

# TROUBLED TIMES

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Musketeer of the English Civil War period.

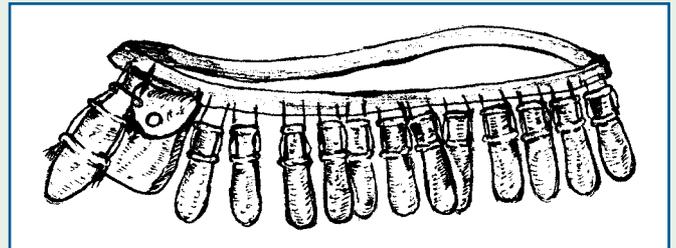


Fig. 1. Bandolier with flask and bullet pouch.

Fig. 2a. Lead caps from the wooden powder cartridges. The centre example has been flattened, the outer two are in perfect condition.

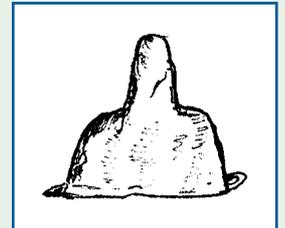


Fig. 2b. Sketch of a lead flask nozzle.

While most people like to relax with a good novel, I prefer to settle down with a history book. This is because our country's past contains more fascinating happenings than any author could invent, and what's more the events and the adventures of the individuals concerned are all true.

Each century has seen its fair share of troubled times, and episodes that have changed the course of history. Many of these events were wars against other nations, although sometimes the conflicts were internal. The Wars of the Roses is one such instance, but of all these events it is perhaps the English Civil War that most stirs the imagination. Interest in this period of our history is high, with the Sealed Knot Society actually re-enacting some of the battles that took place so many centuries ago.

Watching some of these stage-managed battles made me realise how terrifying it must have been for our

ancestors who fought in them. Even the re-enactments can be dangerous. I remember reading of one such event where 16 of those taking part needed treatment for various wounds, and some were taken to hospital and admitted for further treatment.

During troubled times, when brother fought brother and father fought son, to the victor fell the spoils. Robbing the dead of their valuables, should they have taken them into battle, was commonplace. However, it was more likely that any valuables that the soldiers possessed would have been concealed prior to the engagement. Of course, valuables would not only have taken the form of coinage or jewellery. Weapons would also have been regarded in the same light, for arming a soldier was an expensive business. Even clothing - such as boots, breeches, coats and hats - had to be accounted for. It is recorded that in some instances when a soldier came off duty, not only would he have had to hand over his musket and

sword but sometimes his boots and breeches as well to the soldier who was going to take his place.

Unlike the case with earlier conflicts, those who fought in the Civil War did so mainly with matchlock muskets and cannons, although edged weapons - such as swords, daggers and pikes - also played their part.

Gunpowder, which by the time of the Civil War had revolutionised warfare, is thought to have originated in China. However, the Chinese used the invention for fireworks rather than as a method of propulsion in weapons of war. Gunpowder is charcoal, saltpetre and sulphur, mixed together in specific proportions. When first used in firearms it was very unreliable, and had the tendency to separate back into its original components. However, by the 17th century it was found that if the powder mix was dampened, made into cake form, dried and then crushed into grains, not only was it more reliable but also much more powerful.

Obviously, gunpowder was dangerous and it was necessary for the musketeer to carry it safely. However, the Royalists seemed to have overlooked this point for they issued their musketeers with a bag in which to carry it loose. This was obviously very dangerous, although it is known that some even carried it loose in their pockets! The usual method for carrying gunpowder was in a bandolier (see Fig.1.). This was a shoulder belt to which were attached small flasks, sometimes known as "apostles", each containing sufficient powder for one shot.

The powder holders were made from wood, although their caps - which are fairly common detector finds - were made from lead (see Fig.2a.). Each powder holder was connected to the bandolier by a cord that ran through the two loops provided on the cap. The fine powder used for priming the matchlock was held in a larger wooden container, hung from below the bullet bag. Powder flask nozzles, as shown in Fig.2b., were also usually made from lead. There were normally 12 charges on each bandolier, although as many as 15 or 16 charges are known to have been used for smaller weapons.

So far as metal detectorists are concerned, the most common find from this period takes the form of lead shot. Musket and pistol balls are not restricted to battle or skirmish sites but are found on many farm fields throughout the country. Although a number of metals were tested, lead was found the most suitable for the making of musket balls. Having a low melting point lead was easy to cast, and shot could be moulded on site over an open wood fire.

