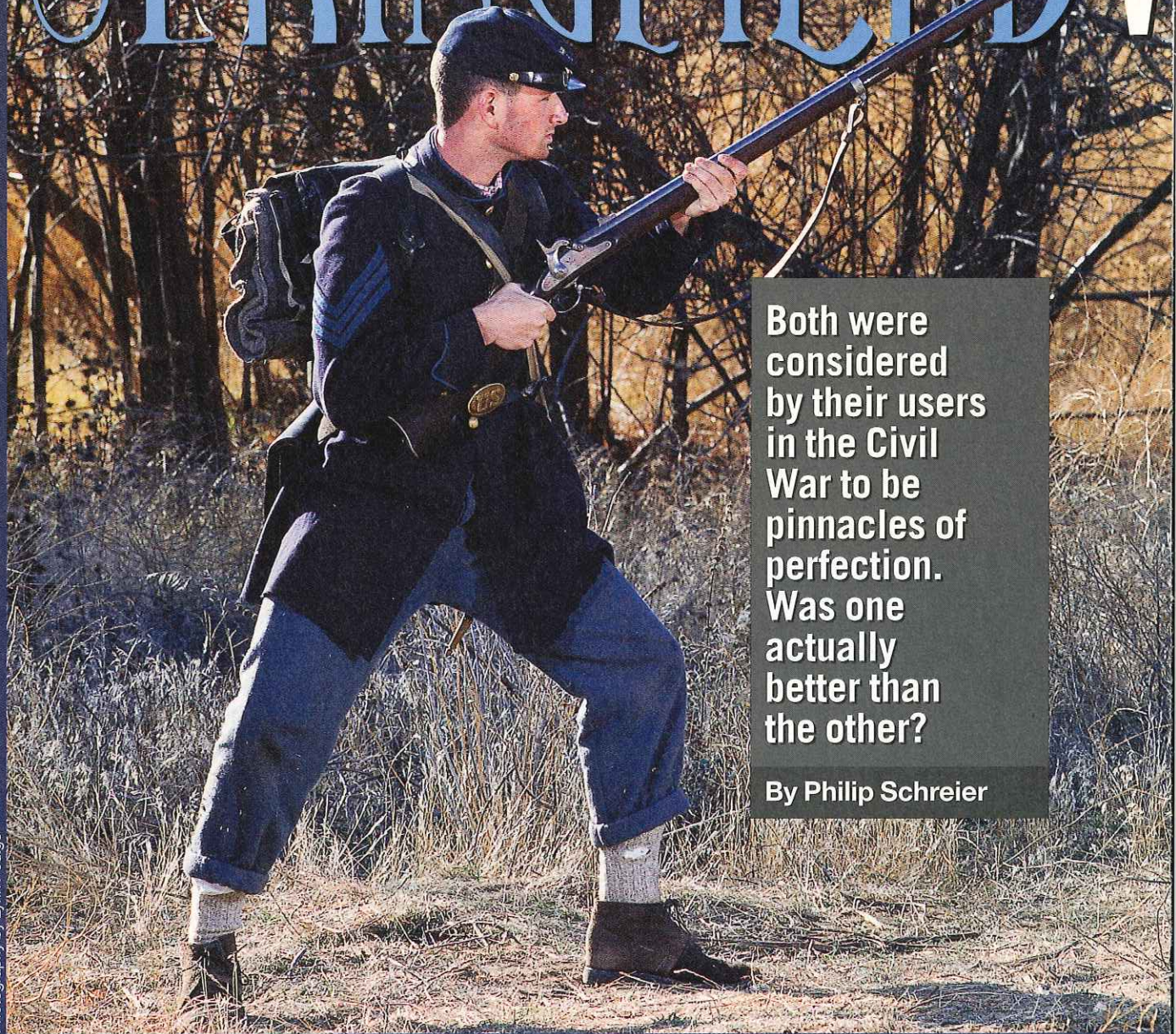


SPRINGFIELD



Photography by Lynn Pedigo

Both were considered by their users in the Civil War to be pinnacles of perfection. Was one actually better than the other?

