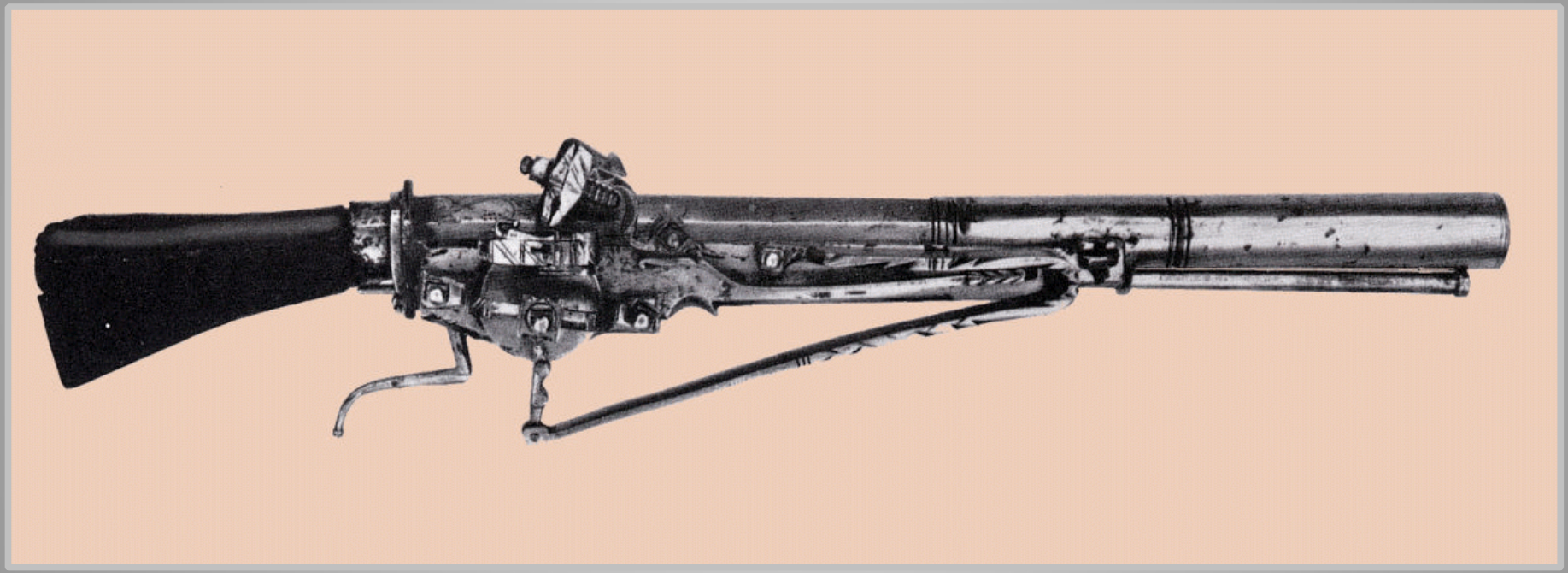
Muskets, Long arms and Rifles

1450 - 1900



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Ca. 1450: Early Match Lock Gun



Early version of a matchlock gun with rotating Serpentine attached to the side of the stock. The upper end clamps the slow match, the lower serves as the trigger. The counter weight on the lower lever returns the hammer to the vertical position.

