"THE LORENZ RIFLE" by Bill Adams

Vast numbers of Austrian small arms were used by both sides during the American Civil War. Although large quantities of Austrian smoothbore muskets, rifled-muskets, and large-bore "Garibaldi" rifles were purchased by the Federals, the most numerous Austrian arms on both sides were the Model 1854 Lorenz rifle-muskets. Over 100 Federal regiments were armed with the Lorenz. The Lorenz was second only to the Enfield in terms of numbers imported, and was particularly numerous in the Confederate Army of Tennessee late in the War.

Collectors sometimes refer to the two basic models of the **M54 rifle-musket** as flank company guns and line company guns, yet the Austrians designated them simply as **Number I** and **Number II**. Both arms have 37 1/2" barrels retained by three bands. The compound upper band also serves as a nose cap and ramrod guide. Both No. I and II arms had cheek rests. The Beech stocks were often stained dark brown, as were the Beech stocks on many Enfields. Both the No. I and the No. II ramrods had a brass band around the tulip head and a short retaining swell similar to that of the '55-'61 Springfield. All Lorenz ramrods have a hole near the base of the head for the insertion of the round arm of the Austrian combination tool to twist the ramrod when using the ball screw.

The No. I was issued to the first and second ranks of line infantry units in the Austrian Army. It has a cheek rest, and a high block rear sight with a fixed point blank setting of 300 schritt (paces), approximately 225 meters. **The No. II** is identical to the No. I except that it has an elevating "flip-up" style rear sight calibrated for 300, 500, 700, and 900 schritt. Although the No. II was allegedly issued to flank companies, in Austrian service, the No. II was issued to non-commissioned officers and the third rank men (skirmishers, often referred to as "sharpshooters") in the infantry. No. II style rifles made for sale to the US government often lack cheek rests.

The Austrians also utilized a short rifle with a heavy, wedge-retained octagonal barrel machined round at the muzzle known as the **Jaeger**, and a short (carbine) version of the M54 known as the **extracorps**. The extracorps had a round barrel approximately 26" long retained by two bands, and was issued to sanitary corps troops, land transport troops, pioneers/sappers, and military police. Sixteen extracorps carbines were issued to each artillery battery for guard duty, and were normally carried in one of the battery wagons when the battery was on the march.

The short rifles were standard issue in Austrian rifle battalions. Known as **Jaegers** (hunters), those well trained light infantrymen were considered to be the elite of the Austrian army. A substantial number of the **Jagerstutzen** short rifles were imported by the Federals, and a far smaller quantity were issued by the Confederates. The Jaeger has a 28" octagonal barrel with a unique rear sight that incorporates a thumbscrew to lock an adjustable curved slide. As first issued in Austria, the Jaeger ramrod was not carried in the gun, but was hung from the soldier's cross belt. Many of the Jaegers purchased by the Americans were early models not set up for carrying ramrods. Several different contractors altered Federal-purchased Jaegers to carry ramrods. Most alterations consisted of drilling a ramrod channel and adding a thimble. The alteration attributed to Tuska is particularly ungainly, and utilizes an added brass band and a brass forward entry guide. There were actually two models of the Jaeger: a standard model issued to riflemen, and a special model with a tige, or pillar breech issued to sharpshooters.

All of the Austrian issued M54 Lorenz series were originally 13.9mm, including a Lorenz single shot pistol that was issued to the Austrian cavalry. The lock plates of Austrian arms were dated with the last three digits of the year of production, 854 signifying 1854, etc. All Lorenz arms were iron mounted as originally issued.

The extracorps and the No. I and No. II arms utilized a socket bayonet with a locking clasp and a typical Austrian quadrangular blade. Some bayonets for the Lorenz rifle muskets were produced under contract in America. Those bayonets resemble the US Model 1855 socket bayonet, yet have wider sight slots to fit the larger Lorenz sight. Some of the US made Lorenz bayonets did not have locking clasps. The sword bayonet for the Jaeger was an adaptation of the sword bladed socket bayonet that had been used on Austrian short rifles for decades. The sockets of the Lorenz bayonets were unique in that they had a single angled slot for sliding over the front sight, rather than having compound right angle slots like most socket bayonets of the era. The front sight base of the Lorenz was angled to match the slot in the bayonet, thus allowing the bayonet to be fixed on the gun in one rapid motion.

The **Model 1862** replaced the earlier arms in Austrian service. The only readily visible difference between the M62 and the M54 is that the M62 lock plate resembles a Pattern 1853 Enfield plate in profile. The bolster rests against the upper edge of the lock; it does not fit down into a cut as on the M54 lock. The M62 had a steel barrel, whereas the M54 barrel was iron. Austrian references mention some use of hollow-based bullets in the M1862 arms, and refer to the M62 as the "perfect muzzleloader." The M62 certainly exemplifies the high state of development and performance attained in the heyday of muzzle loading military rifles. Because they were just being introduced into Austrian service, no actual M62s were released for sale. No true M62 Lorenz arms are known with Civil War provenance; however, arms with M62 configuration lock profiles and Federal provenance are encountered. Examination of those locks generally discloses that the plates are altered and reprofiled locks from the pre-Lorenz era.

