

Civil War Artillery

"The Widow Blakely" 7.5-inch Blakely Rifle

"The Widow Blakely" was located about 1 mile north of its current position during the Siege of Vicksburg, Mississippi. It was misidentified as a 7.44-inch caliber rifle but inside micrometer measurements of the lands, nearly 1.5 inches wide, show diameters between 7.50 and 7.51 inches.

On May 22, 1863, one of "The Widow Blakely's" shells exploded in the tube while it was firing at a Union gunboat. The explosion took part of the end of the muzzle off, leaving the remainder of the tube intact. The ragged ends were cut smooth and the rifle was used as a mortar during the rest of the siege (Pemberton surrendered to Grant on July 4, 1863). It is rifled with 12 lands and grooves in the typical hook-slant Blakely fashion. After the trimming of the muzzle the overall length is about 100 inches. Originally the tube would have been about 124 inches long. It was taken to West Point Military Academy as a war trophy and remained there for ninety-six years until its return to Vicksburg.

Civil War Heavy Artillery

- **Mortars** were short-barreled pieces, mostly smoothbore, which fired a shell with a small powder charge at a steep elevation. Shells were usually grapeshot or hollow shells set off by percussion or timed fuses.
- **Howitzers** fired large projectiles at higher elevations than guns, but lower than mortars.
- **Smoothbores** were standard guns at the start of the war, but they were soon outdated by the invention of rifled guns, which added spin to the projectile, creating a longer range.
- **Columbiads** were large caliber smoothbores which fired a large projectile at high elevation over a great distance.
- **Parrott Rifles**, as the name implies, were rifled guns made of iron with a strap of wrought iron wrapped around the breech. These guns unfortunately had a tendency to burst at the muzzle.
- **Brooke Rifles** were essentially a Confederate version of the Parrott gun. However, the Brooke rifle might have 1, 2 or 3 wrought iron bands around the cast iron breech.
- **Dahlgrens** - Admiral John A. Dahlgren designed many types of naval guns for use in the war. Of the heavy variety were his large caliber smoothbore shell guns, two of which were the only armament of the Monitor.
- **Whitworth Rifles** - Due to the lack of sufficient foundries, the Confederacy had to rely on imported guns, run through the blockade, for many of its heavy varieties of guns. The Whitworth rifle could fire a hexagonal bolt nearly 10,000 yards.
- **Blakely Rifles** - Another import, Blakely rifles came in various calibers with barrels made of cast iron strengthened with steel.

| Gun Model Yr | Metal | Bore | Weight | Projectile | Charge | Elevation | Range |
|-----------------------------|--------|-------|------------|------------|---------|-----------|-----------|
| 8" siege mortar 1841 | Iron | 8" | 930 lbs. | Shell | 1 lb. | 45 deg | 1200 |
| 10" siege mortar 1861 | Iron | 10" | 1000 lbs | Shell | 4lbs | 45 deg | 2100 |
| 13" seacoast mortar 1861 | Iron | 13" | 17120 lbs | Shell | 11 lbs | 45 deg | 4200 |
| 24 pdr. Coehorn mortar n/a | Bronze | 5.82" | 164 lbs | Shell | 0.5 lbs | 45 deg | 1200 |
| 24 pdr. siege howitzer 1844 | Iron | 5.82" | 1476 lbs | Shell | 2 lbs | 5 deg | 1322 |
| 8" siege howitzer 1841 | Iron | 8" | 2614 lbs | Shell | 4 lbs | 12-30 deg | 2280 |
| 8" seacoast howitzer 1841 | Iron | 8" | 5740 lbs | Shell | 8 lbs | 5 deg | 1800 |
| 10" seacoast howitzer 1841 | Iron | 10" | 9500 lbs. | Shell | 12lbs | 5 deg | 1650 |
| 8" columbiad 1861 | Iron | 8" | 9240 lbs. | Shell/Shot | 15 lbs | 27-30' | 4468/4812 |
| 15" columbiad 1861 | Iron | 15" | 50000lbs | Shell | 30 lbs | 40 deg | 5018 |
| 20" columbiad 1864 | Iron | 20" | 115000 lbs | Shot | 200 lbs | 25 deg | 8000 |
| 100 pdr. parrott 1861 | Iron | 6.4" | 9700 lbs | Shell | 10 lbs | 25 deg | 6820 |
| 200 pdr. parrott | Iron | 8" | 16500 lbs | Shell | 16 lbs | 35 deg | 8000 |

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|---|-------|-----|-----------|-------|--------|--------|------|
| 1861 | | | | | | | |
| 300 pdr. parrott 1862 | Iron | 10" | 26500 lbs | Shell | 26 lbs | 13-30' | 9000 |
| 11" smoothbore Dahlgren 1850s | Iron | 11" | 15700 lbs | Shell | 15 lbs | 15 deg | 3400 |
| 70 pdr. Whitworth muzzle loader 1850s | Steel | 5" | 8580 lbs. | Bolt | 13 lbs | 10 deg | 4000 |

- Source: Martin, David G., "Data File 023: Civil War Heavy Artillery", Strategy & Tactics, No. 81, Jul/ Aug. 1980 Osprey New Vanguard 40 : American Civil War Artillery (2) 1861-1865 : Heavy Artillery

Due of the length of the coastline of the United States, American ordnance and engineers placed an emphasis on heavy artillery mounted in coastal defenses from the very beginning. At the start of the war these standardized weapons came in 18, 24, 32 and 42pdr calibers, along with an 8in. and 10in. siege howitzer and mortars ranging from 8in to 24in. In addition army records specify an 8in. and 10in. 'Columbiad' - a large caliber, short shell gun invented by a pre-war chief of ordnance. The Union army organized its 'Heavy Artillery' into separate regiments, uniformed and equipped differently. While the Field Artillery was assigned across the fighting fronts Heavy Artillery units served the big guns in the forts and the defenses of Washington. The Confederates did not differentiate types of artillery and those that became known as Heavy Artillery did so through informal association rather than formal designation. Despite this Confederate heavy artillerymen saw more active service with their large guns than did most Federal units, since much of the war consisted of assaults on heavily defended Confederate posts and forts such as Fort Wagner, Charleston and Petersburg. This book details the development and usage of the big guns. Text by Philip Katcher with illustrations by Tony Bryan.