Total length:	927 mm
Barrel length:	562 mm
Caliber:	18.2 mm

Private Collection

1514: Target Gun with Snap Tinder Lock

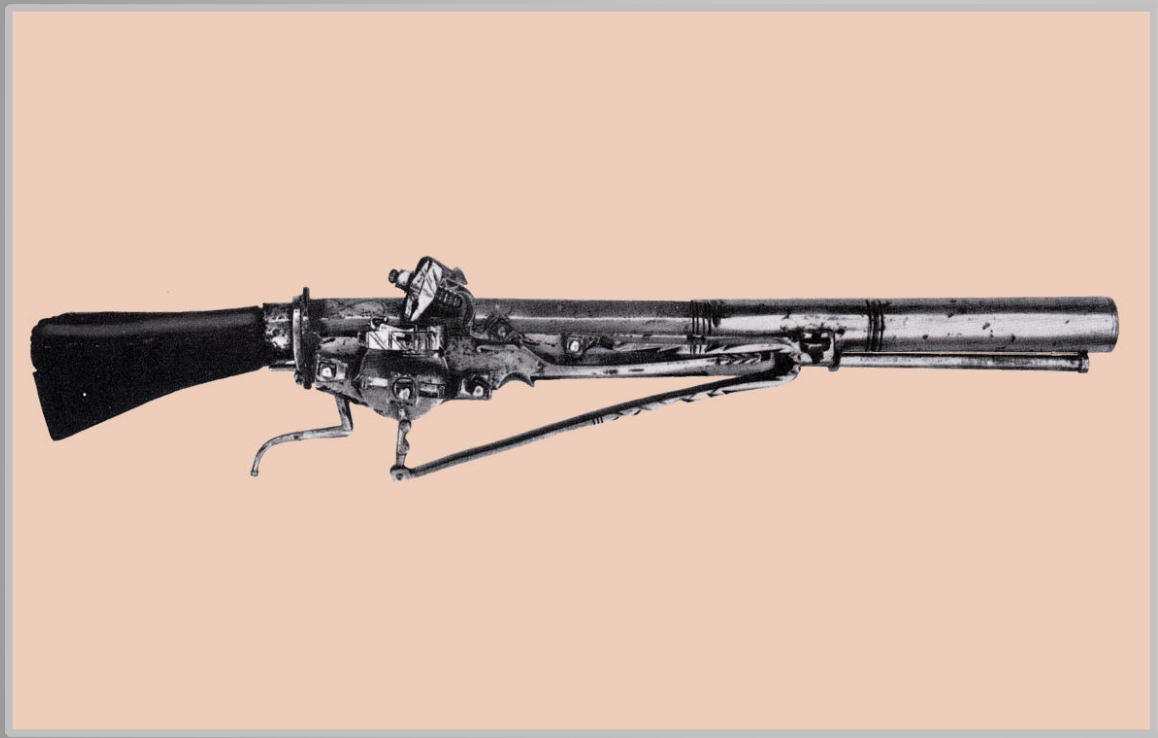


Private Collection

The tinder lock would suggest that this weapon is a target gun. The shape of the stock is typical of the area of Basel. Reconstruction of the stock is based on an original owned by the historical museum in Basel, Switzerland.

