

Shooting the Flintlock Pistol Competitively

by Rob Matthews

Flintlock pistols have an ignition system that is difficult to master, but once any problems they present are overcome, they can be the most rewarding of all muzzle-loading pistols to shoot. When I started shooting my flintlock pistol I would have found the following information useful: I hope it may be of use to others.

Half an hour for 13 shots may seem like a long time, but with a flintlock, 30 minutes pass by very quickly. Loading kit needs to be well set out, with contingency plans to cover for when things go wrong. Having powder phials and ball etc neatly laid out reduces the chance of loading a ball without powder, but this type of thing happens to us all: It is worth removing the touchhole now and then when cleaning the pistol, and wrapping PTFE round the threads before replacing it. This makes it easy to remove during a competition should the need arise. Removing the touchhole, dribbling in some powder, and reinserting the touchhole to fire the gun is then relatively effortless. If this fails, make sure you have a ball puller on hand.

If you use cast ball, time can be lost finding the sprue to place it outermost. Simply making a mark on the ball prior to the competition with a permanent marker pen can save you valuable time.

A pricker is used to keep the touchhole clear. Prickers usually have a piece of brightly coloured ribbon attached to them. This is not just for show, it helps you to quickly find the pricker should you drop it.

It is important to accurately (and safely) dispense priming powder into the pan. One way to do this is to utilise an old syringe (say 5 or 6cc). Discard the plunger and needle, and replace them with a cork in one end and a cocktail stick in the other. These cheap tricklers are safe and convenient to use once filled with fine priming powder.

If the flint fails to generate a spark during a competition do not be too quick to replace it during competition. Very often twisting it slightly to present an edge will do the trick. If the problem recurs after a few shots twist it slightly the other way.

To shoot a flintlock well, a reliable (make that FAST) ignition is needed. Misfires will inevitably occur, but they need to be kept to a minimum. A strong shower of sparks is required to ignite the powder in the pan, and the flash from the priming powder needs to ignite the main charge as fast as possible.

Flint

Three kinds of flint are available. You can use black or white traditional flint, or synthetic. All will work satisfactorily, but you must use the right size for your pistol, as it must strike the frizzen correctly. The flint must not be wider than the frizzen. If it is, after a few shots a large portion of the striking edge will be held off - and not generate sparks. Narrower (within reason) will work fine. Flint length is also important. Ideally, on half cock, the flint should not quite contact the closed frizzen. Again, an ideal flint should strike

the frizzen about $\frac{1}{4}$ down the length of the frizzen's face. However, especially with hand-knapped flint, a certain amount of leeway exists. There is no hard and fast rule as to which way up to place the bevelled face of the flint: Just place it in the jaws so it conforms with the above mentioned. With the flint attached, make sure the flint contacts the frizzen all the way down. A short flint will bring the top jaw of the cock into contact with the frizzen, and you will lose sparks. Again, do not be too quick to change a flint - as sometimes it takes a couple of shots to break it in.

Springs

Flintlock spring tensions are much more important than they are for their percussion counterparts. A weak mainspring will not produce sufficient sparks, since it needs to drag the flint down most of the length of the frizzen. The flint needs to cut small pieces of steel from the face of the frizzen to generate sparks, and this requires a certain amount of force. Transversely, the frizzen spring needs to be weak. This spring is there to hold the frizzen closed and keep the priming powder covered. In fact a good lock will generate sparks with a broken or missing frizzen spring. Too strong a frizzen spring will stop the pan from opening quickly, and it will also cause flints to wear out prematurely. It is wise to buy a pistol with a roller on the frizzen. The roller greatly reduces friction between the spur of the frizzen and the frizzen spring.

Priming

The priming powder needs to be as fine as possible. Fine powder particles have more surface area for a given quantity, and this makes it burn much faster. The flame needs to pass unobstructed from the pan through the touchhole to the main charge. If the hole is filled with priming powder, ignition will be transferred through the vent hole from particle to particle of powder. This acts as a fuse and slows ignition. Therefore the vent needs to be kept clear of powder by using a pricker. A wide pan helps with ignition; powder spread out on a wide pan presents a greater surface area for the sparks.

Main Charge

Most flintlocks are smoothbore (this is a prerequisite for most MLAGB competitions) so a fast burning powder is important. Rifled bores need less powder so that the patch can engage with the rifling. Too much powder in a rifled bore would fail to make the ball spin, so accuracy would be reduced. Smooth bore pistols require high velocity to keep the ball straight and true, therefore more powder is required. The ball needs to be sent on its way as fast as possible, and the main charge needs to burn as quickly as possible. So fine powder is used (Swiss 1 or equivalent); as with priming powder, greater surface area relative to quantity creates a faster burn.