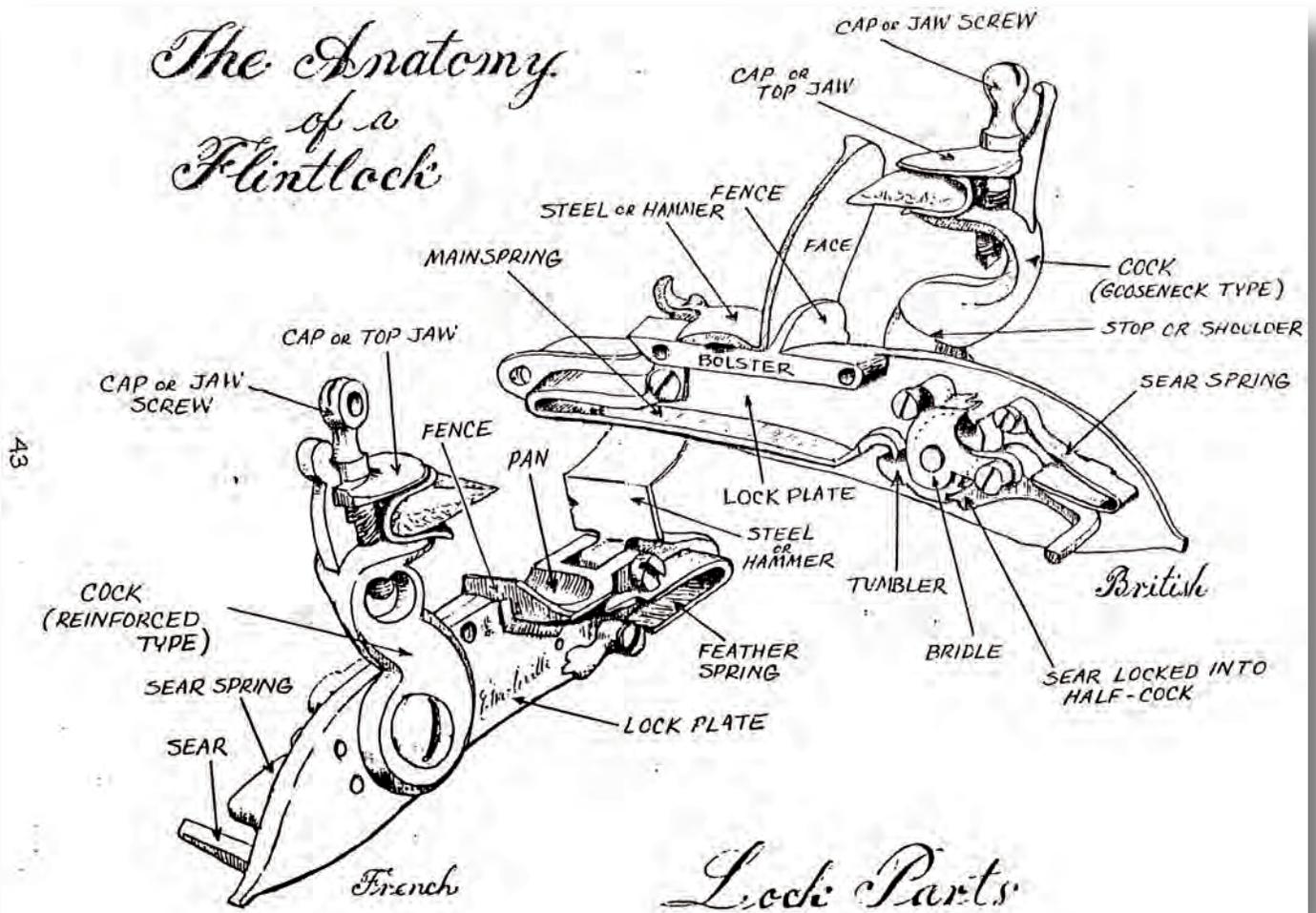


Lock, Stock, & Barrel



Lock, stock, and barrel. Have you heard this saying before? It refers to the three main parts of a musket. The firing mechanism or lock, the wooden stock, and the steel barrel. At the time of the U.S.-Mexican War both countries sent their infantries into battle with the flintlock musket as their primary weapon. The musket got its name from the type of firing mechanism it used.

