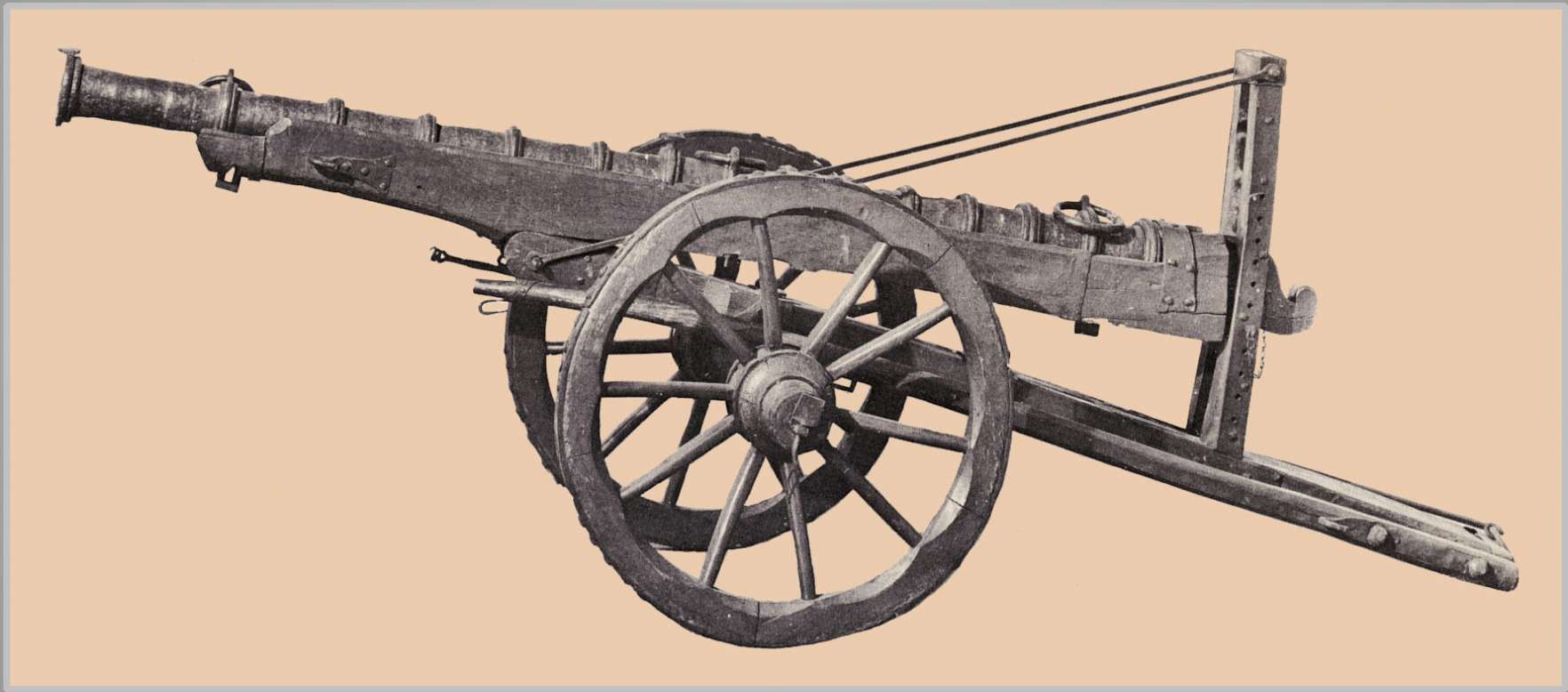
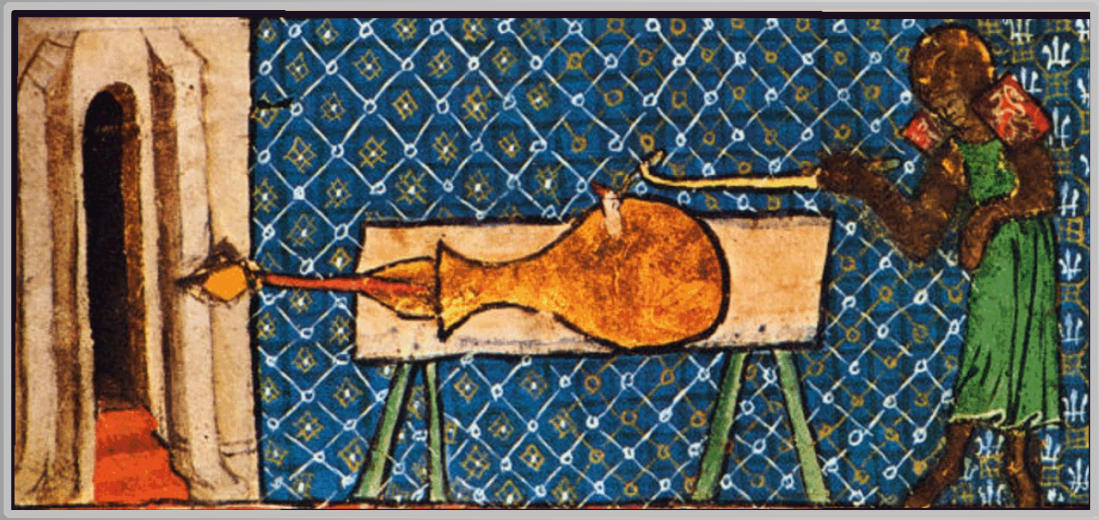
Cannons and Mortars
1300 - 1900



Ca. 1326: Bronze Barrel, Walter de Milemete



Oldest Illustration of o firearm from Chaplin Walter de Milemete under King Edward III of England in the year 1326 in the manuscript, "De Secretis Operibus Artes et Naturae et de Nullitate Magiae".
A vase shaped barrel is lit by a Knight. An arrow leaves the barrel.

