than switch to the SMLE, Australian marksman might cut down their Long Lee barrels or replace them with Lithgow heavy barrels of SMLE length.¹⁶ Replacing barrels on a favorite rifle was probably a more attractive option for most Long Lee owners than replacing an entire rifle. Former BSA employee, Proof House Guardian, and author John Knibbs estimated that between 1921 and 1938, BSA sold only 1,700 Territorial rifles (versus 3,725 SMLE rifles).¹⁷

A Guide to Commercial Markings

One way to tell the difference between a commercial Long Lee and a government rifle is to look at the wrist (a.k.a., action strap or butt socket). On government rifles, there will be a royal cypher (the sovereign’s crown and initials) that denotes government ownership, plus the source of manufacture (Enfield, Sparkbrook, BSA Co., or LSA Co.), a model designation (I*, II) and a date. A BSA commercial rifle, however, will show only the company name, and sometimes the words “Lee-Speed Patents” (when the patents were still

in force, up to 1904). Rifles produced through 1897 will say “BSA&M Co.,” and anything later will be “BSA Co.” (due to the company reverting to its older name).¹⁸ The very earliest models (early 1890s) will say *only* “Lee-Speed Patents” in this location, with no company name.¹⁹ The term “Lee-Speed” refers to inventor James Paris Lee who designed the action in 1879, and Joseph Speed (Assistant Manager of RSAF Enfield), who patented several improvements to the rifle when it was adopted for service in 1888. There was never a model called the “Lee-Speed”—it was simply a patent acknowledgement. But over the years, the term has come to be used for commercial rifles (especially the sporting models) because military model designations are typically absent, while the “Lee-Speed Patents” marking is prominent—hence, the temptation to say “this is a Lee-Speed.”

The proof and view marks are also different on commercial rifles. The British military markings are absent, and instead one will find the marks associated with the famous Birmingham Proof House, as shown in Figure 5. The 1904 Birmingham proof marks are easily identified and will be the most commonly seen. Midway through the First World War, the Crown over BM proof was introduced for military pattern rifles like the .303, and is one of the clearest differentiators between a pre-war and post-war Long Lee.²⁰

Beginning in 1893, the screw-in bolt head on early rifles carries the patent acknowledgement “19,145/90.” This is not a Lee-Speed patent, but a



Figure 5. In accordance with the 1868 Gun Barrel Proof Act, all BSA commercial rifles were submitted to proof testing before sale. Top row shows Birmingham Proof House view and proof marks in use prior to 1904. Second row shows the marks adopted in 1904, with the BM military barrel proof adopted in 1916. Government rifles would have none of these.

Westley Richards patent taken out by employees John Deeley and F.J. Penn.²¹ This bolt head was an improvement that was introduced with the service pattern Lee-Metford Mk.II, and BSA&M adopted it when they retooled to make that model in 1892. For their commercial rifles, they agreed to pay a royalty of 1/6 per rifle to Westley Richards.²² This patent ran until 1904.

The nose cap and bayonet attachment was another improvement introduced when the Lee-Metford service pattern advanced from the Mk I* to the Mk II. This was covered under patent 16,321 of 1888 by famous gunmaker and former RSAF Superintendent John Rigby, whose solicitors politely informed BSA&M in December 1893 that they were infringing on the patent. As with the bolt head, arrangements were soon made for royalty payments, and beginning in December 1894, the nose caps were marked "Rigby 88."²³ This patent ran for 14 years.

Another marking on Long Lees that has puzzled collectors is "For Cordite Only." Although the change from black powder to Cordite as the propellant for the .303 service cartridge necessitated a change in rifling (Metford to Enfield), this marking has nothing to do with

the rifling pattern. It was in fact an effort by BSA to insulate itself from any damages that might arise if customers used ammunition other than Cordite. Smokeless powders were still in the developmental stage, and Cordite had several rivals, such as Rifleite. These other powders were found, in some circumstances, to cause dangerous pressures that might burst the actions, even in rifles that had passed proof. In July 1898, BSA issued a controversial warning to the gun trade that they would not accept responsibility for damage to any BSA rifle that used cartridges loaded with any propellant other than Cordite. They announced that henceforth all BSA rifles chambered for .303 would carry the warning "For Cordite Only."²⁴

