**12 Pdr Canister**



**27 Balls 1.49 inch diameter and 2 pounds cannon powder for propellant**

**12 Pdr Napoleon Shell**



**Weights Approximately 8.5 Pounds And Is Loaded With 7 oz ff Black Powder For A Bursting Charge. The Propelling Charge Is 2 Pounds of Cannon Grade Black Powder. This Projectile Was Used Against Any Type of Fortification or in Siege Campaigns.**

**12 Pdr Napoleon Solid Shot**



**This Round Weighs 12 Pounds and is s Solid Ball.  It was very effective as a psychological weapon against massed infantry as it could actually penetrate thru 4 ranks of infantry and cause fear in the last or 4th rank that was actually pushing the 1st rank forward toward the enemy.  It was also used against fortifications to batter down or breach the walls making an opening for the infantry to enter.  The propelling charge was 2.5 pounds of cannon grade black powder.  The average velocity of a 12 pdr projectile was around 1440 fps (386830 ft/lb energy or 193 tons) with a range of 1800 yards.**

**12 Pdr Spherical Case Shot**



**84 round balls .69 Caliber and space for approximately 1 ounce of bursting charge with 2.5 pounds of propelling powder.  The ball was painted red for easy identification in the field.  Some manufacturers would paint the fuse red instead of the entire ball.  The bore and the breech are 4.62" in diameter.  Range was considered to be 1800 yards at 5% of elevation.**

**Mt. Howitzer**

**12 Pdr Mt. Howitzer Canister**

  
**Can contains 142 balls of .69 Cal.   1/2 pound powder for propellant charge.  Range approximately 200 yards.**

**12 Pdr Mt. Howitzer Shell**

  

**This is the same shell fired by the 12 pdr napoleon and the 12 pdr field howitzer. It weighed Approx. 8.5 lbs. and held a 7 oz bursting charge. The fuse was ignited by the 1/2 lb propelling charge which was precut to a specified time of 1/4 second intervals up to 5.5 seconds. The Indians in the western theater referred to the Mt Howitzer "The gun that fired twice" due to the bang of the gun firing and the bang of the shell down range.**

**12 Pdr Mt. Howitzers Spherical Case Shot**



**Contains 84 round ball of .69 Caliber and space for approximately 1 ounce of bursting charge with 1/2 pound of propelling powder. The ball was painted red for easy identification in the field. Some manufacturers would paint the fuse red instead of the entire ball. The wooden sabot is shaped to fit the reduced chamber of the howitzer barrel. The chamber is 3.33" while the bore is 4.62" in diameter. Range was considered to be 800 yards. This short stubby gun fired the same ball as the 12 pdr gun and the 12 pdr field howitzer, but with less propelling powder, lower velocity and higher elevation of arch in flight. The entire gun weight approximately 600 pounds.  It could be maneuvered by one horse or loaded onto 3 mules including ammunition and carried over mountain passes.**

**6 Pdr**

**6 Pdr Canister**

  

**27 ball diameter 1.13 inches.  1 pound
cannon powder for propellant.  This round was used at close range (300 yards) against massed infantry**

**6 Pdr Solid Shot**



**The 6 pounder solid shot was used in the same manner as the 12 pdr solid but with less powder.  By Gettysburg in July 1863, only one 6 pdr was present.  It belonged to a South Carolina unit.  The 6 pdr just proved to be impotent compared to the 12 pdr.  Early in the war, Robert E. Lee suggested that all 6 pdr replaced with the 12 pdr.  If enough metal was not available to cast the 12 pdr, the 6 pdr should be melted down and recast as 12 pdr.  The propelling charge was 1.25 lbs of cannon powder with a muzzle velocity of around 1439 fps (193415 ft/lb energy or 97 tons).**

**Rifle Bolt**



**2.9" or 3' bolt for the 10 pdr rifle**

**The "bolt" was the solid shot for the rifled gun. It was used against any type of fortification or structure. Its use against massed infantry was not as effective as the smoothbore solid shot. The bolt did not bounce along the ground as the round ball smoothbore solid shot would do but had a tendency to bury into the ground. Range on the 10 pdr rifle with one pound of propelling charge was approximately 2200 yds with a muzzle velocity of around 1215 fps (229491 ft/lb energy or 115 tons) with very good accuracy.**

**There were 20+ types of rifle projectiles produced during the Civil War as the rifled cannon was new technology and required experimentation to determine the best configuration of projectile. The 2.9" bore rifled cannon was introduced in 1861 and removed from the field and rebored to 3" following the acceptance of the 3" rifle in 1863. This created a standardization of ammunition to 3" projectiles for all 10 pdr rifles. There are many recorded instances of artillery units going into combat and finding they had 3" guns and 2.9" ammunition which ruined accuracy. Or worse yet a 2.9" gun with 3" ammunition which was unfirable. This standardization helped with the logistics of supplying ammunition for the rifled guns. Issued with the rifle round was a powder bag containing one pound of cannon grade powder. Loading of the rifle was done in a double stroke method consisting of ramming the powder bag into the chamber then repeating the process with the projectile.  More time was consumed to load each round than the smooth bore but the range was in excess of one mile so it was not a matter of concern until the final charge of massed infantry was at hand. Alas the muzzle loading rifle reached its apex of serviceability in a short span of less than 20 years as the breech loading rifles were developed and accepted by the 1880's.**