Walter de Milemete, De Secrete Operis...., 1326, Christ Church, Oxford

Ca. 1340: Loshult Bronze Barrel

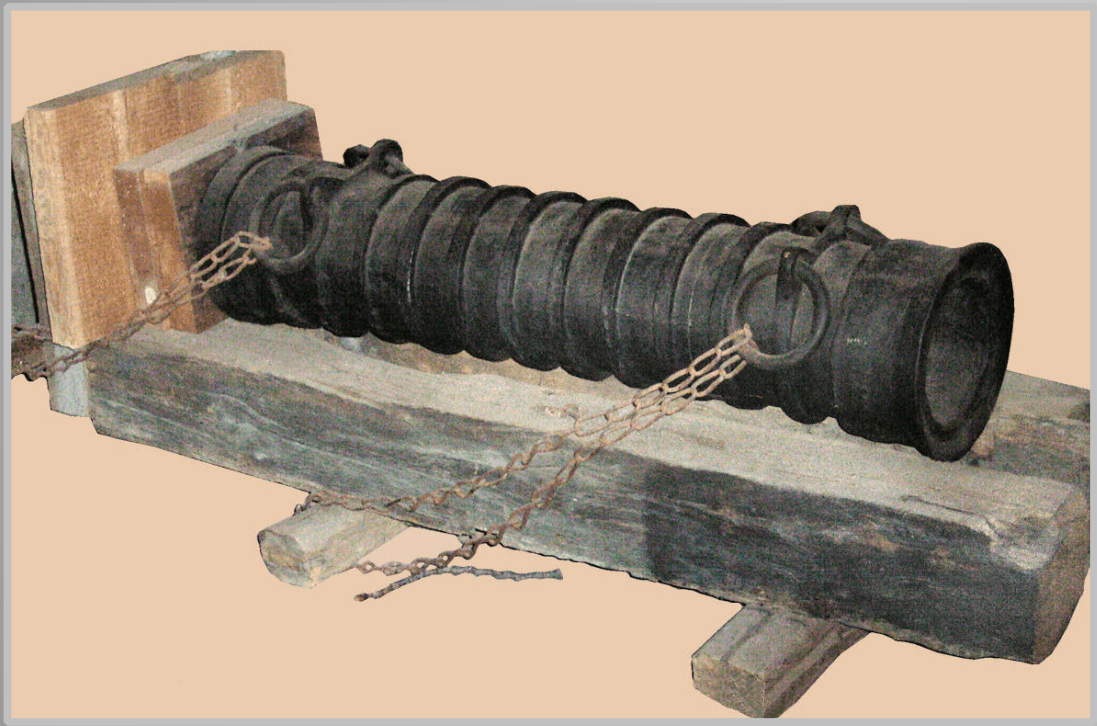
Statens Historical Museum Stockholm

Oldest firearm still in existence, found 1861 in the Swedish town of Loshult.

Its form shows great resemblance to the illustrations of Walter de Milemete.

According to metallurgical tests, the bronze stems from the mining area of the Middle Slovakian Mountains.

Ca. 1370: Iron Barrel on Wooden Mount

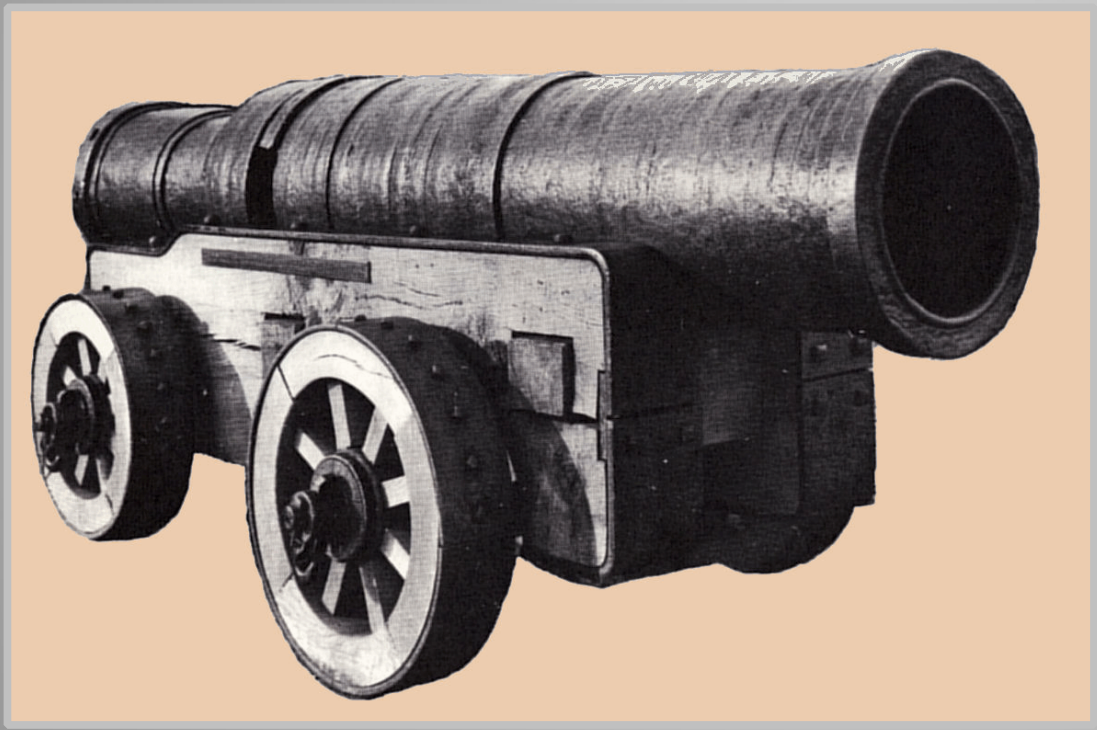


Bastille Jülich, Germany

The forged iron barrel is reinforced by a large number of rings.

Mont and chains have been added later.

Ca. 1380: Mons Meg Bombard



Edinburgh Castle, England

Oldest and largest preserved bombard with a barrel forged from iron rods, reinforced with iron bands and detachable powder chamber.

With it, iron balls of 510 kilograms could be shot 1250 meters.

250 kilogram stone balls could be shot 2500 meters.

Ca. 1390: Bombard with Elevation Adjustment

Bernese Historical Museum, Switzerland

Early adjustable artillery: A barrel forged from rods is reinforced with three rings.

The attachment is made with two open brackets on an offset stock.

An iron rod inserted through the stock serves as a pivot shaft for the elevation adjustment.

The selected elevation can be maintained with a friction lock at the rear end of the stock.

The tunable unit is mounted on a cylindrical stanchion.

Ca. 1439: Stone Mortar «Rumphardt»

