



Artillery of the Battle of Kennesaw Mountain



Obverse (left) and reverse (right) of the Order of Saint Barbara medal. Saint Barbara is the patron saint of artillerists everywhere.



Artillery was not new technology in warfare at the beginning of the American Civil War. In fact, the Chinese had successfully used gunpowder artillery as early as the twelfth century A.D., over seven hundred years before. While the concept itself was not a new one, cannon and projectile technologies were rapidly advancing throughout the mid-nineteenth century, causing artillery to take on a more vital role in Civil War battles. Artillery also played an important role at the Battle of Kennesaw Mountain, and it is no coincidence that the winning side also possessed the greatest artillery advantage.

Common Civil War Artillery



Rifled Cannon (top)
Smoothbore (below)

While there were a complicated array of cannons and projectiles used throughout the war, they generally fell into three basic categories: guns, howitzers, and mortars. Guns fired in a low to medium trajectory and could cover a large distance, while howitzers had a shorter range and shot in a higher trajectory. Mortars were the smallest and most portable type of artillery, and they were primarily used for lobbing shells at high elevations over enemy fortifications at close range.

Smooth vs. Rifled

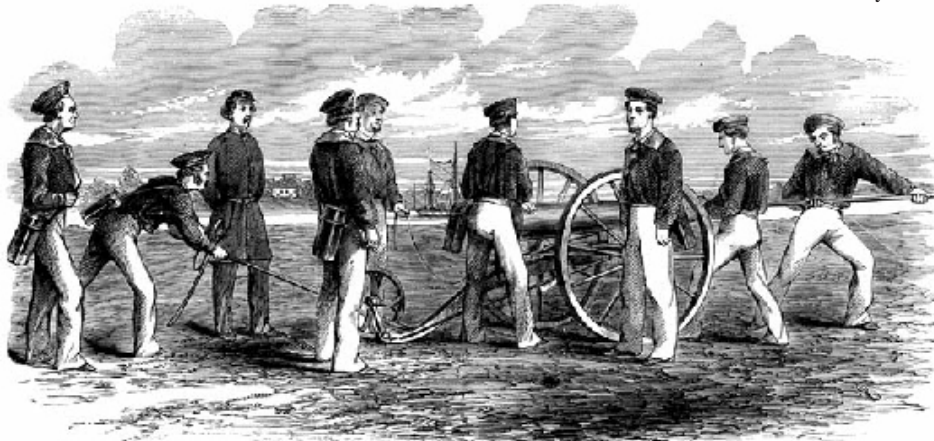
Each artillery piece, or ordnance, had either a rifled or smooth firing bore. Smoothbore guns had smooth barrels and shot plain spherical rounds, commonly known as “cannonballs”. Rifled guns, however, contained spiral grooves on the inside of the barrel to cause the projectile to spin. This allowed rifled guns to shoot with greater distance and accuracy than their smoothbore counterparts. Despite the advantages of rifled ordnances,

however, smoothbores were easier and cheaper to produce, and therefore remained commonly used throughout the war.

Perhaps the most commonly used gun on either side was the model 1857 12-pounder Napoleon cannon. The term “12-pounder” refers to the weight of its ammunition, while the name “Napoleon” is attributed to the gun because of its beginnings under Napoleon III. This weapon was a smoothbore gun-howitzer, and like most cannons used during the war, it could shoot many different kinds of projectiles. Solid shot, or shot, is simply a solid ball of metal, and commonly known as a cannonball. Other more advanced projectiles contained explosive substances along with small pieces of metal to provide the shrapnel effect. These destructive balls of metal could also be detonated in a variety of ways, from timed fuses, to percussion fuses (only on rifled projectiles), which would detonate on impact.

The Men Behind the Gun

More important than the guns, however, were the men who operated them. Artillerymen on both sides were generally well trained and proud of their role as cannoneers. Due to the similar conditions they



experienced and the significant amount of time they spent together, men in the same gun crew developed a special camaraderie. A typical gun crew contained nine men, and each man was assigned a specific task to perform for each round that was shot. According to the artillery manual used during the war, as few as two people could technically operate a cannon, but this would have been highly impractical and inefficient. In fact, most gun crews did not attempt to operate their weapon with less than four men. In ideal conditions, a full and experienced gun crew could fire a smoothbore cannon at approximately three to four rounds per minute.

Artillerists at practice

The Role of Artillery



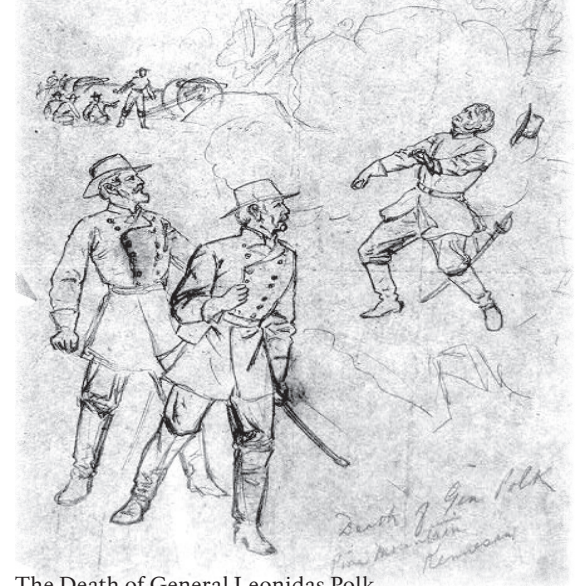
General Johnston (above) and General Hardee (below) were present at Polk's death