Total length: 980 mm
Barrel length: 505 mm
Caliber: 18 mm

Ca. 1525: Early Wheel Lock Gun



External wheel lock with V-shaped main spring

Trumpet-shaped muzzle

German National Museum, Nürnberg

Ca. 1530: Three Barrel Match Lock Gun



Private Collection

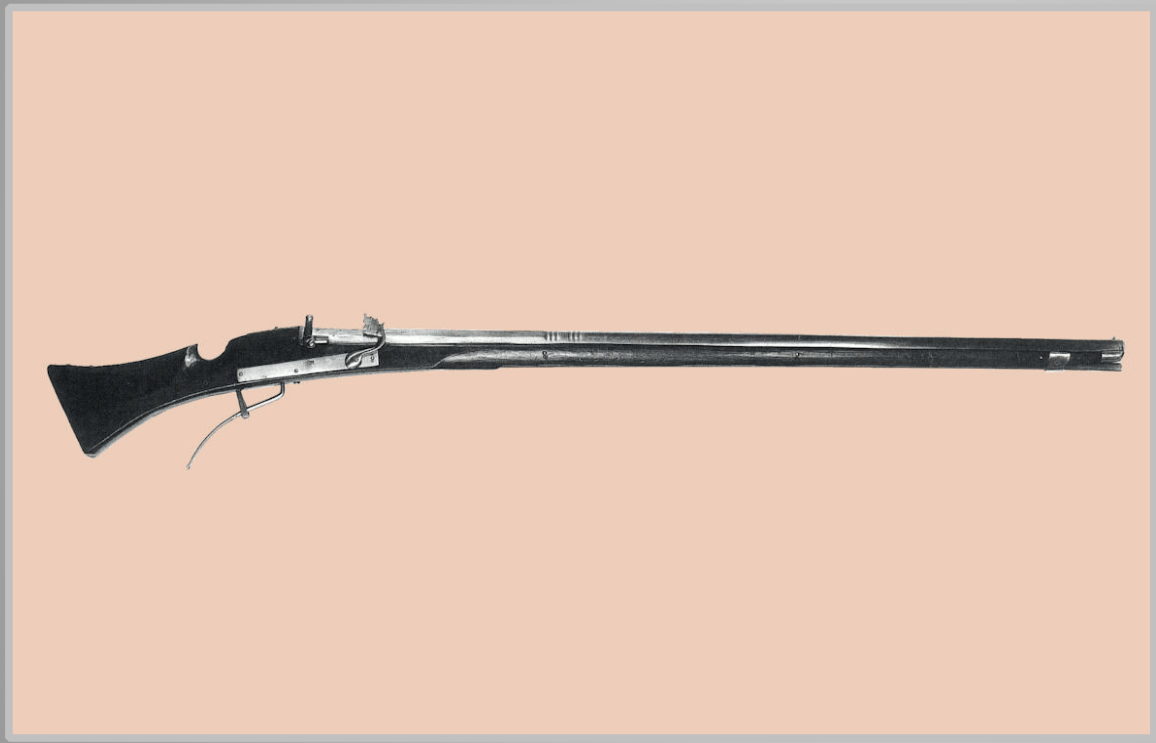
Top barrel with touch hole and flash pan

Lower two barrels are connected together with touch hole

One snaphance match lock on each side of firearm

Four short barrels looking back-wards in the butt with separate touch holes.