By Philip Schreier

The Union was dissolved. Southern Senators and Congressmen stood on the floors of their respective chambers and gave tear-filled parting speeches to their Yankee colleagues. The war that many of them had fought so hard to avoid was now imminent once

South Carolina adopted an ordinance of Secession on December 20, 1860. Georgia Senator Howell Cobb stood in the chambers once occupied by Calhoun, Webster and Clay to bid farewell and utter an ominous threat. "We can whip you Yankees with corn stalks," he said in a reference to the prowess

S. ENFIELD



The U.S. Model 1861 Springfield and British Pattern 1853 Enfield were the two most widely used rifle muskets in the Civil War. While Springfields were generally obtainable by Rebels through capture, many thousands of Enfields were officially sold to the North. The English were hedging their bets, as well as lining their pockets.

of Southern manhood. Corn stalks, however, would not become the weapon of choice once Lincoln called for volunteers and militias began to mobilize following the storm clouds that broke out over Ft. Sumter on April 12, 1861. For the first time in American military history, one

army would be meeting another army with rifle muskets-guns, which looked much like their smoothbore predecessors but possessed greater range and deadlier accuracy. The result was bloodshed on a scale unequaled before or since by Americans under arms.

SPRINGFIELD VS. ENFIELD



The 1861 Springfield was the most widely used Yankee rifle musket in the Civil War. It was basically a modification of the earlier Model 1855, sans the cranky Maynard tape primer system.

U.S. MANUFACTURERS OF THE "SPRINGFIELD" RIFLE

Model of 1855	Springfield Armory Harpers Ferry Armory
Model of 1861	Springfield Armory Alfred Jenks & Son (Bridesburg) Eagleville E. Whitney William Mason Millbury James D. Mowry William Muir & Co. Sarson & Roberts (New York) Welch, Brown & Co. (Norfolk) Norwich Arms Co. Parkers' Snow & Co. Providence Tool Co. E. Remington & Sons E. Robinson Savage Revolving Firearms Co. C. D. Schubarth & Co. S. Norris & W.T. Clement J. T. Hodge & A. M. Burton (Trenton) Union Arms Co. Charles B. Hoard (Watertown) Dinslow & Chase (Windsor Lock)
Special Contract Model of 1861	Colt Patent Firearms Co. Amoskeag Lamson, Goodnow & Yale
Model of 1863	Springfield Armory

Two great arms-making facilities were soon producing hundreds of thousands of rifle muskets for both combatants. The Springfield Armory, founded in 1795 on a spot in Massachusetts selected by George Washington, supplied the majority of long arms to the Union forces while the equally famous Enfield Armory in England supplied arms to both sides, with a majority of them going to the gray-and-butternut-clad Confederate troops

THE SPRINGFIELD SAGA

Rifled arms had won wide acclaim in the Mexican-American War of 1847—so much so that one Mississippi regiment exclusively outfitted with the Model 1841 rifle, and under the command of future Confederate President Jefferson Davis, won a nickname for the model; it would forever become known as the "Mississippi Rifle." In 1857 the Springfield Armory and Harpers Ferry Armory began production of the Springfield Model 1855, the first production rifle that was a standard issue long arm for the U.S. Army. Production was slow, and by 1861 only 60,000 of the .58-caliber rifles were completed.

The Springfield Rifle (models 1855, 1861 and 1863) used the .58-caliber Minié ball as its primary projectile. The Minié ball revolutionized combat arms by eliminating the cloth patch that most rifled arms used to hold a round ball to the rifling. With a conical shape and hollow base, the projectile used a number of concentric rings around the base of the bullet to expand into the rifling as the powder charge forced the projectile forward. An application of grease or lard in the space between the base rings served to lubricate the round and lessened the fouling.

The Minié ball got its name from French Army Captain Claude Etienne Minié, who with fellow officer Captain Gustave Delvinge patented the bullet in 1844 following Delvinge's initial patent of