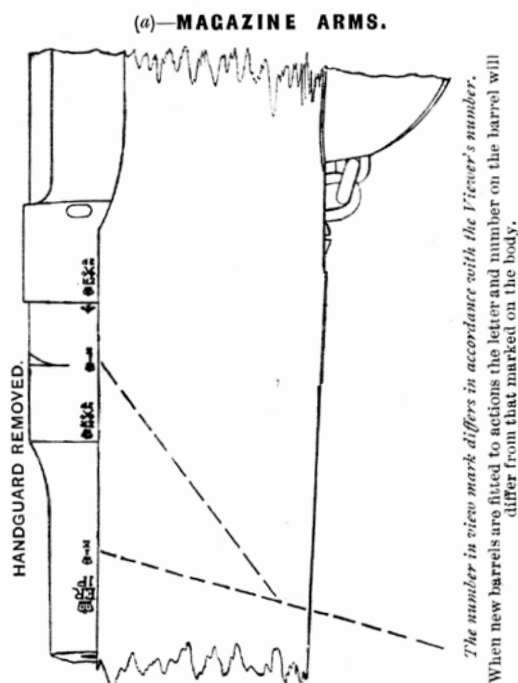
In the matter of serial numbers, collectors often wonder why a commercial rifle has two sets of serial numbers, one above the other, on the action and the barrel. In most cases, the second number is really a Government View mark, showing that the rifle conformed to service rifle specifications, and was therefore eligible to compete in NRA matches in the Service Rifle category, which the NRA rules defined as ".303 rifles as issued by the Government for the arming of troops or of private manufacture of bona fide Government pattern and



Figure 6. BSA Territorial by L.R. Tippins. On left side is BSA's warning not to use any ammunition besides Cordite and the 1904 Birmingham Proof House view mark. On right, another version of Gov't Viewer's mark with letter-prefixed number above the BSA number. Tippins' trademark on the knox rather than BSA piled arms logo.

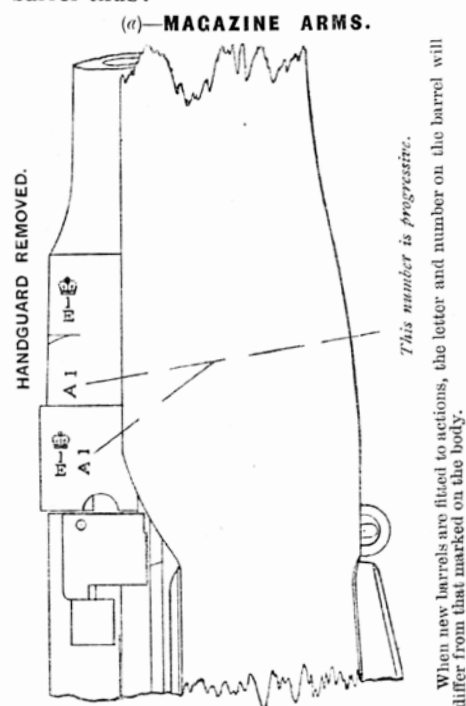
1.—GOVERNMENT ARMS.

Government Carbines and Rifles with Magazine and Martini Actions are marked with the Government view and proof marks on the left side of the body and barrel thus:—



2.—PRIVATE ARMS.

Private Carbines and Rifles with Magazine and Martini Actions (Government viewed) are marked with a Government view mark and number on the right side of the body and barrel thus:—



(See note on next page as to Rifles issued from store for private sale).

Figure 7. Diagrams of Government Viewer's marks from *National Rifle Association, Bisley Common, 1904 Programme*. Martini-Metfords and Martini-Enfields were subject to the same rules and were also diagrammed. Note that this view number is not the same as the manufacturer's serial number.

bearing the Government Viewer's mark."²⁵ This inspection was conducted by the same viewers already employed at the BSA factory to inspect government rifles. The customer paid an extra 1/6 for this service, and received a certificate. The 1904 *Text Book of Small Arms* explains:

"The viewer's mark consists of a number below a crown, the letters E or B are also put on to denote the place of manufacture. [On Government rifles] the marks are placed on the left side of the body, and on the left side of the barrel close to the junction of the body and barrel.

Private rifles or carbines that have been submitted for a modified inspection to the Small Arms Inspection Department, after they have been finished and are

*found to be in general conformity with Service patterns, so that they may be used in matches restricted to rifles or carbines of Government pattern, are marked with the above marks on the right side instead of on the left."*²⁶

The mark itself might vary in the letters and numbers below the crown, depending on the viewer, but it is always at a right angle to the serial number, and is accompanied by a number with a letter prefix—this is often mistaken for a second serial number. This number is progressive and has been observed in the four-digit range. Figure 7 shows the typical arrangement.²⁷

Never being in government service, the commercial rifles lack the buttstock markings found on government rifles. However, these rifles were often presented as shooting prizes, and may



Figure 8. Nicely stocked BSA Long Lee-Enfield by Daniel Fraser of Edinburgh. Gov't Viewer's Mark and letter-prefixed num



number above the BSA serial number on the action, and Deeley-Penn patent on the bolt head.

be found with plates on the buttstock, indicating the name of the match, the sponsor, the winner, and the date.