Ca. 1540: Match Lock Musket with Trigger Bar



Match lock with a trigger bar similar to crossbow

Total length:	1563 mm
Barrel length:	1189 mm
Caliber:	21 mm

Heerestechnisches Museum Vienna

Ca. 1570: Wheel Lock Musket, Hallau, Switzerland



Target rifle with internal wheel lock

Set trigger for precise firing

City Museum Hallau

Ca. 1570: Snaphance Musket



Early Spanish snaphance lock

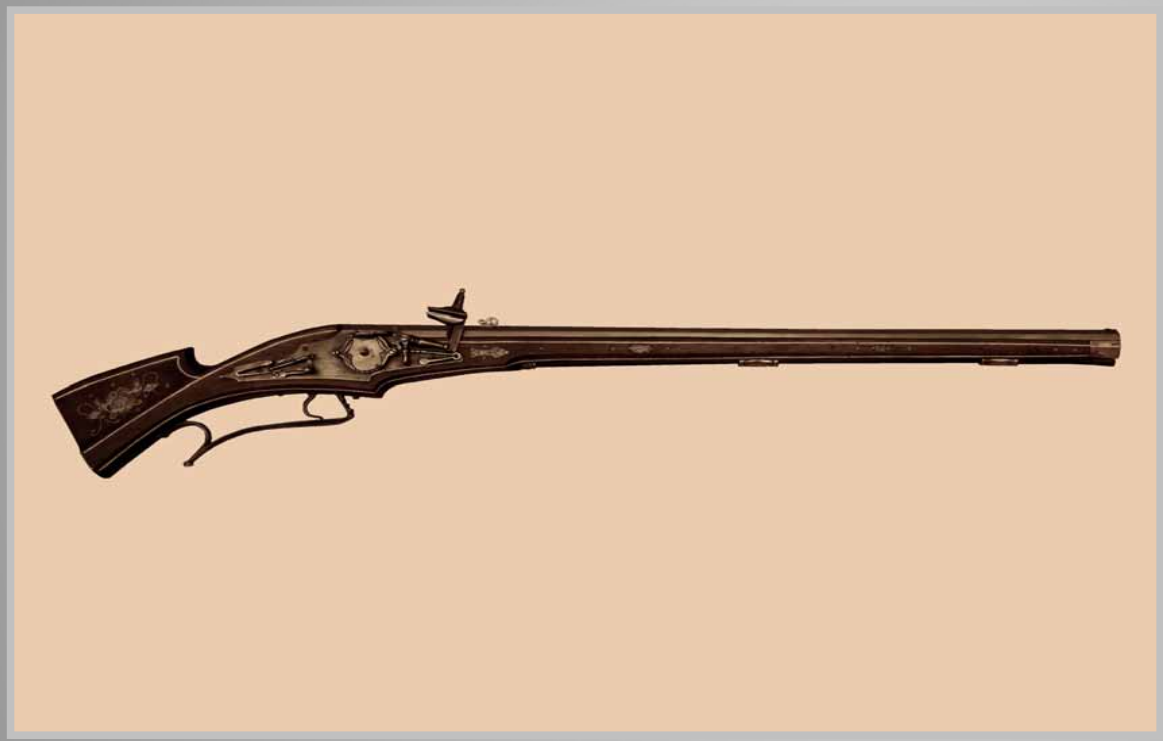
Steel is in the safety position

Set trigger

Total length:	1520 mm
Barrel length:	1170 mm
Caliber:	18 mm

Private Collection

Ca. 1580: Wheel Lock Rifle, Salzburg



Rifle supposedly owned by the Bishop Wolf Dietrich von Raitenau, Salzburg

Barrel of the gun maker Georg Zellner, Zell

Stock with staghorn inlay

Total length:	1580 mm
Barrel length:	880 mm
Caliber:	18 mm

Bavarian National Museum, Munich

Ca. 1590: Military Wheel Lock Musket



But similar to Dutch butt

Total length:	1605 mm
Barrel length:	1208 mm
Caliber:	18 mm

Private Collection

Ca. 1600: Wheel Lock Target Gun, Hallau



The butt has a larger thumb notch for better handling

City Museum Hallau, Switzerland

Ca. 1620: Wheel Lock Carbine, Franc



Wheel lock with engravings

Fishtail butt

Total length:	1055 mm
Barrel length:	705 mm
Caliber:	18 mm

Private Collection

Um 1630: Baroque-Hunting Rifle with Snaphance Lock



Rifled octagonal Barrel

Nürnberg snaphance lock

Total length:	1360 mm
Barrel length:	926 mm
Caliber:	25 mm

Private Collection

Ca. 1720: Rifle with Roman Snaphance Lock



Private Collection

Southern Italy

Main spring outside of lock, pressing on cam in front of the cock

Total length:	1280 mm
Barrel length:	890 mm
Caliber:	15 mm

Ca. 1720: Flint Lock Carbine, Zürich



The barrel originates from the gun maker Hans Heinrich Göetz, Zürich, ca. 1590.

In 1729 the armory of Zürich reused the barrel for this flint lock carbine

Total length:	1150 mm
Barrel length:	820 mm
Caliber:	16.4 mm

Private Collection

Ca. 1730: Rifle with Covered Flin Lock



Beautifully engraved gold plated lock plate is covering the lock and battery

Total length:	1300 mm
Barrel length:	920 mm
Caliber:	16.4 mm

Private Collection

1737: Flint lock Rifle, Muoser, Bürglen



Private Collection

Privately owned rifle made by a small gun maker in the village of Bürglen in the Swiss Alps

Total length:	1340 mm
Barrel length:	848 mm
Caliber:	18 mm

1738: Breech loader Flint Lock Rifle



Private Collection

Firearm with drop barrel and French flint lock

Bore of the barrel has a square cross section

Total length:	1210 mm
Barrel length:	800 mm
Caliber:	15 mm

Ca. 1740: Flint Lock Blunderbuss with Damascus Barrel



The Blunderbuss has an edged ribbon Damascus barrel. It has an octagonal back part, cylindrical middle and an oval funnel shaped muzzle.
The weapon has a French flint lock, delicate carvings on the stock and masterful engravings on the brass fittings.