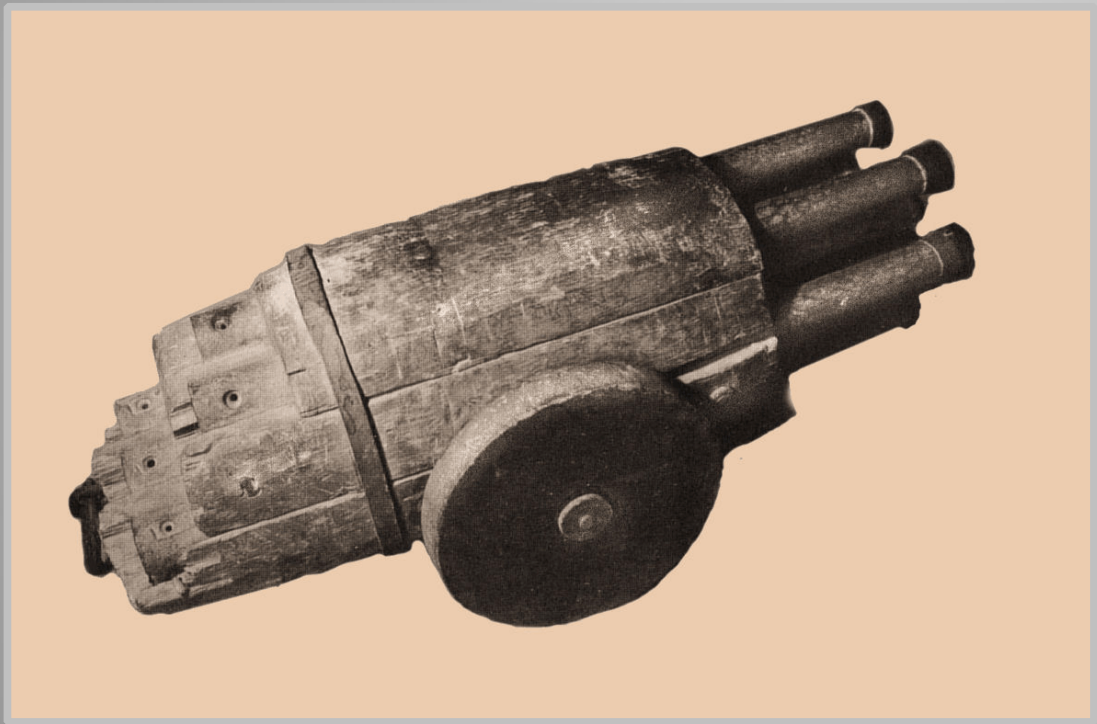
Heeresgeschichtliches Museum, Vienna

The barrel consisted of iron rods reinforce by iron rings.

It has a small powder chamber at the barrel end.

Barrel length: 258 cm
Weight: 8 Tons

Ca. 1460: Five Barreled Organ Artillery
Southern Germany



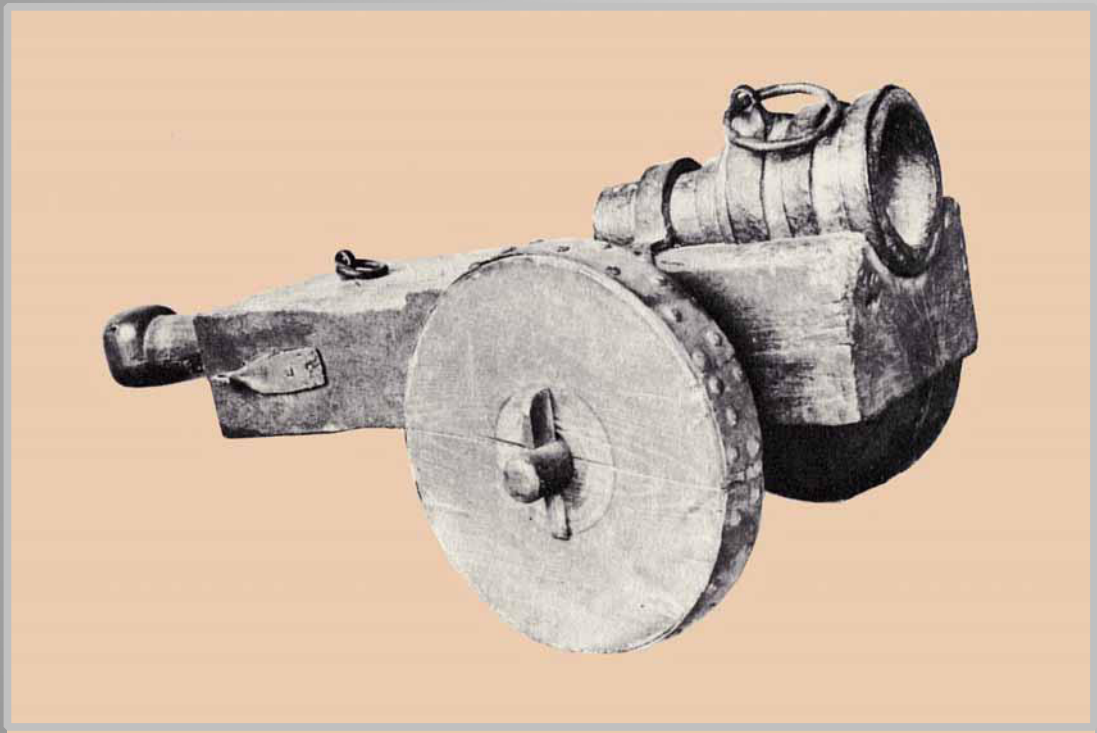
Fürstliches Hohenzollerisches Museum, Sigmaringen, Germany

Five barrels are held in a bundle by specially cut wooden boards.

The barrel bundle is held on a wooden carriage with bands. Each barrel has its own touch hole. These are arranged radially.

By turning the bundle, the next barrel to be fired is brought to the top.

Ca. 1460: Wheeled Mortar



Bernese Historical Museum, Switzerland

The barrel consisted of iron rods reinforce by iron rings.

It has a small powder chamber at the barrel end.

The mount consist of a wooden beam and wooden wheels.

