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76

An Introduction To  
Small Arms  
of the  
Civil War



Americana 76 has designed its **CIVIL WAR BULLET IDENTIFICATION GUIDE** to meet the following educational objectives:

1. Trace the development of improved weapons used during the Civil War beginning with the first percussion muskets through the evolution of the deadly rifle musket and carbines.

2. Provide a comparative study guide for several of the more commonly found bullets from the Civil War era. The student can immediately appreciate the logistics and supply problems experienced by both sides due to the diversity of weapons and ammunition used throughout the course of the war.

The horrific carnage inflicted by Americans on Americans during the Civil War can be attributed to two basic causes: use of non-jacketed soft lead bullets and tactics employed by opposing armies.

The one-half ounce round musket ball, used with .54 caliber and one ounce round musket ball used with .69 caliber muskets, gave way to the conical bullet developed by Capt. Minie' of France. This design improved the spin and therefore the accuracy of the projectile to the point where effective volley ranges were increased from 100 to 300 yards and greater.

In addition to greater accuracy, the inertia of these soft lead bullets was such that the impact upon human flesh caused horrible wounds as the soft lead expanded. Contemporary photographs show gruesome piles of arms and legs which had to be amputated due to the destructive force of these bullets. A soldier who was "gut shot" or shot in the head was more often than not left to die by the surgeons who focused their attention on those wounded who were more likely to survive.

The other factor for such high casualties was the tactics employed by the North and South. Military leaders of that era were of the opinion that in order to inflict the greatest destruction upon the enemy, their fire had to be massed. To do so, battlefield formations found forces standing shoulder to shoulder firing as fast as they could reload. Even the worst marksman was bound to hit something at 100 to 300 yards in this situation.

## Burnside Carbine



overall length: 39 1/8" finish: blued  
caliber: .54 (5 groove rifling) fastenings: single iron band  
barrel length: 19 5/8"

The U.S. Ordnance Department continued to seek a carbine which would eliminate the gas leakage problem associated with early model Sharps carbines and others. Ambros Burnside, a Union general who played a vital role in the battles of Fredricksburg and Antietam, was granted a patent in 1856 for a carbine which featured an upward pivoting breechblock and chamber using a triggerguard to swing the chamber open. Gas leakage was eliminated by using a unique conical shaped brass cartridge, the base of which was pierced with a small hole. While a percussion cap was still required to fire the weapon, when fired the flash from the cap ignited the cartridge powder through the vent hole.

Three models of Burnside carbine were introduced between 1861-65 with a total of 51,000 produced.

## Springfield U.S. M1861 Rifle Musket

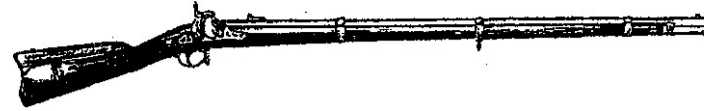


overall length: 56" • finish: bright  
caliber: .58 (3 groove rifling) • fastenings: 3 iron bands  
barrel length: 40"

The Springfield U.S. M1861/M1863 Rifle Musket was the workhorse of the Union Army during the Civil War. With the loss of the Harpers Ferry arsenal to the Virginia militia in 1861, the U.S. War Department scrambled to produce arms for the growing conflict. In 1861 Samuel Colt, acting as a consultant to the U.S., proposed a new model rifle musket to decrease production time and costs. The M1861 Rifle Musket bore a striking similarity to the M1855 Rifle Musket, but among the changes was the elimination of the Maynard tape primer system. M1861 models were made at the Springfield arsenal as well as by private contractors; 1.5 million were made between 1861 and 1862 alone. The model M1863 bore subtle changes to the M1861 model; 528,000 were produced between 1863 and 1864.

The M1861 Rifle Musket had an increased effective volley range to 1000 yards and an accuracy for individual targets to 300 yards. Its rapid rate of fire, 5-6 rounds per minute, made it very popular.