Total length:	960 mm
Barrel length:	587 mm
Caliber:	16 mm

Private Collection

Ca. 1780: Continer Air Gun, Austria



Magazine-Air Gun M1780, Giradoni-Contriner was used during a short period by the sharpshooter of Habsburg

Three detachable air reservoir belong to the rifle

Total length:	1225 mm
Barrel length:	832 mm
Caliber:	12 mm
	12 Rifling

Private Collection

Ca. 1780: Rifle with Snaphance “à la Florentina”



Elaborately decorated firearm with a snaphance lock of Italian origin

Total length:	1205 mm
Barrel length:	800 mm
Caliber:	12 mm

Private Collection

Ca. 1810: Forsyth Percussion Rifle



Private Collection

Based on the discovery of mercury fulminate by Charles Edward Howard of England in 1796, Pastor Alexander Forsyth developed and patented this revolutionary lock mechanism

This ignition system represents the beginning of the percussion principle

Total length:	1120
Barrel length:	834 mm
Caliber:	17 mm

Ca. 1830/1780: Percussions Rifle, transformed



Most flint locks have been transformed into a percussion lock after this new ignition system turned out to be a much easier to handle and much more reliable system

Total length:	1300 mm
Barrel length:	925 mm
Caliber:	18.8 mm
	28 Rifling

Private Collection

Ca. 1830: Kentucky Air Gun



Tohus Museum, Copenhagen

The air rifle M1780 has the air reservoir underneath the stock

Three detachable air reservoirs belong to the rifle

Total length:	1200 mm
Barrel length:	810 mm
Caliber:	12 mm
	8 Rifling

1841/1863 Dreyse Needle Rifle



Private Collection

Sometime around 1832, the Prussian, Johann Nikolaus Dreyse, developed and patented a needle ignition System. This Ignition system is based on a paper cartridge which is penetrated with a long needle. This brings a pellet primer of mercury fulminate between block powder and base of the lead projectile to an explosion.

Total length:	1365 mm
Barrel length:	1035 mm
Caliber:	15.5 mm

Ca. 1850: Percussions-Tromblon



Private Collection

The Spanish maritime tromblon has Miquelet percussion lock made by Fernando Arrate, Eilbar.

Officers Firearm to be used against pirates

Total length:	575 mm
Barrel length:	260 mm
Caliber:	18 mm

Ca. 1850: Lefaucheux Double Shotgun



In the year 1835, the Parisian gunsmith Casimir Lefaucheux, received the patent for a shot paper cartridge with metal base and a side-ways protruding firing pin. The pin fire cartridges were used in large numbers for brake open shotguns and revolvers