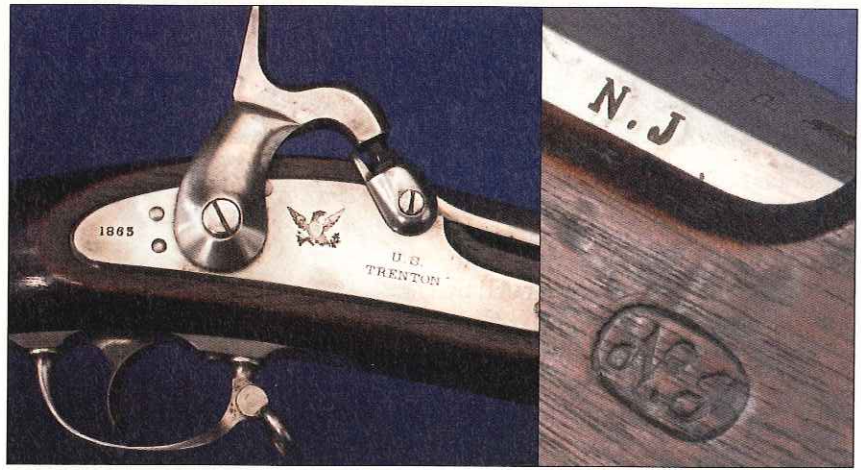


Regarded by many as the high water mark in military muzzleloaders, the Pattern 1853 Enfield was a well-made, serviceable arm that saw use throughout the globe. It was the second most widely used arm in the Civil War.

1842. (Some historians give W. Greener of Birmingham, England, credit for inspiring Delvinge with his similar efforts for the British Board of Ordinance in 1835.) Minié's name has been associated ever since with the revolutionary design, elements of which can still be found in modern ammunition to this day.

As Lincoln called volunteers to arms following the fall of Ft. Sumter, the Springfield Armory began to produce an improved rifle known as the Model of 1861. By the war's end, some scant four years later, over 800,000 of the Model 1861 and 1863 rifled muskets had been produced there with another 700,000 manufactured by the 32 separate contractors and sub contractors who were hired to service the needs of the ever-expanding Union army.

An interesting feature of the Model 1861 was the large "humped" hammer. This "C"-design hammer was a leftover from the design of the Model 1855, which used a Maynard tape priming device that was considered ill suited to the rigors of constant use and hard campaigning. In the rush to produce arms, the same machinery was used to produce this distinctive hammer as utilized on the earlier model. Confederates who captured the U.S. Armory in Harpers Ferry removed all the arms-making machinery to Richmond, Virginia, to produce tens of thousands of U.S. Model 1855 copies for their own use, each one carrying the same distinctive hammer design



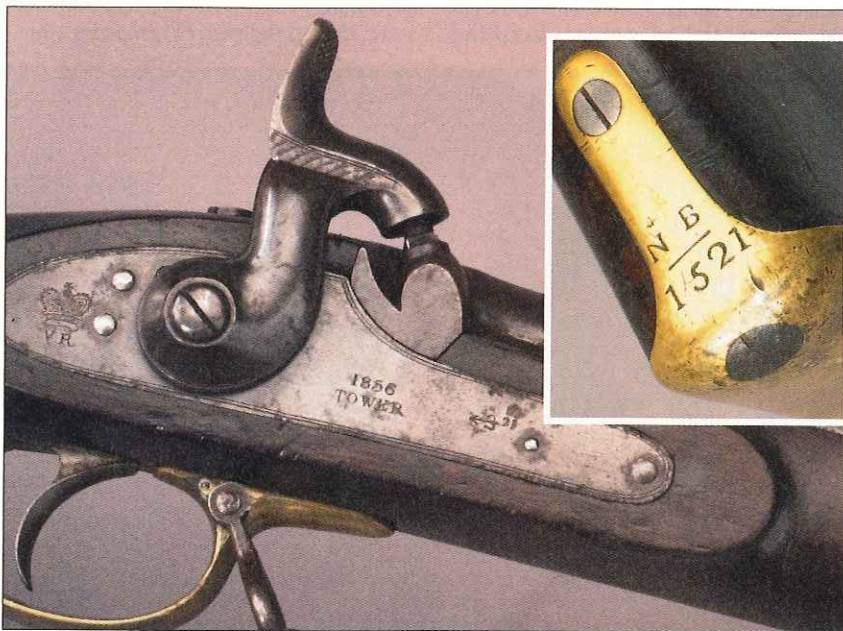
The Model 1861 was made by a number of contractors, as well as at the national armory. This gun's lockplate markings indicate it was turned out by J.T Hodge and A.M. Burton at the Trenton Locomotive and Machine Co. Most of this firm's output was used by New Jersey troops, as indicated by the gun's stock and barrel markings.

from the Model 1855.