It is possible that target rifles were pressed into wartime service during the First World War (so desperate was the government for rifles that they purchased anything the gun trade had available), and thereby picked up some service markings. Some officers carried their personal arms to war, not only in 1914 but also earlier in the Boer War, though they tended to be carbine patterns rather than Long Lees. Some private rifles saw service as sniper rifles in 1914, but generally speaking, these target models were spared the mud and barbed wire of Flanders. This is why they are so often found in beautiful condition today. They were likely to have been well maintained by their owners, and some probably saw at most a weekly trip to the local rifle club meeting. Still, it was at such rifle clubs, which proliferated in the decades leading up to 1914, that British and Imperial marksmanship was encouraged and honed. In this framework, the Long Lee target rifle made its contribution to both sport and national defense.

Notes

- 1 For information on Long Lees, such as principles of operation and differences between models, see Ian Skennerton's *The Lee-Enfield* (Labrador, Queensland, 2007).
- 2 Birmingham Small Arms Company (BSA). *Extracts from Records for the Period 1861-1900, with 1914-1918 addendum*. [unpublished typescript; annotations by B.A. Temple], 146.
- 3 *BSA Extracts*, 3. See also *Arms & Explosives* (May 1898): 130, which has the same royalty figure, but estimates 18,446 private rifles sold through 1898.
- 4 *BSA Extracts*, 3, 171-179. For a nice summary of early foreign contracts, see Ray McMahon's "'Volunteer' or Commercial Pattern Lee-Metford Rifles & Carbines" *Arms & Militaria Collector* (Vol.4, No.2): 29-30.
- 5 For the full story, see Cornfield, Susie, *The Queen's Prize: The Story of the National Rifle Association*. (London: Pelham, 1987) and Humphry, A.P. and Fremantle, T.F., *History of the National Rifle Association*. (Cambridge: Bowes and Bowes, 1914).
- 6 Humphry, 362.
- 7 LoC 11715, 23 Dec 1902.
- 8 *B.S.A. Rifles. 1909-2nd Edition*. (Catalogue): 8.
- 9 *BSA Rifles. G264-5-5-5* (Catalogue; n.d.): 9.
- 10 *B.S.A. Rifles & Rifle Sights. Fifth (a) Edition*. (Catalogue; n.d.): 12, 21.
- 11 Another prominent gunmaker who catered to the Bisley market was London's W.J. Jeffery—though they mostly relied on rifles from the London Small Arms Co, and therefore beyond the scope of this article.

- 12 Ommundsen, H. and Robinson, Ernest H., *Rifles and Ammunition and Rifle Shooting*. (New York: Funk & Wagnalls, 1915): 61. Although outside the scope of this article, private purchasers could even order an SMLE model with Metford rifling, something you would never see on a government rifle.
- 13 Davis, Capt. R.H. "The Making of a Marksman," *Pall Mall Magazine* (Vol. XXXVIII, July-Dec 1906): 552.
- 14 *Proceedings of the National Rifle Association 1923* (London: Waterlow & Sons, Limited, 1923): 50.
- 15 *NRA Journal* (Sept. 1933): 208-210; Casey, Bill, *Home on the Range: Queensland Rifle Association 1861-2011* (2011): 153-154.
- 16 Skennerton (*The Lee-Enfield*), 341, 458.
- 17 Knibbs, John. Letter to the author. October 9, 2010.
- 18 *Arms & Explosives* (Oct. 1897): 9.
- 19 The author has seen an early commercial action (number 59) marked only "Lee-Speed Patents." The action is so early that it still has the rare Mk I safety lever—a part that was removed on all service rifles with the advance to Mk I* in 1891. This is a clear example of commercial rifles as "time capsules" of early features.
- 20 Dates of manufacture (or at least proof) for the 1920s can also be pinpointed if one can find the Birmingham Proof House private viewers' date marks on the barrel, as described by Nigel Brown in *British Gunmakers Volume Two: Birmingham, Scotland & the Regions* (Shewsbury: Quiller, 2005), 435.
- 21 Westley Richards 1909 catalogue: 81; *The Field* (July 7, 1894): 41.
- 22 *BSA Extracts*, 157.
- 23 *BSA Extracts*, 171.
- 24 *Arms & Explosives* (July 1898): 163.
- 25 *National Rifle Association, Bisley Common, 1904 Programme*. (London: Waterlow & Sons, Limited, 1904): 43, 82-84. See also *Sporting Goods Review* (March 15, 1897): 49.
- 26 *Text Book of Small Arms 1904* (HMSO, 1904): 162.
- 27 *National Rifle Association, Bisley Common, 1904 Programme*, 82-85. Rarely, this view arrangement has been seen on the Left side, and the letter is a suffix. The view number should not be confused with a Proof House "View Mark" (e.g., Crown over BV)—different viewers, different purpose. Nor should it be confused with the serial numbers of London Small Arms rifles, which often had a letter prefix.

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