Total length:	1153 mm
Barrel length:	742 mm
Caliber:	17.5 mm

Private Collection

Ca. 1856: Ignition Tape Carbine, England

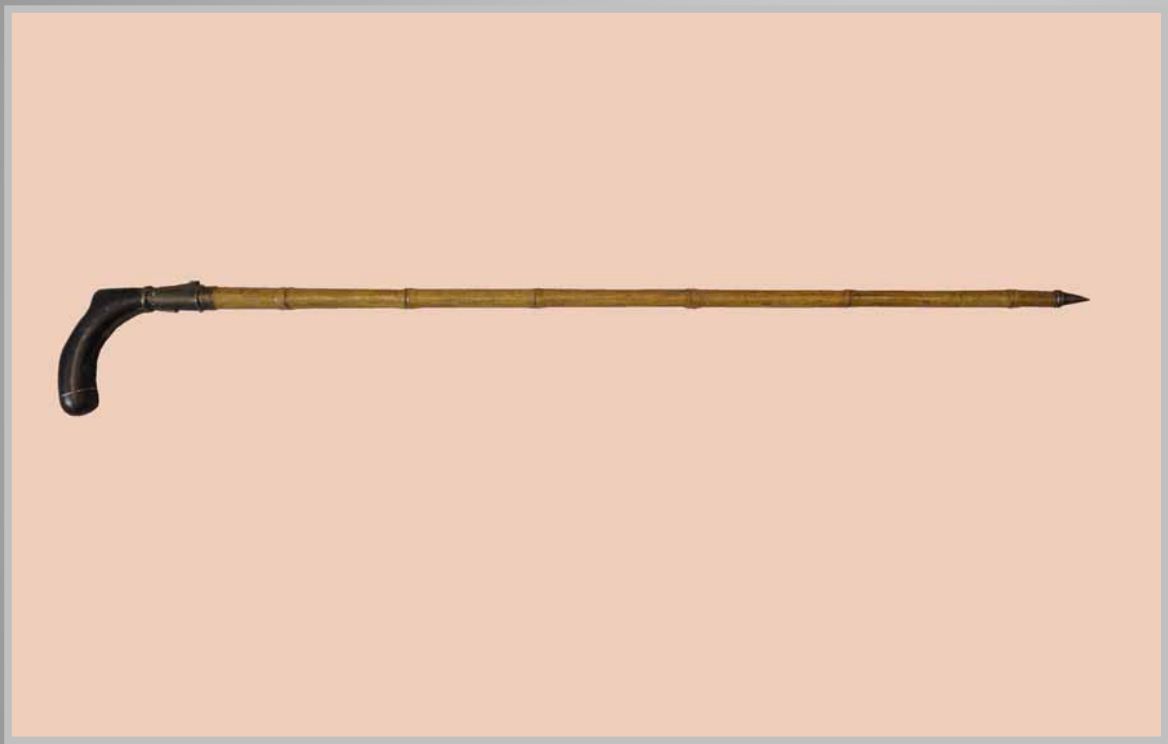


2000 Greene Carbine have been delivered to the Ministry of Defense, England, in 1855. The ignition tape was patented by Edward Maynard, USA.
This ignition tape lock was used with little success

Total length:	857 mm
Barrel length:	590 mm
Caliber:	.55 “

Enfield Pattern Room

Ca 1860: Walking Stick with Percussion Ignition



Private Collection

Firearms were often taken along on walks or while traveling. In most cases, the owner wished to have the means for self defense while promenading.
Apparently, there were dubious figures around who had quite evil intentions.
This was most likely the reason firearms and edged weapons were manufactured.

Total length:	965 mm
Barrel length:	787 mm
Caliber:	12 mm

Ca. 1867: Milbank-Amsler, Switzerland



To increase the firing power within a short time many muzzle loaders were transformed to breech loaders

Applying the Milbank-Amsler Ignition System, the Swiss pattern M1842/59 was transformed to the breech loader M1867

Total length:	1470 mm
Barrel length:	1080 mm
Caliber:	18 mm

Private Collection

Ca. 1870: Vetterli Repeating Rifle, Switzerland



Parallel to the conversion from muzzle loaders to breech loaders, the development and introduction of repeating rifles was given high priority. As the first army in Europe, Switzerland introduced a repeating rifle with a tubular magazine under the barrel

Total length:	1300 mm
Barrel length:	842 mm
Caliber:	10.5 mm
	4 Rifling

Private Collection

Ca. 1870: Werndl Carbine, Austria



Private Collection

In 1867, the Austrian Army converted muzzle loaders to breech loaders by installing Werndl locks. Instead of a swiveling block, this lock has an approximate 90 degree rotating cylinder with an axis parallel to the barrel. The cylinder has a groove on one side, that allows the cartridge to slide into the chamber.

Total length:	1280 mm
Barrel length:	843 mm
Caliber:	11 mm

Ca. 1889: Repeater with Straight Pull Bolt Action



The repeater rifle by Rudolf Schmidt has a straight pull bolt action with an integrated turn mechanism. Contrary to most repeaters from those days, the shooter did not have to make a turning movement to open or dose the action.

Total length:	1300 mm
Barrel length:	780 mm
Caliber:	7.5 mm

Private Collection

Ca. 1890: Parlor Rifle



This rifle has the similar size and weight of a regular target rifle, and similarly handles like one. For target practice in the parlor, the front section of the barrel is designed to hold a separate loading gate to use 4 mm Flobert cartridges. The loading gate is opened by rotating down the trigger guard.

Total length:	1260 mm
Barrel length:	830/140 mm
Caliber:	4 mm

Private Collection

End