With a 40-inch barrel and leaf sights graduated to 50, 100 and 300 yards, this Springfield was the most produced U.S. long arm of the 19th century. Its .58-caliber projectile was capable of inflicting mortal wounds at nearly 1,000 yards, and it was considered to have devastating accuracy at ranges of up to 500 yards. Models produced by the U.S. Armory are marked on the lock plate with "U.S. Springfield" and the date of manufacture (1861 or 1862). Contract rifles are similarly marked with the name of the manufacturer and the date. Furniture was iron, and stocks were of American walnut. Ramrods had special "tulip"-head tips

to better configure to the pointed bullet nose, effecting better seating and allowing for less deformation of the soft lead. The reverse end of the ramrod was threaded to take corkscrew-shaped cleaning "worms" and screw-in bullet pullers.

In 1862, the Colt Manufacturing Co. of Hartford, Connecticut, accepted a contract to produce a special model of the 1861 rifled musket. This rifle differed in a number of ways from its similarly named cousin. Its hammer was designed more like the traditional "S" shape, and the barrel was held with three bands that used screws to hold



This First Model Pattern 1853 Enfield lock indicates that it was Crown issue, manufactured in 1855. Generally speaking it is rare to find early "VR"-marked 53s with Civil War usage. Such guns would have had to have been obtained in some unorthodox manner. Butt markings indicate the gun was used in New Brunswick, Canada.



Tompions (Enfield, left; Springfield, right) were placed in the guns' muzzles to help protect the bore and keep out foreign material.

SPRINGFIELD vs. ENFIELD

them fast to the barrel and stock, rather than the springs of the '61. Nearly 100,000 of this "Special Model 1861" were manufactured by Colt, with another 77,000 manufactured by Amoskeag of Manchester, New Hampshire, and Lamson, Goodnow & Yale of Windsor, Vermont.

In 1863 the Springfield underwent a few design changes resulting in a new model designated as the Model of 1863. Springs were used to retain the barrel bands, and the improved "S"-shaped hammer became standard. Manufactured solely by Springfield, over a half a million were produced in the last two and a half years of the war, bringing the total number of rifled muskets produced by the venerable armory to nearly 800,000.

THE ENFIELD ERA

In 1804 a Royal Small Arms Factory was established at Enfield Lock, north of London, England. Originally intended to serve as a center to assemble and complete "Brown Bess" muskets for the British infantry, by 1850 Enfield had become the center of arms development and manufacture within the United Kingdom. It was at the personal direction of the Duke of Wellington, in 1852, that every British soldier was to become a rifleman and armed with "...the best that can be found." Acting on his direction, the Select Committee on Small Arms selected a rifle that would evolve into the world famous Enfield Pattern 1853 rifled musket, the standard service rifle for the British until 1866, as well as the most popular foreign rifle to see service on either side of the War Between the States.

The development of what would, without argument, become the best service rifle of the Civil War period has as much an American ancestry as it does British. When first introduced in 1853, the P53 Enfield was made, as all guns were at that time in the UK, by the "cottage industry" method of production. Each component part was fabricated by a specialist operating from any of the numerous small shops that surrounded the great armories in London and Birmingham. Hand made to exact specifications, the components were then assembled into completed arms by hand finishers at the armory. This method of manufacture was not only expensive but slow going.



Enfield rear sights were sophisticated "ladder" affairs graduated to up to an optimistic 1,000 yards, depending upon the model and vintage of the arm.

When war broke out between England and Russia in the Crimea in 1856, a sudden demand on the arms producing armories strained their capabilities to the maximum. A contract was let to Belgian and French makers as well as the Robbins & Lawrence Co. of Windsor, Vermont, to produce P53 rifles for the British military.

Robbins & Lawrence quickly "tooled up" to produce rifles by the "American Method" of manufacturing,



Springfield sights involved a folding two-leaf setup with notches set for 50, 100 and 300 yards. While the gun was capable of lethality at up to 1,000 yards, as might be expected most damage was done at closer ranges.

that is to say, the company quickly produced machinery that would manufacture rifles in an assembly line method wherein each part was identical and interchangeable, requiring only modest hand-fitting to complete the firearm. This enabled R&L to make rifles not only faster and cheaper, but also better than their English counterparts due to the ease of replacing a bro-



Springfield tools involved (top to bottom, left to right) bullet puller, worm, tumbler and wire punch, screwdriver/nipple wrench, mainspring vise.

ken part with a machine-made identical part. When the contract was complete in 1858, the Vermont firm sold the machinery to the Royal Small Arms Factory at Enfield where the machines were the first in all of England to utilize this method of manufacturing for any product. Soon a copy of the machinery was made and employed at the London Armory to produce P53s.

