

# ARTILLERY

## Nomenclature

In order properly to classify muzzle-loading cannons, it is important to know the types of weapons and the correct names for the various parts. Study carefully the following terms and diagrams and carefully access the pieces in your collection.

Early artillery pieces are broken down into three basic types:

1. Guns: The longest type of muzzle-loading artillery, they weigh from 150 to 200 times more than the projectiles they throw. They have smooth bores, fire solid shot, and are classified by the weight of the ball they fire. Example: A six-pounder gun fires a six-pound ball. They were designed to fire on a horizontal plane with flat trajectory.

2. Howitzers: Shorter and lighter than guns, they fire shell, grapeshot, and other anti-personnel projectiles. Their heavy carriages and short barrels allow them to be fired both horizontally as a gun and for high-elevation, short-range lobbing of shells over the walls of fortifications. As they do not fire solid shot, they are designated or classified by the diameter of the bore. Example: Eight-inch howitzer, ten-inch howitzer, etc.

3. Mortars: The shortest of all artillery pieces, they were designed to fire only shells and to fire them at extreme elevations. They are the principal weapon used during a siege for firing shells over the walls of an enemy fort. Like the howitzer, they are designed or classified by the diameter of the bore.

## Carriages and Beds

There are very few field carriages or beds in existence today. They were made mainly of wood and trimmed with iron. Many of the artillery pieces presently owned by the State were stored in the open on their original carriages. These have long since rotted away. For purposes of general information, the above-described pieces had the following types of carriages: Mortars were generally mounted on beds without wheels in the form of a giant block of wood hollowed out to receive the base of the mortar. The elevation is controlled by a wedge, which pivots the piece on its trunnion. Guns and howitzers were mounted on wheeled carriages with the elevation being controlled by a wedge or an elevating screw. The carriages on guns and howitzers also carried the necessary tools for loading, firing, and cleaning the piece.

## NOMENCLATURE OF THE GUN

<b>First Reinforce</b>	<b>Second Reinforce</b>	<b>Chase</b>	<b>Fillets and Astragal</b>
<b>Breech Ring</b>	<b>Dolphin</b>	<b>Chase</b>	<b>Muzzle</b>
<b>Breech Face</b>			<b>Muzzle</b>
<b>Mouldings</b>			
<b>Cascable</b>		<b>Bore</b>	<b>Muzzle Face</b>
<b>Loop for elevating screw</b>	<b>Rimbase</b>	<b>Trunnion</b>	<b>Muzzle Fillets and Astragal</b>

### Fillet Astragal

### Vent Field

### Ring Ogee

#### Accessories

These are rarely found with the piece. A limber is an ammunition box on wheels. A caisson is two ammunition chests and a spare wheel on a wheeled bed, Any wheels not on a vehicle that are stored on the site should be checked as they may be what is left of an original carriage and quite valuable.

#### General Care

The following regulations will govern the treatment of cannons on historic sites:

1. Small cannons will only be displayed indoors and protected from the public. Children love to touch and climb on field pieces, which damages the patina and is dangerous to the child. Also, people tend to stuff things down the muzzle of the cannon--rather than use trash cans.

2. Larger cannons that cannot be placed indoors must be protected with a fitted canvas during bad weather and when the site is closed. This can greatly prolong the life of a piece. They should also have their bores checked on a regular basis to remove trash and other obstructions placed in the muzzle.

3. Medium sized cannons that cannot be displayed indoors and are not properly mounted should be displayed under a shed and raised off the ground on chunks of wood to prevent conditions of dampness that can cause bronze disease or severe rusting of iron.

4. Original carriages must never be exposed to the elements. They must always be protected from handling by the public. If a carriage is a reproduction, it still must be protected from the elements as reproductions are expensive.

5. Cannons must never be placed in direct contact with the ground.