Ca. 1464: Dardanelles Artillery of Mohammed II

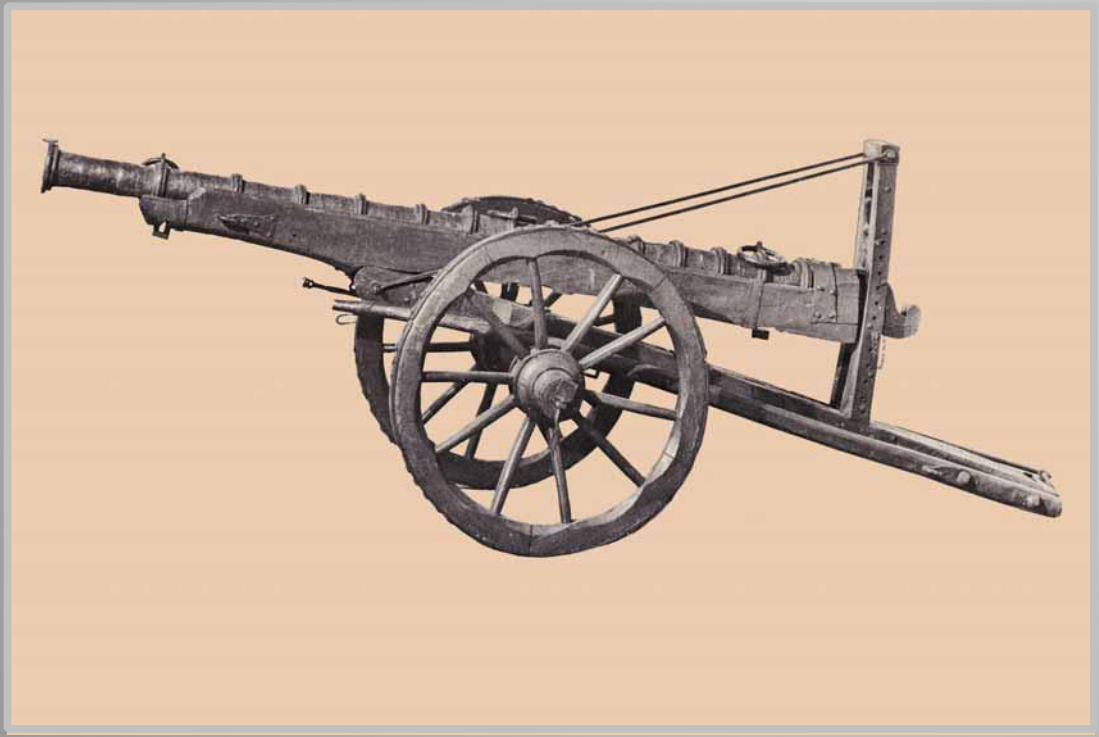
Tower London, England

The largest known cannon barrel still in existence. It has a bronze pipe of 5.4 m in length, a caliber of 64 cm and a weight of 18 3/4 tons.

Mohammed II, the Turk, at the siege of Constantinople, cast the bronze barrel in front of the city walls.

The threaded powder chamber with a diameter of ca. 50 cm is visible.

Ca. 1470: Light Cannon, Charles the Bold



Museum La Neuville, Switzerland

This light cannon is known as "Feldschlange"

It has an iron forged barrel with a caliber of 6.5 cm and length of 292.5 cm

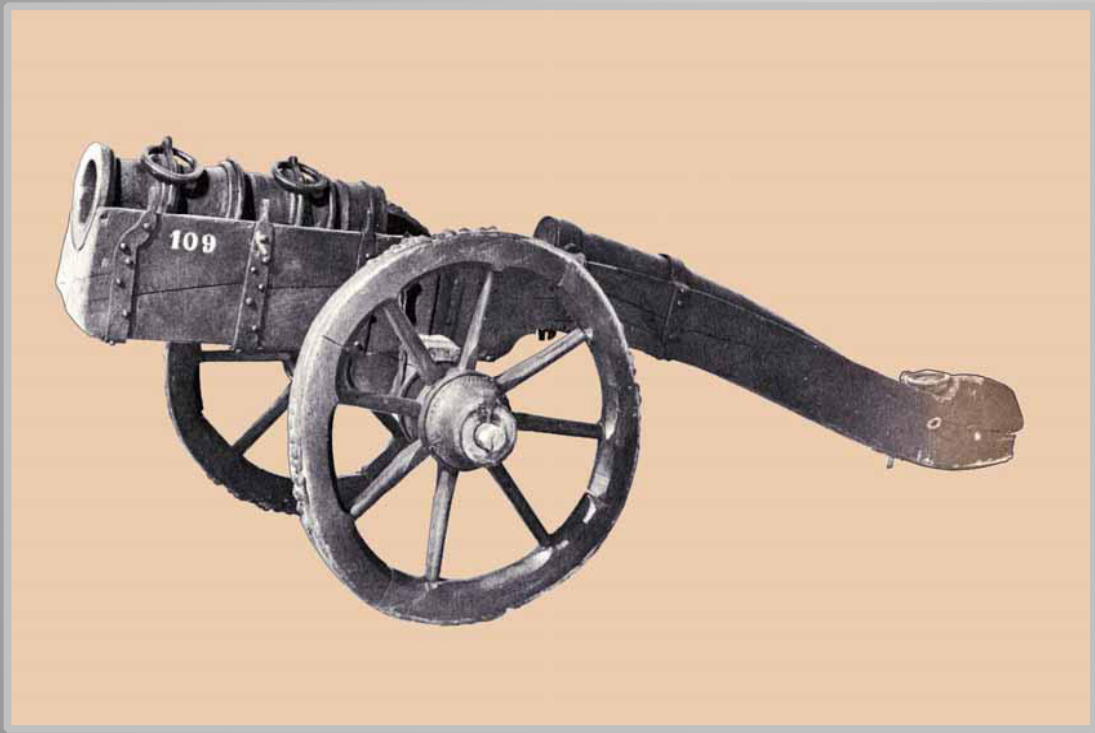
Ca. 1470: Mobile Muzzle Loading Artillery

Bernese Historical Museum, Switzerland

The forged iron barrel, reinforced with iron rings is held to a mobile wooden carriage with iron bands.

The elevation is not adjustable.

Ca. 1475: Feldschlange, Charles the Bold

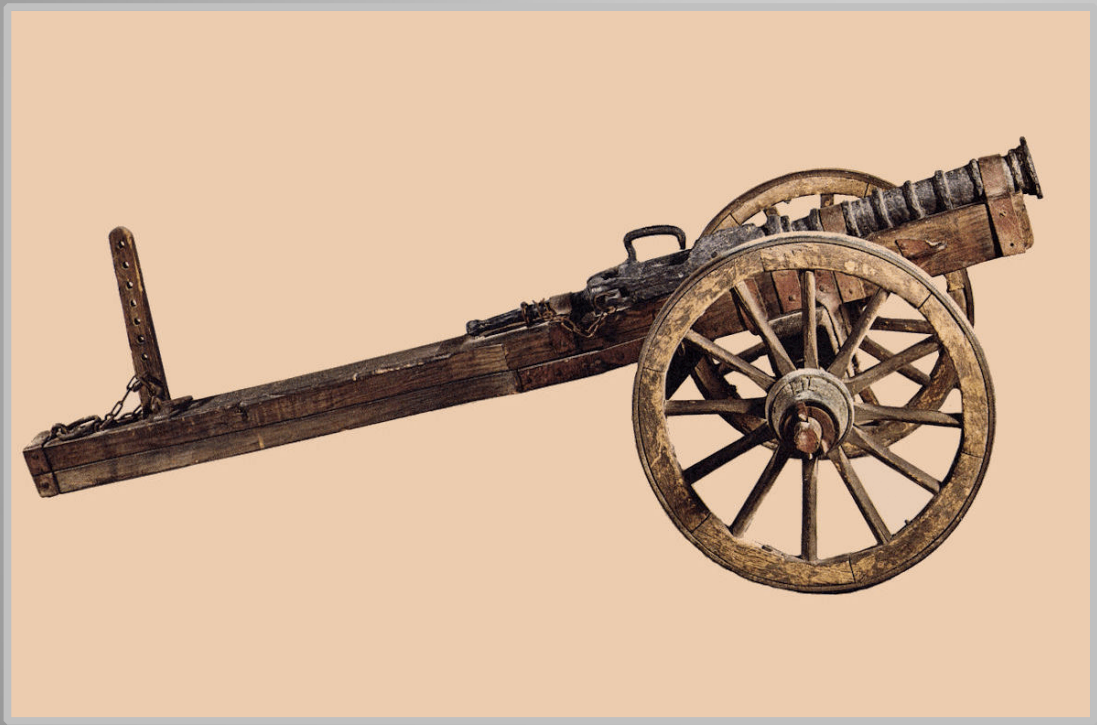


Museum Murten, Switzerland

The Swiss Confederates occupied the cannon during the battle at Murten in 1476.