(One of these original rifling machines made for the execution of the 1856 contract was returned to the Robbins & Lawrence Co. in the 20th century, where it is on display today in Windsor, Vermont, at the American Precision Museum. A plaque from the RSAF on the machine denotes its historic contribution not only to the arms-making industry but also to the history of manufacturing in the UK.)

When Confederate purchasing agent Caleb Huse walked into the offices of the London Armory in May of 1861, he contracted with that firm and the firm of Sinclair, Hamilton & Co. to secure the entire production of available Pattern 1853 Enfield rifles in England, eventually purchasing over 500,000 stands of arms and running them through the Union blockade before the war's end. Agents of the Federal government in Europe attempted to beat the Confederates at the game of procuring arms on the continent but, as the legend goes, they arrived almost 30 minutes too late to gain the upper hand in monopolizing the output of Pattern 1853 rifles.

The Pattern 1853 rifled musket was a percussion rifle of .577 caliber, weighing 8 pounds, 14½ ounces and having an overall length of 56 inches. It had three rifle grooves with a 1-turn-in-78-inch rate of twist. The .577 caliber smooth-sided "Pritchett" bullet weighed 530 gr. The Springfield equivalent .58-caliber Minié ball weighed 505 gr., slightly lighter than the British bullet due to the concentric rings on the bullet's U.S. version, designed by American Colonel Burton. The sights on the P53 were a considerable improvement over those found on the Springfield. Of the ramped ladder design, they were graduated to 1,000 yards, greatly increasing the rifle's practical use as a long-range weapon. It is commonly believed that a marksman from Archers Brigade, CSA, fatally wounded Union General John Reynolds on July 1, 1863, at the battle of Gettysburg with a P53 at a distance of very near 1,000 yards.

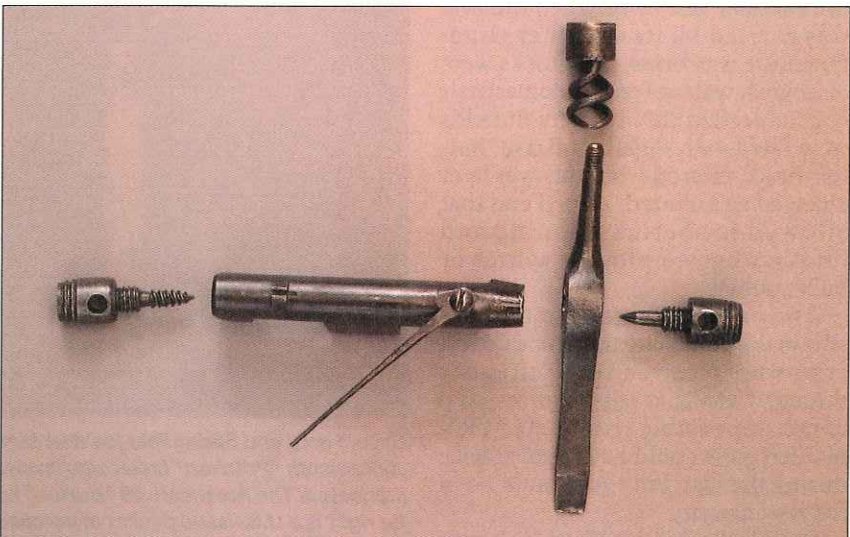
There were four distinctive models of the Pattern 1853 rifle as it was pro-



Early Enfield ramrods had simple "button-head" tips. This was later changed to a knurled, slotted end to allow better grip and more torque when using musket tools.



The Springfield's "tulip-head" ramrod allowed for less bullet deformation and greater ease of loading. The swell behind the head helped keep the rod in position in the stock and provided for a better grip when it was being withdrawn.



The Enfield sergeant's tool was a clever all-in-one arrangement that contained a bullet puller, vent pick, oil bottle, worm, nipple wrench, mainspring clamp and screw-driver. These were not issued to every soldier in the British army.