The correct bullet for the M54 Lorenz is cylindro-conodial with two very deep grooves in the sides. The bullet collapses upon itself when fired, and the displaced lead presses out into the rifling grooves. Austrian trials proved that the M54 was capable of outstanding accuracy with a service charge of sixty two grains of powder and a lubricated, paper-patched compression bullet of .5401" diameter, weighing 450 grains. The U.S. Army commonly issued Mississippi rifle ammunition for use in the .54 Lorenz, yet that usually impaired the accuracy potential of the arm. The Confederates produced the Wilkinson-style bullet in at least three variants, yet standard .54 ammunition was often substituted for the compression bullets, both through necessity and confusion.

In 1904, former C.S. purchasing agent Caleb Huse (never prone to understating his own importance) wrote that he had purchased "100,000 rifles of the latest Austrian pattern" from the Vienna Arsenal, which U.S. agents had first declined, then later attempted to purchase. Some collectors have interpreted Huse's remarks to imply that the arms purchased by the Confederates were new. Another misconception is that Huse (supposedly) said the Austrians had rearmed with a new weapon that used gun cotton as a propellant, and had therefore put all of their other arms on the market. The rifles that Huse initially bought for the Confederacy were surplus M54 rifle-muskets. The first arms received by the Confederates were primarily Nr. I arms with dates of 1854 through 1859, with some few dated 1860. The Austrians simply sold off their weapons that were a few years old to offset the cost of new production Lorenz weapons of what was to become the 1862 series.

The rifles that Huse purchased were first sent to Bermuda, where they awaited trans-shipment, so it is probable that the Federals were the first to issue the M54. The U.S. received Lorenz's through H. Boker, Dingee, and a number of other arms merchants. Many of those U.S. arms were .58 calibre. By 1863, large numbers of Austrian Lorenz rifles were in use in the Confederate Army, particularly in the Army of Tennessee. The U.S. government canceled its overseas arms contracts in September 1863 when domestic contractors began to make significant deliveries of arms. Southern purchasers were thus able to acquire many foreign arms that were originally ordered for the Union. Many of the scores of Federal regiments armed with the M54 carried new production arms turned out by a number of Austrian arms makers. Federal contract arms, both English and Austrian, often have standard U.S. thread percussion nipples, and may also be found with ramrods threaded for standard U.S. appendages.

Most of the .58 arms found with 4-groove rifling were made in that caliber originally. The few .58 arms that turn up with 3-groove rifling can be considered to be American rebores. US records mention acquiring and issuing .54 caliber Lorenz rifles that were to be rebored when circumstances permitted. Contracts and ordnance returns show no less than six different calibers received into Federal service: .54, .55, .56, .57, .58, & .59. Those caliber designations were haphazard at best, and an occasional listing of ".57 ½ calibre," or ".577" can also be found.

In terms of numbers, the M54 Lorenz was the third most widely distributed long arm in the Union and Confederate Armies. Although accurate, rugged, and reliable, the fit and finish of the M54 did not equal that of American made arms, but approached that of many of the non-interchangeable Enfields. The Lorenz was one of the best of the Continental arms in American service, and was well received by most troops. Many were used by Confederate mounted troops, and examples have been excavated that were shortened for cavalry use. The Confederates repaired and refitted many Lorenz's gleaned from the battlefields, and went so far as to produce a copy of the Lorenz in Tyler, Texas. Although it was rated as a second class arm by his government, many a Federal veteran thought enough of his Austrian rifle to purchase it when he was mustered out. Shortened, smooth bored for shot, or unaltered, these sturdy foreign veterans continued to serve settlers, farmers, and hunters long after the end of America's great conflict.

Federal ordnance officers sometimes complained about the fit of wood to metal on the Lorenz, and criticized the quality of some of the M54 bayonets. The chief complaint about the Austrian arms in Confederate service was due to the fact that the fixed block sight limited the effective range of the arms. Confederate officers in the trenches at Atlanta requested that troops armed with Enfields be sent to support Lorenz-armed troops whose weapons were not effective at long range. Another problem inherent in the Lorenz was related to the narrow cut in the ramrod channel of the unsealed beech stocks: the wood swelled in wet weather, making it almost impossible to draw the ramrods. That problem was experienced by the Austrian-armed VMI Cadets at the Battle of New Market.

Lorenz arms saw service not only in Europe and in the American Civil War: an Austrian contingent that included eighteen companies armed with Jaeger rifles supported Emperor Maximilian in Mexico. The Lorenz proved itself in combat against Danes, French, Prussians, Italians, Mexicans, Federals, Confederates, and a host of lesser known adversaries. While not as universally adopted as its English counterpart, the "Austrian Enfield" proved itself to be one of history's great infantry arms.