The iron forged barrel is attached to a mount with spoked wooden wheels.

Ca. 1475: Breech Loading Artillery, Bern



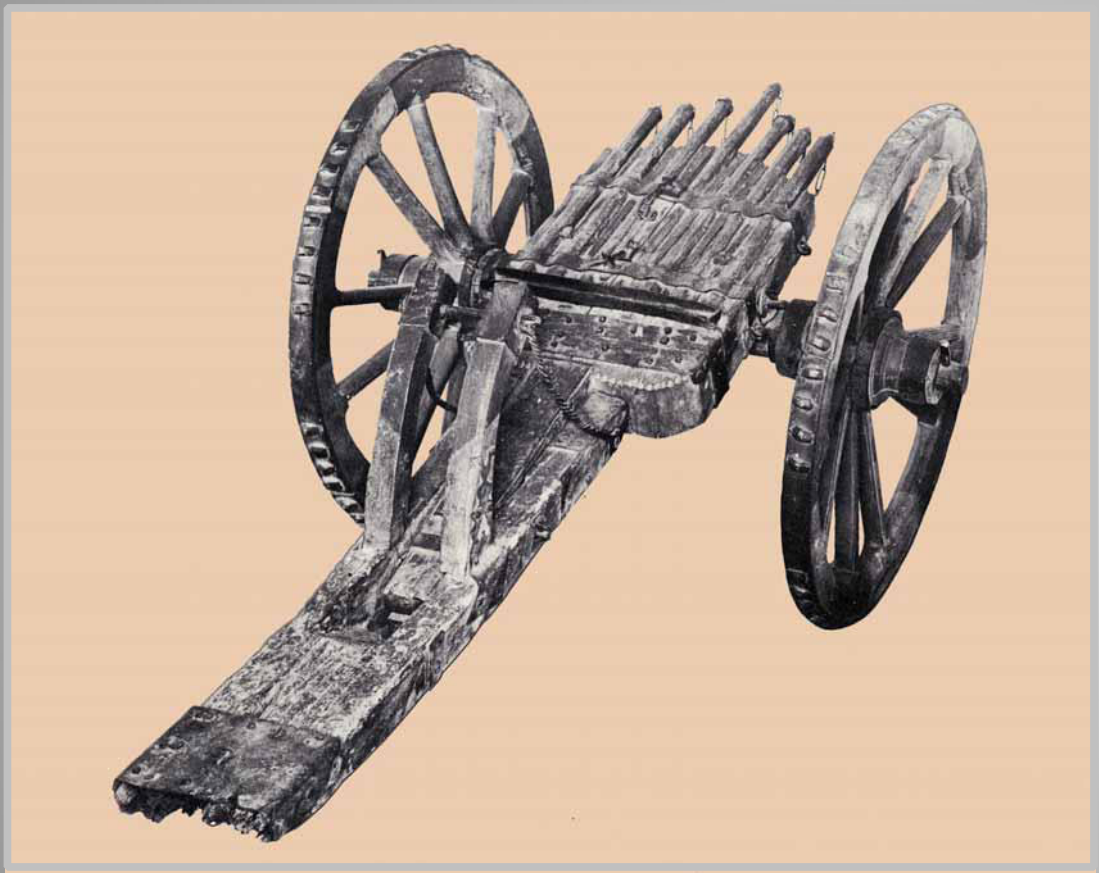
Bernese Historical Museum, Switzerland

Forged barrel with an upward pointing opening at the rear to insert an iron breechblock.

The mobile wooden carriage is a later reconstruction.

The elevation is adjusted with a vertical wooden support strut.

Ca. 1500: Seven Barrel Organ Gun



Heeresgeschichtliches Museum, Vienna

All iron barrels have a caliber of 30mm.

Their touch holes are connected with a long channel

Ca. 1535: Wall Gun, Falconette

Private Collection

The tripod is made from wood. The missing wheels suggest the weapon was used to defend a fortification.

Ca 1609: Wall Gun, Falconet

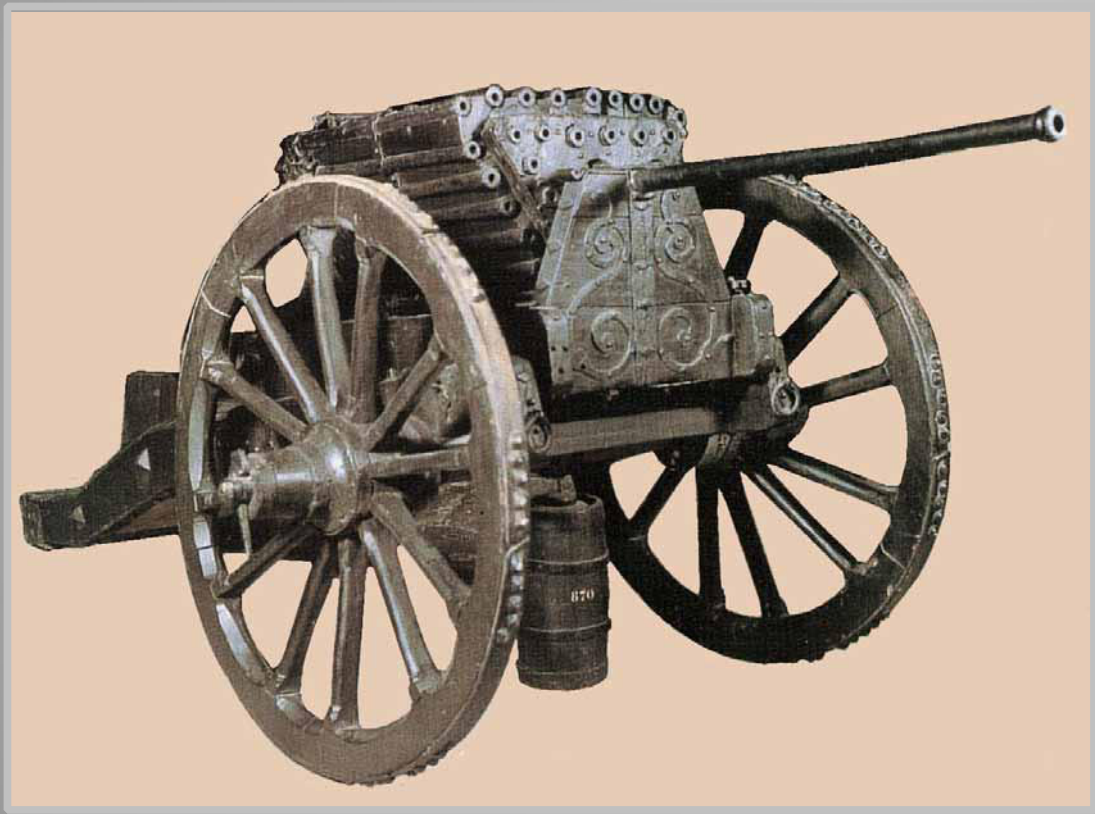
Old Armory Museum, Solothurn, Switzerland

The original muzzle loading barrel on the tripod carriage was later converted to a breech loading System.