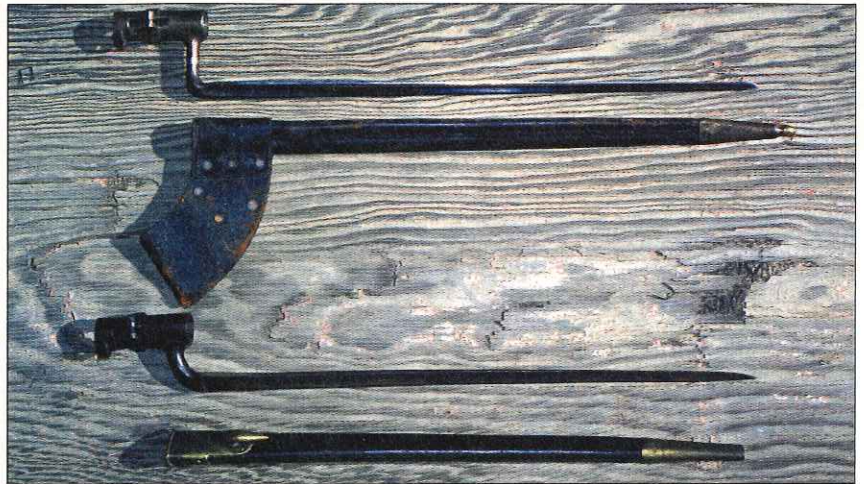
SPRINGFIELD VS. ENFIELD

duced between 1853 and 1866. Of these four models, only the third model was sold and purchased to the Union and Confederate agents for shipment abroad. The third model is distinctive in that the barrel bands are retained by a clamp screw closure. In 1865 a modification, resulting in the P53, 4th Model, incorporated what is known as the "Baddeley" barrel band. Though never seen in service during the Civil War, a number of reproduction rifles, used in Civil War reenactments and NSSA Skirmishing, accidentally copied this design. This style band was similar in that it was a screw clamp design but the screw passed through the ring of the band itself instead of through a clamp that extended from beyond the profile of the oval-shaped band. This design change saved a lot of wear and tear on the soldiers' uniforms when the rifle was carried by its shoulder sling. Furniture was brass, and stocks were of English walnut (on the domestically produced arms). Initially Enfields were fitted with slightly concave "button-head" ramrods, but this was later changed to a slotted, ribbed end that allowed for better gripping and torque when employing worms or bullet pullers.

One caveat: Of course there is always the possibility that some Crown arms were received surreptitiously through Canada or other sources, so it is not impossible that some "VR"-marked guns could have seen service during the war, but they would be in the vast minority.

As with all arms produced for British service since the 1650s, a broad arrow stamp signified acceptance and property of the crown. None of these rifles so marked were ever released from service and sold to either U.S. or CS forces. All arms bought during the American Civil War period (1861-1865) were privately contracted and lack any British martial marks such as the broad arrow. The "VR" mark found on arms produced during the reign of Queen Victoria (1837-1901) is not found on arms produced for commercial sale and is absent on arms procured for the American Civil War.

The locks of most P53 rifles bear an engraved copy of the British crown to the rear of the hammer and a date of manufacture forward of the hammer



Both rifle muskets used triangular bayonets with locking rings. The Yankee scabbard (top) had an integral frog (belt loop), while the Enfield's was separate and looped over a hook on the brass scabbard throat.



