THE MINIE BALL

The most lethal weapon in the Civil War was the rifled musket with Minie (pronounced "mini") ball ammunition. Military historians believe that this combination accounted for 90% of the casualties in the Civil War.

The federal arsenal in Springfield, Massachusetts produced a rifled musket with increased range and accuracy. A rifled musket had a barrel with grooves cut into its interior wall that caused the bullet to spin as it left the barrel. A spinning bullet has a more stable trajectory, thus it is more accurate at longer range. A Springfield rifled musket using Minie ball ammunition was accurate up to 250 yards.

The Minie ball was named after its inventor, Claude-Etienne Minie, a French army officer. His bullet was cylindrical in shape with a conical point and a hollow base that contained an iron plug. On the outside of the base two to four grooves were cut into the metal. This ammunition allowed muzzle-loading rifles to be used in battle. Prior to this invention, muskets were too difficult to load and often misfired. The Minie ball could be loaded quickly. A soldier in battle could load and fire three rounds in one minute's time.

In the Civil War, soldiers used paper cartridges. A cartridge consisted of a Minie ball and black powder. A paper cylinder full of powder was placed behind the Minie ball; both were then wrapped in more paper, tied off at the bullet end and folded or twisted closed at the powder end. To load the cartridge, a soldier bit off the folded end of the cartridge, poured the powder into the barrel and squeezed the ball from the paper wrapping. He used the ramrod that came with the rifle to "seat" the Minie ball securely in the barrel. This ramming action also cleaned the barrel of residual powder and helped to prevent misfires. The soldier then placed a percussion cap in the firing mechanism and the weapon was ready to fire.

When soldiers fired their rifles, the exploding percussion cap ignited the black powder in the barrel. The heat and force of the expanding gas caused the lead base of the Minie ball to expand. The expanded base then engaged the rifling in the barrel causing the Minie ball to spin as it passed down the barrel and toward its target.

Both the North and the South used rifled muskets and Minie ball ammunition. Generally, Minie ball ammunition manufactured in the North had three grooves cut into the base; Confederates used Minie balls with two grooves in the base.