The elevation can be changed with a threaded rod below the barrel.

The tripod carriage is made from wood.

Ca. 1650: Organ Cannon



Old Armory Museum, Solothurn, Switzerland

Thee groups of 13 barrels surround a central cannon barrel.

They are arranged in a triangular block and have three powder pan ignitions.

Number of organ barrels: 3x13
Organ Barrel Caliber: 17 mm
Main Barrel Caliber: 29 mm

Ca. 1640: Cannon with Leather Barrel

Heeresgeschichtliches Museum, Vienna

To get more flexibility it was preamble to have cannons with little weight.

Trials were made to use thick walled, copper barrel wrapped with hemp rope and leather.

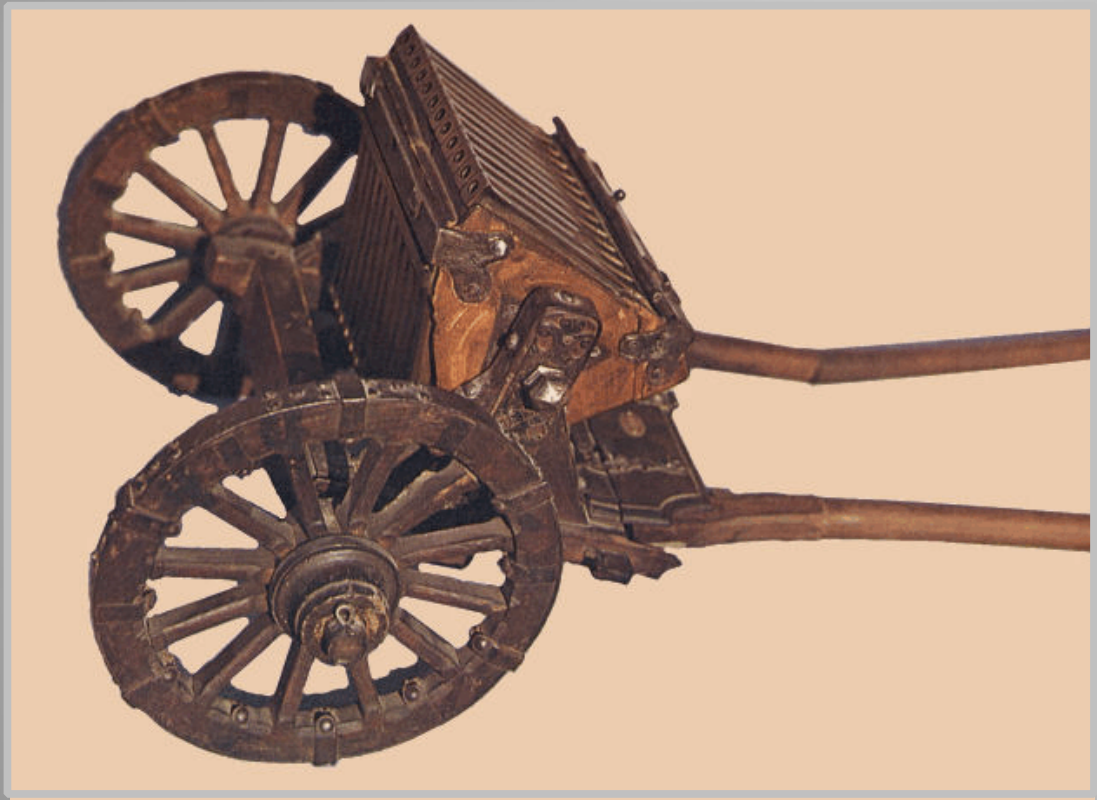
This type of barrels however were never successful.

Ca. 1650: Light Cannon on Iron Mount

Bastille Jülich, Germany

Barrel cast in iron is mounted on top of wheeled gun carriage.

Ca. 1670: 36 Barrel Organ Cannon



Fürstliche Waffensammlung Lichtenstein

On a triangular wooden frame there are 12 barrels attached per side.

The barrels to be fired have to be turned to the top.

An ignition groove connects the touch holes of one line of barrels.

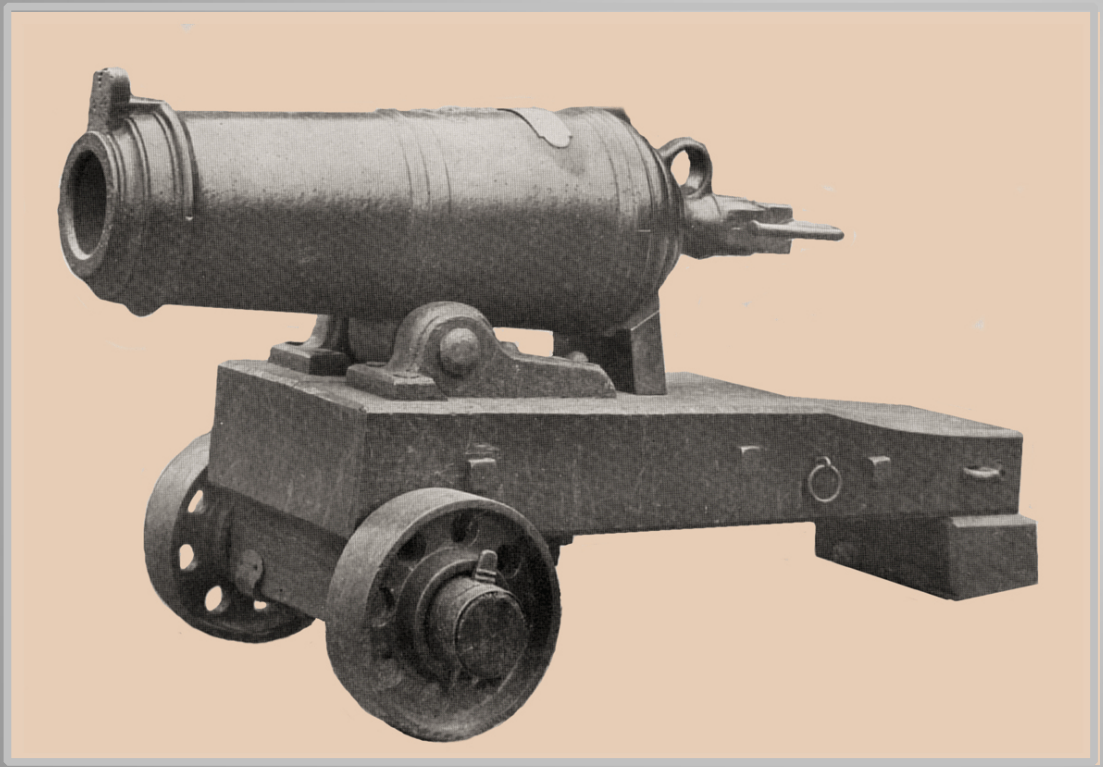
Ca. 1735: Mobile Mortar

Old Armory Museum, Solothurn, Switzerland

The mobile mortar has a bronze barrel and is attached to a two wheeled carriage.