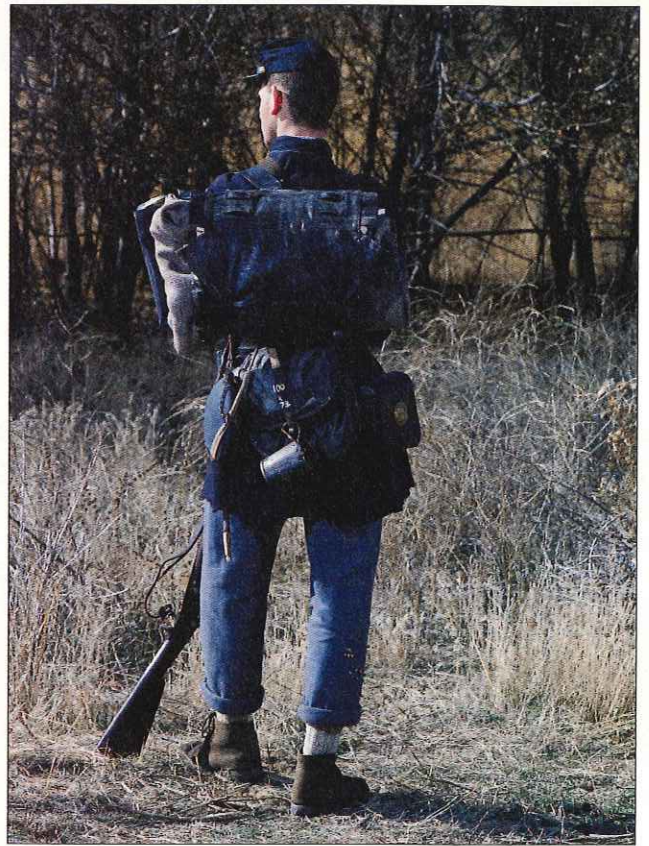
Enfield (left) and Springfield (center) cartridges were quite different. The Enfield's .577 smooth "Pritchett" bullet was inverted in the paper casing, which was externally lubricated. The American .58 "Burton" bullet (right) had integral grease rings. To the far right is a U.S.-issue packet of percussion caps. As the calibers were so close, they could be used interchangeably, though because of the widespread use of Enfields by the South, the Confederacy's official caliber was .577.

and above the manufacturer's name. Manufacturers include London Armory Co., Enfield, Potts & Hunt, Barnett, King & Phillips and Tower.

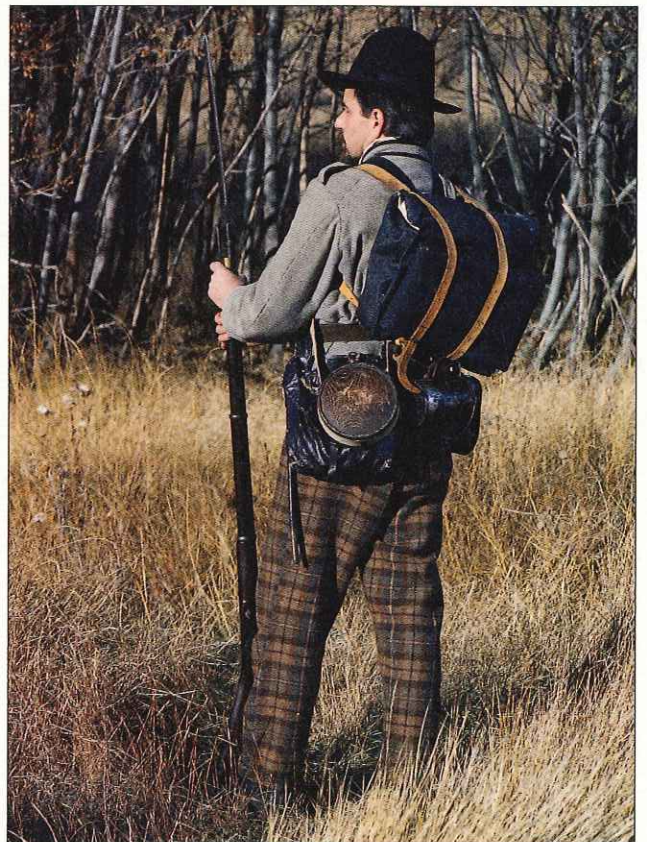
One interesting lock mark to be found on P53s is the "Windsor" name. Known as the formal last name of the current royal family, Windsor is also the name of the royal castle that serves as Queen Elizabeth's retreat from London. So it would be a logical assumption that English Enfields so marked would be considered most English. However, the opposite is true. The Windsor marks are from the Robbins & Lawrence factory in Windsor, Vermont. (The Royals



A selection of battlefield pickup bullets includes (left to right) a Williams clean-out bullet (which was supposed to help clear the bore of powder fouling), two types of Burton-style Miniés and an Enfield Pritchett bullet.



This typical Yankee soldier is well kitted out. Instead of a more common sack coat, he still wears a frock. Trousers are rolled up for comfort and ease of movement. Accoutrements include knapsack, Model 1855 cartridge and cap box, haversack, tin cup and wool-covered "bullseye" tin canteen.



Less elegantly turned out than his Yankee counterpart, this Confederate infantryman exhibits a combination of issue and civilian equipment. His wooden canteen and tarred linen cap and cartridge boxes bespeak of a nation hard-pressed to obtain more conventional accoutrements.