In the early months and years of the Civil War, one of the main purposes of artillery in battle was to instill fear and shock into the enemy infantry. By the time of the Atlanta Campaign and the Battle of Kennesaw Mountain in 1864, however, the usefulness of scare tactics was greatly decreased. Both sides had begun to use battle entrenchments to protect against enemy cannons, and these fortifications largely succeeded in reducing artillery damage. This, along with the increased combat experience of soldiers, contributed to the limited effect of artillery later in the war.

Despite the reduced psychological impact of artillery, a cannon still had the ability to produce demoralizing effects upon its enemy – particularly when used against beloved leaders. On June 14, 1864, less than two weeks before the Battle of Kennesaw Mountain, a group of high-ranking Confederate officers, such as General Joseph Johnston, Lieutenant General William J. Hardee, and General Leonidas Polk, decided to climb to the summit of nearby Pine Mountain to observe the enemy's position. A Federal artillery

battery fired without warning and struck Polk in the chest, killing him instantly.



The Death of General Leonidas Polk, Pine Mountain, Georgia

Artillery in the Battle of Kennesaw Mountain

Artillery was also destined to play a major role during the Battle of Kennesaw Mountain. After an extended maneuvering match with Union General William T. Sherman that led both armies throughout much of North Georgia, General Joseph Johnston of the Confederate Army made a final strategic retreat to his defenses on Kennesaw Mountain in mid-June. Because of the steep incline of Kennesaw Mountain, engineers advised against placing artillery on the crest, but Major George Storrs, an artillery battalion commander, believed it could be done. He found a spot on the back of Little Kennesaw, and got permission to cut a roadway through the brush and all the way up the mountainside. The first gun reached the summit after thirty minutes, and it was pulled by one hundred men with ropes. Several more batteries were moved to their positions using the same method.

Meanwhile, General Sherman and his army were at the base of the mountain setting up their own positions and deciding their next move. In the previous weeks, Sherman had been gaining position in Georgia by outmaneuvering Johnston, but in an attempt to be unpredictable and as a result of the failed flanking maneuver at Kolb farm, he decides to call for a full frontal assault on Kennesaw Mountain. The attack is to take place on June 27th, beginning with an artillery barrage at 8:00 A.M. The point of the artillery barrage is to weaken the enemy line before the infantry advance. At this stage of the war, however, many offi-

cers were questioning this tactic, arguing that it only served to eliminate the element of surprise. Regardless, the barrage began as planned at eight precisely, and the battle commences to the deafening sounds of exploding Union shells. The barrage lasted a total of fifteen minutes, and caught much of the Confederate army off guard. Confederate General Benjamin F. Cheatham's men were unprepared for an attack at the start of the barrage. Most men had just woken up and were in the back of their position going through their typical morning routines. Unfortunately for Sherman, however, the barrage fully alerted the Confederates to the impending attack, yet did little actual damage.

The Union advance began shortly after 9 A.M., about an hour after the first cannon shots were fired. The Confederate artillery positions that Major Storrs had discovered and placed proved to play a vital role in the outcome of the battle. Confederate Colonel Melancthon Smith ordered several of his masked batteries to hold fire during the initial Union barrage. When the infantry attack began, the Union soldiers advanced directly into his artillery trap. All ten guns opened fire on the advancing line, and the attack on that position was repelled immediately. This incident occurred at what both sides called the Dead Angle, which is known today as Cheatham Hill. Ultimately, Sherman's attack sputtered to a halt around midday, and the Union army was forced to look for an alternative route to Atlanta.

Bulletin created by Stephen Ward, Kennesaw State University history student, in cooperation with Kennesaw Mountain National Battlefield Park.

Cannons Today at Kennesaw Mountain

12 pound Howitzer

Range: approximately half a mile



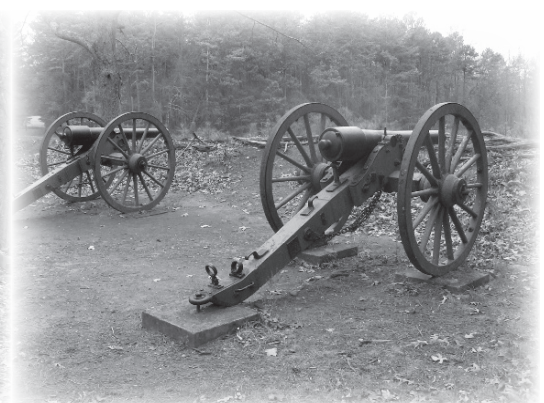
12 pound Light Howitzer (Napoleon)

Range: approximately 1 mile



10 pound Parrott Rifle

Range: approximately 3 miles



Each photo taken at the Cheatham Hill battlefield area