The elevation is adjusted with a screw thread under the front of the barrel.

Ca. 1779: Cannon for Vessels

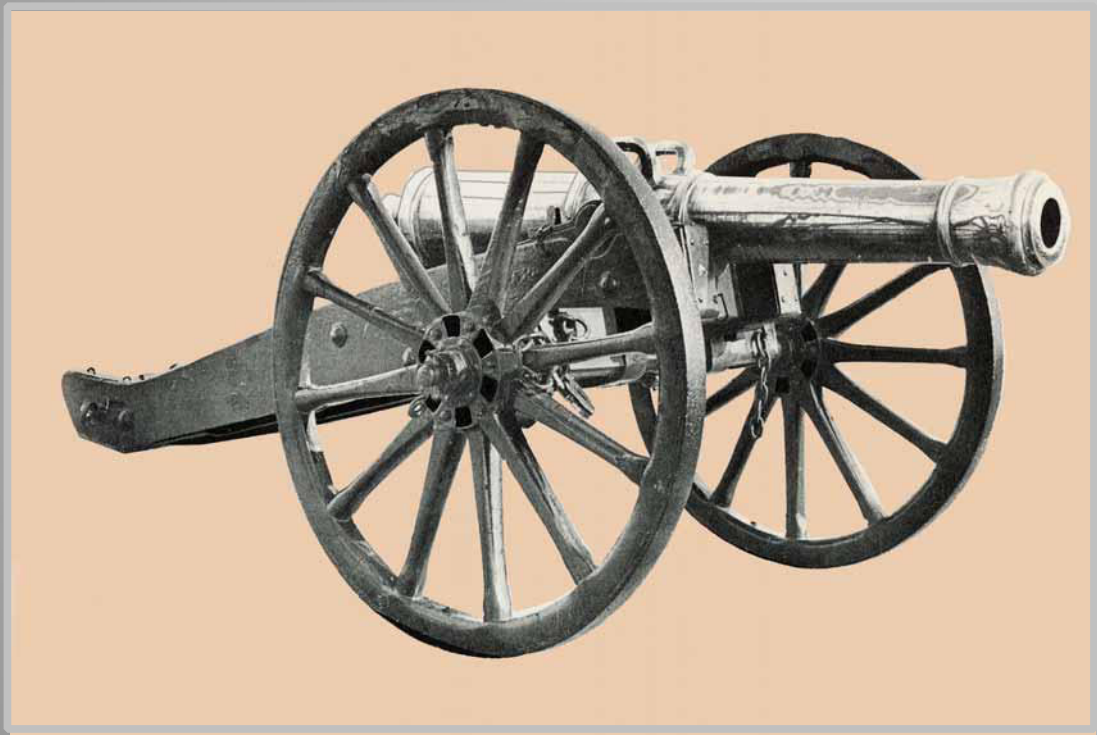


Tower London, England

On a wooden carriage with iron wheels a cast iron barrel is attached.

This cannon has been used on a vessel.

Ca. 1800: Cannon «Brezin», France

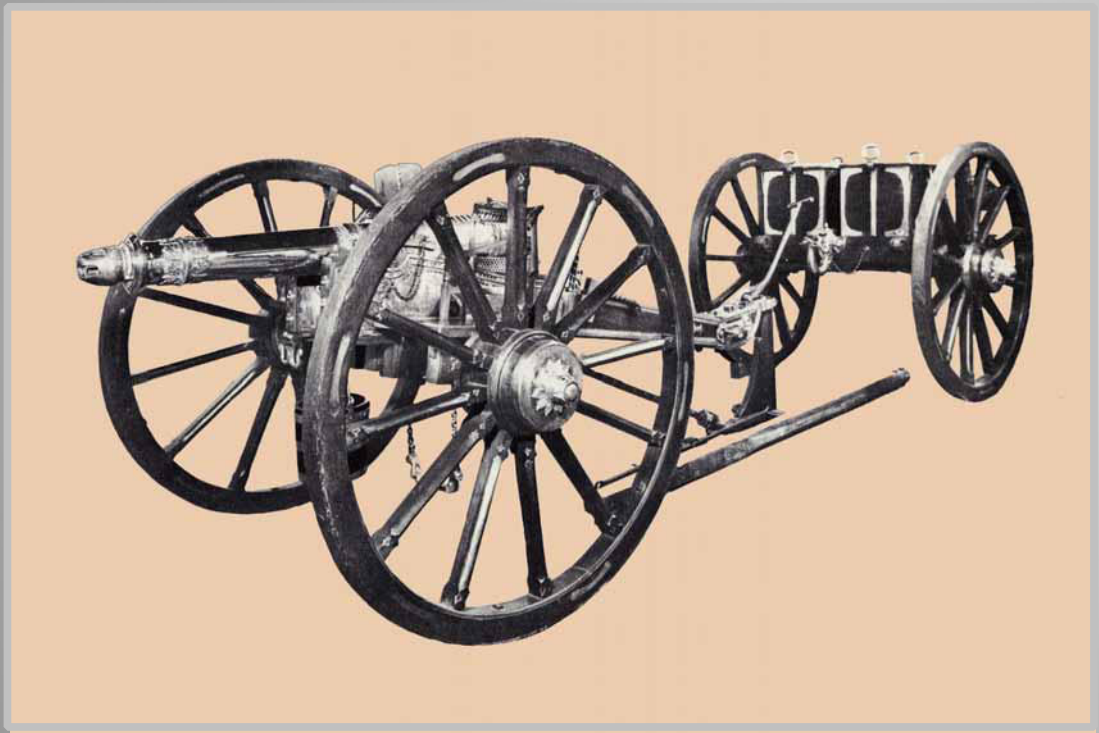


National Army Museum Camberly, England

This 18-pound cannon has been captured by the English from the French in the battle of Waterloo.

It has a cast bronze barrel made by the Paris Arsenal.