SPRINGFIELD VS. ENFIELD

changed their name to Windsor during the First World War; it formally had been Saxe Coburg von Gotha, the surname of Queen Victoria's consort, Prince Albert.)

Confederates were able to purchase and ship nearly 500,000 Enfield Pattern 1853, 3rd Models, to their

troops while Union troops received nearly 400,000 of the same pattern and model. Additionally, the Confederate States of Louisiana, Georgia, Mississippi, North Carolina and South Carolina, as well as the Union state Massachusetts, entered into separate manufacturing contracts and received

tens of thousands of additional P53 rifles to arm and equip men in their respective State Volunteer units.

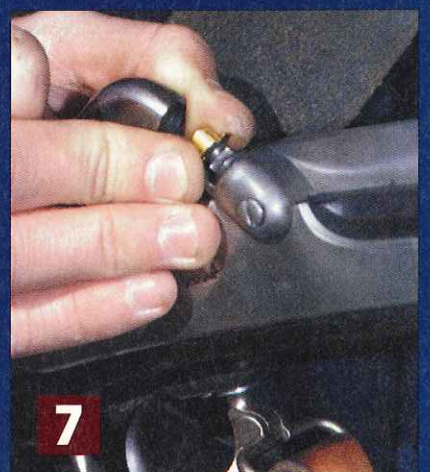
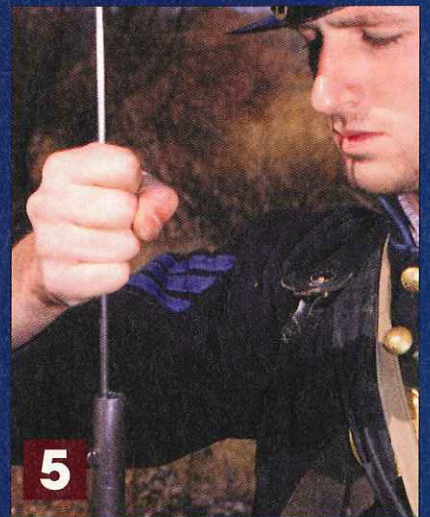
THE BEST?

It is difficult to really say whether one arm was better than the other,

LOADING A SPRINGFIELD



To load a Springfield, one first removed a cartridge from the cartridge box (1). The end of the paper wrapping was bitten off with the teeth (2) and the charge poured down the barrel (3). Next, the bullet was removed from the paper and placed in the muzzle (4) and then seated on top of the charge with the ramrod (5). Finally, a percussion cap was taken from the cap pouch (6) and placed on the nipple (7). After the hammer was put on full cock, the gun was ready to fire.



though a few differences are worth considering. First, there was much greater interchangeability between different Springfields than there was between Enfields. The Enfield certainly had a more sophisticated sighting arrangement than the Springfield, though practically speaking, the guns were rarely fired at distances much greater than 200 yards. Of course brass furniture is less prone to rusting than iron, but then again it was softer and not quite as serviceable. Firing tests of both types of guns show similar accuracy and reliability, so that's pretty much a wash.

When asked, long after the war, why the Confederates had not beaten the Yankees with "cornstalks," Senator Cobb answered, "Why...they refused to fight us with cornstalks." Though the comment was meant as an insult to the Senator, he may have smiled an inner smile as he contemplated the fact that superior southern marksmanship with excellent arms had killed twice the number of Yankees during the war than was suffered by the Confederates at the hand of their aggressors. Both types of arm had their adherents during the Civil War, and still do up to this day. For instance, I personally prefer the Enfield, while MCI Editor Garry James gives the edge to the Springfield. I know this doesn't do much to answer the question, but perhaps there really wasn't one in the first place. MC

LOADING AN ENFIELD

Enfield cartridges were loaded a bit differently than their Yankee counterparts. Remove the cartridge from the cartridge box (1), and bite off the end (2). Pour the charge down the barrel (3). Invert the cartridge and place the bullet, paper and all in the muzzle to the depth of the external grease ring (4). Tear off the remaining paper (5), and ram the bullet home (6). Remove a percussion cap from the box (7). Cap the nipple (8). While some Enfield-style cartridges were imported from abroad, and even made in the Confederacy, most Rebs ended up using Springfield-style cartridges.