With a squeeze of the trigger, tension on several internal parts is released, which in turn causes a piece of flint to come crashing down onto a steel plate, creating sparks and igniting gun powder held in a shallow steel or brass pan on the side of the lock.

It's simplicity made it practical to use and easy to maintain while on campaign. Although newer firing mechanisms for muskets were beginning to make waves among the armies of the world, it was the trusty flintlock that saw most of the action during the U.S.-Mexican War.

Pictured here are examples of Mexican War era flintlocks. One is a Model 1816 Springfield musket, the kind carried by U.S. troops at the battle of Palo Alto and below is its Mexican counterpart, the Third Model Brown Bess. The locks are shown in the half cocked position.

Before the firing procedure begins, a musket's lock would be put into this position. From here it is easy to go into the fully cocked position with the flick of a thumb making the musket ready to fire.

This is also a safety position for the lock. If the lock is functioning properly, the musket will not fire when the trigger is squeezed.

In other words—it will not go off half-cocked.



Loading and firing a musket was not a quick and easy process. The weapon had to be manually loaded at the mouth of the gun's muzzle. U.S. and Mexican armies spent countless hours training their soldiers to load and fire their muskets in 12 and 11 motions respectively.

Before the musket can be fired, it must be "primed". A paper cartridge containing gunpowder and a musketball at the bottom is torn open using the teeth. A small amount of the powder is then poured into the pan. Not too much is needed as black powder burns at a very high rate of speed.



The hammer or steel is then brought down to "close" the pan. With the priming powder secured in the pan, the loading process can continue. While keeping the remaining contents of the cartridge secure, the cartridge is brought up to the mouth of the muzzle.

The next step would be to "charge cartridge". This meant pouring the rest of the black powder and musket ball down the barrel. The cartridge paper itself was also put into the barrel as it helped to keep the charge compact and secure in the barrel. The charge still needs to be seated at the back of the barrel.



To do this the soldier uses the ramrod to seat the charge and puts the ramrod back in place. Finally, the musket is then brought up to the shoulder position.



The musket is now loaded and ready to be fired. In order for the weapon to fire, the lock must be moved from the half cocked position to the fully cocked position. This is done with a quick flick of the thumb. The only thing left is to take aim and fire.

With a squeeze of the trigger, the hammer is released and the flint comes crashing down onto the steel, sending a shower of red hot sparks down onto the powder in the pan. In a flash, the powder in the pan ignites sending flame and sparks through the vent hole on the side of the barrel, and causing the musket to go off.

Or so you hoped...



Things did not always go smoothly. On occasion there is a delay from the time the trigger is pulled to when the gun actually goes off, known as a hang fire. From time to time, when the flint strikes the steel it produces little or no sparks, failing to ignite the powder. Now and then, the powder in the pan ignites but the flash did not set off the charge in the barrel resulting in a *flash in the pan*.

These problems are usually easily remedied under normal circumstances but in a battle situation, the simplest of complications can lead to catastrophe. Even under the best of circumstances, muskets had a very limited effective range of only about 80 yards. The only way to combat this deficiency, was to fire in mass volleys. By putting as many musketballs in the air at the same time, armies greatly increased the likelihood of inflicting damage upon enemy lines.

A companion of wood and steel, a giver and taker of life—the musket was constantly by the side of the infantryman, at times even sharing a bedroll with the soldier. Even though they were not without their limitations and were a far cry from modern weapons, the flintlock muskets used by U.S. and Mexican soldiers played an important role in many of battles of the war and have their place in the histories of both the United States and Mexico.