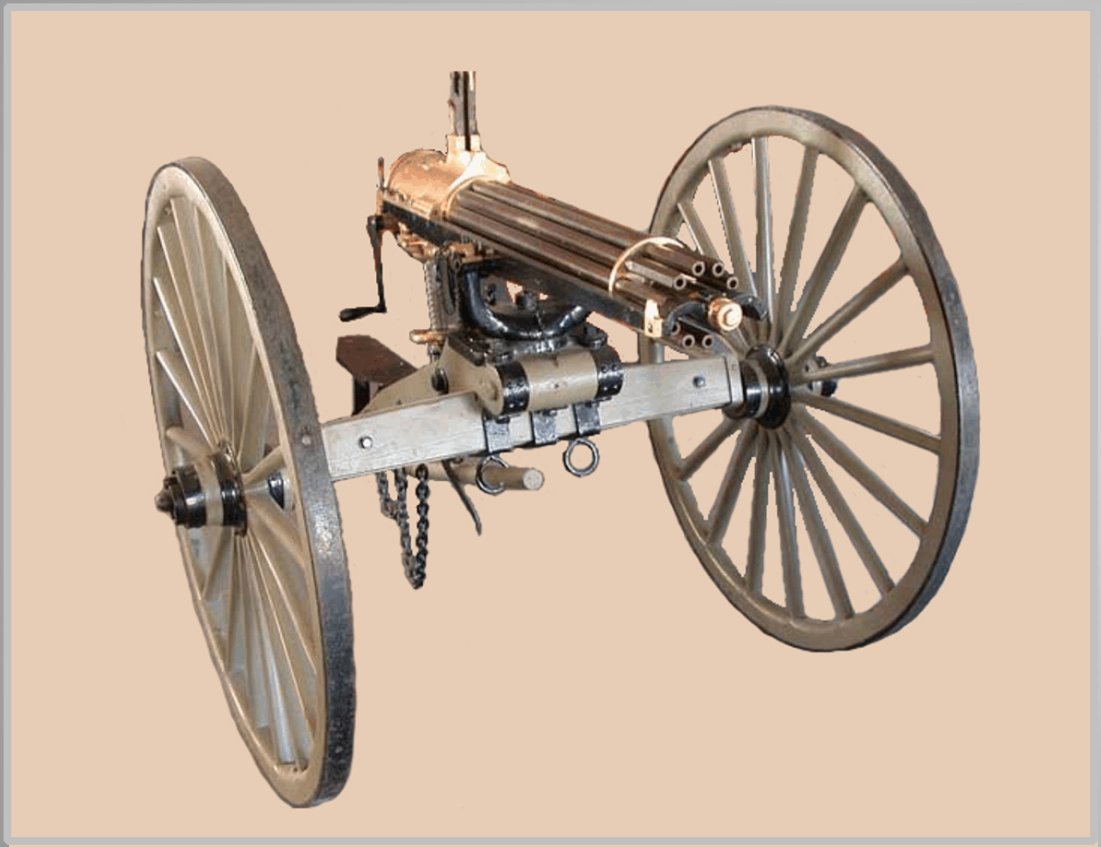
Ca. 1845: 6-Pound Field piece



National Army Museum Camberly, England

Black powder an lead ball are loaded an the trailer of this field piece

Ca 1865: Gattling Machine Cannon

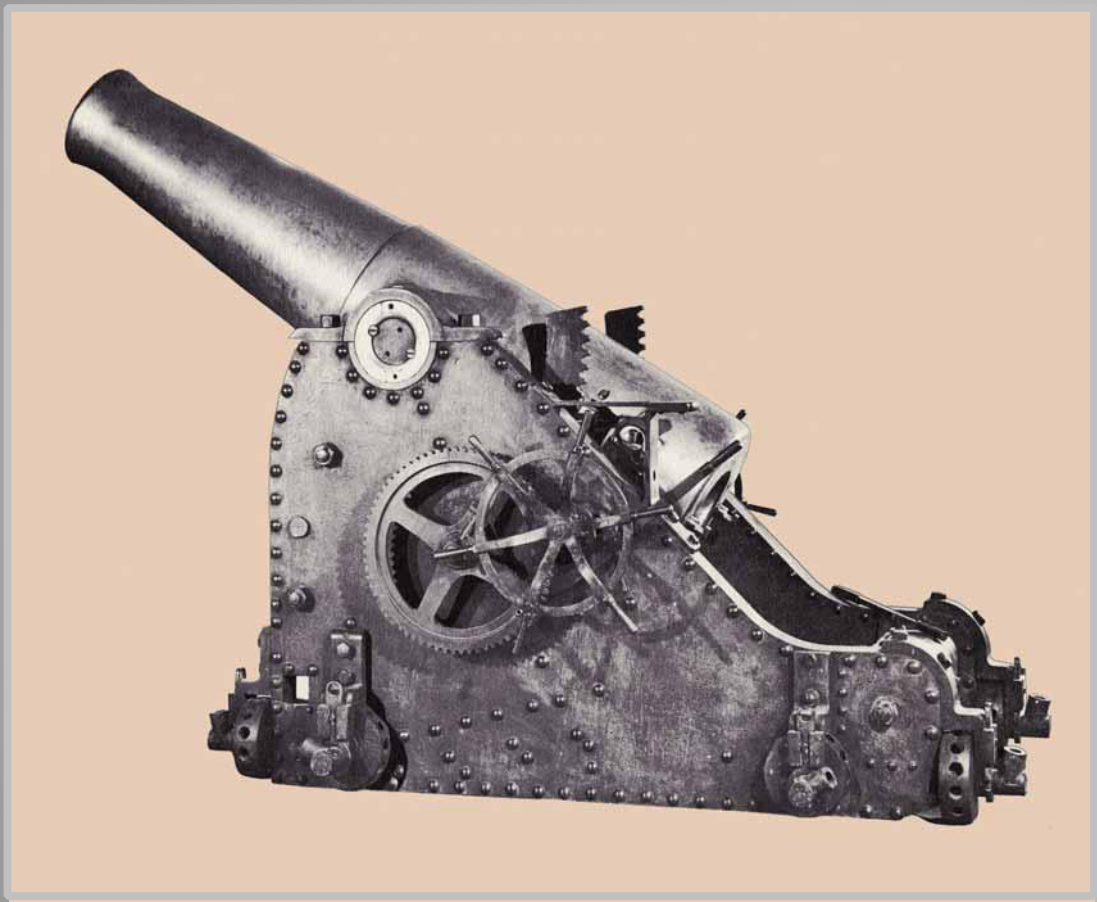


National Park Service at Fort Laramie, Wyoming

The machine cannon developed by Richard Gattling has 6 rotating Barrels. With rotation of the barrels an overheating by the high shooting cadence could be omitted.

First time they were used in the American civil war.

Ca. 1880: Mortar of the Austrian Coast Artillery



Heeresgeschichtliches Museum ,Vienna

For the arched shelling of hostile vessels this mortar used grenade with a caliber of 21 cm

In most cases these mortars were mounted on turntables

End