## U.S. M1855 Rifle Musket



overall length: 56" • finish: bright  
caliber: .58 (3 groove rifling) • fastenings: 3 iron bands  
barrel length: 40"

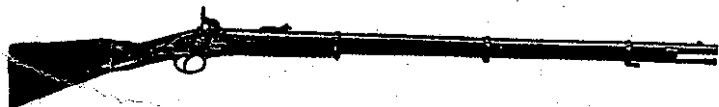
During the period 1852-1853, ordinance experts at the Harpers Ferry arsenal extensively tested the French Minie' bullet design. In 1854, the U.S. adopted it in .58 caliber along with the Maynard primer system which consisted of percussion caps affixed to a strip of paper much like a child's roll of caps used in a cap pistol. This roll of caps fit into a special compartment in the lock and, each time the hammer was cocked, a cap was advanced onto the firing nipple.

The M1855 Rifle Musket was manufactured solely at the two national arsenals: Springfield and Harper's Ferry. About 50,000 were made between 1857-1861.

The volley range of the M1855 Rifle Musket was 500 yards, and accuracy for individual targets 150 yards.

Featured is one version of the Williams Cleaning Bullet (type II). Its design featured a hole in the base of the bullet into which was fitted a lead disc and plug and zinc washer. When the musket was fired, the washer was forced against the base of the bullet which caused the washer to expand and act as a scraper to clean the fouling from the bore. Some cartridge manufacturers included one Williams type bullet in each package of cartridges.

## Enfield Rifle Musket



overall length: 56" • finish: bright  
caliber: .58 (3 groove rifling) • fastenings: 3 iron bands  
barrel length: 40"

Prior to 1863 the primary weapon of the Confederacy was the U.S. Percussion Musket M1842 which was a smooth-bore weapon with a slow rate of fire (2-3 round/minute) and effective accuracy of only 100 yards. This gave the Northern troops a decided advantage.

since the South was having difficulty producing an effective rifle musket, weapons were purchased abroad and brought through the blockade of Southern ports by blockade runners. The British Enfield Rifle Musket became the most popular import, with between 200,000 and 800,000 purchased during the war.

Certain Union regiments also used the Enfield, depending upon the availability of U.S. made percussion rifle muskets.

The Enfield used a rather simplified bullet which depending upon the availability of U.S. made percussion rifle muskets.

The Enfield used a rather simplified bullet which did not feature lubrication rings as other standard Minie; type bullets did. The Enfield had an accurate range of 1100 yards and an accuracy for individual targets of 500 yards which made it superior to the U.S. Springfield Rifle Musket. However, its slow rate of fire was comparable to that of the M1842 Percussion Musket.

## Colt Model 1851 Navy Pistol



length: 13" • ramrod: hinged lever  
barrel length: 7-1/2" • weight 2 lb., 10 oz.  
caliber: .36 • made from 1850 - 1872  
# of shots: 6 • shape of barrel: octagonal

The term Navy Colt (and Army Colt) referred to the style and caliber of the pistol regardless of which branch of the service purchased it. The Navy Colt was lighter than the Dragoon Model and was worn as a belt revolver which could be used with an optional shoulder stock attachment.

The Navy Colt took a charge of 20 grains of black powder per chamber, and the bullet mold supplied with the pistol had two cavities - one for a round ball (81 grains in weight) and one for a conical bullet (140 grains in weight). Tests revealed the bullet could penetrate 6" of pine at 50 yards.

Upon loading, the hammer was drawn to the half-cock position which allowed the cylinder to rotate. Each chamber of the cylinder was charged with powder. The bullet was then placed without wadding over the opening of the chamber and the lever action ramrod was used to seat the bullet. This action hermetically sealed the chamber from moisture. Next, a percussion cap was placed on the nipple of the cylinder. Since loading did require some time, troops often carried several loaded cylinders which they simply snapped into place once all the rounds of the original cylinder had been expended.

The government contract price of the Colt Navy Pistol was \$14.00 in 1863.

Confederate armorers imitated the Colt revolvers since they could not purchase them directly from Colt. For the most part they followed the pattern of the 1851 Navy Pistol, substituting brass for steel where ever possible due to increasing scarcity of raw materials.