During the Civil War the main firearm used was the matchlock musket. However, there was no standard bore size and guns were issued with their own individual ball moulds. If a musketeer had run out of shot and did not have the opportunity to remould any replacements to his own gun's bore size, then he might have scraped oversized shot down to size with an implement such as a pruning knife. Should one not be available, he could still chew the lead musket balls with his own teeth (see Fig.3.). However, there is more than one explanation for the chewed musket balls that are sometimes found. One theory is that chewed shot were intended to act as "dumdum" bullets. They would splatter on impact causing the maximum damage to the poor individual unfortunate enough to be hit. Another theory is that musket balls were given to battlefield



Fig.3. Chewed lead musket shot.



Fig.4. Various lead Civil War period musket and pistol shot.

Fig.5a. Iron worm used for removing jammed musket balls.



Fig.5b. Lead musket balls that have been removed with a worm.



Fig.6. Sketch of a scouring stick used for cleaning powder residues from a musket barrel.

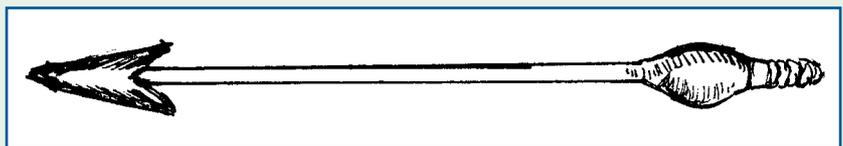
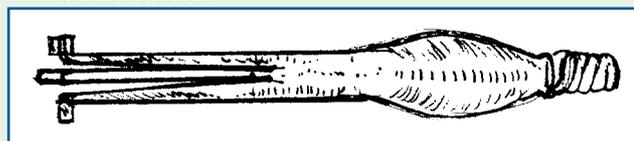


Fig.7. Sketch of a "musket arrow". These would probably have had incendiary material attached to them, and were possibly used for setting fire to buildings.

casualties to bite down on during painful operations such as amputations (thus the expression "bite the bullet").

In 1630 and 1638 the Council of War attempted to standardise matchlock musket bores to 12 bullets to a pound of lead. It was proposed that the cavalier and arquebus use balls of a size that would be 17 to a pound of lead, while the carbine and pistol would use lead balls that would be 24 to the pound. Fig.4. shows some of the various sizes of lead shot in use.

Usually as a result of damp gunpowder, there were occasions when a matchlock failed to fire. This meant that the lead shot and the powder behind it needed to be removed manually by means of a tool known as a "worm" (see Fig.5a.), which was screwed to the end of a ramrod. Sometimes musket balls are found that have a small central hole in them (see Fig.5b.). These are in fact misfires that

have been removed by means of a "worm".

Other tools could also be fitted to the ramrod such as the scourer shown in Fig.6. Gunpowder (sometimes known as "black powder") was a far from clean propellant, and quickly fouled up the smooth bore barrels of the weapons in which it was used. The scourer was used to clean out the residue of burnt black powder from the matchlock's barrel. In ideal conditions this was carried out after several shots had been fired, but became essential after about 10 shots for - unless the musket ball was a very loose fit - the fouling would prevent it from being rammed down the barrel.

One unusual item that could be fired from a matchlock, was the musket-arrow (see Fig.7.). However, by the time of the Civil War they were regarded as obsolete, and there is no evidence that they were used in any of

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the battles of that war. These strange looking items were forged from iron. One end was provided with a swallow-shaped arrowhead, while the other end terminated in a screw thread. The screw thread would have been used to attach the arrow to a wooden rod, and the whole device was then placed in the barrel of a matchlock on top of a powder charge. Due to the weight of the musket-arrow the distance it travelled would not have been that great. There is a contemporary illustration showing a musketeer firing a musket-arrow that has incendiary materials attached and ignited. They could therefore have been used for setting fire to buildings occupied by the enemy.

The type of firearm that the musketeer was using would dictate the accessories he would need to carry. Obviously there had to be a way to ignite the priming powder, which in turn fired the main charge. The matchlock, as its name suggests, relied upon a smouldering match. This was made by taking a length of cord, soaking it in a weak solution of saltpetre, and then letting it dry. The main drawback of using a match to light the priming powder, was that in misty or rainy conditions the smouldering cord would become wet and go out, thereby making the musketeer ineffective. To prevent this a "matchbox" (see Fig.8.) was carried. This was a narrow tube about 12in long made from tin, that was provided with just enough holes to allow the air in but keep the damp out.

To be able to light the match an iron strike-a-light was needed. A spark was produced by holding a trimmed piece of flint in one hand and the strike-a-light in the other. By hitting the strike-a-light in a downward motion against the flint, sparks were created and allowed to fall onto a piece of dried tinder or wool. Once this was smouldering blowing upon it would encourage a flame. Although there must have been many thousands of iron strike-a-lights produced, few have survived due to the metal from which they were made. Surviving examples show a great variety of designs. The two most favoured forms would appear to have been the "bull-horn" (see Fig.9.) and the pear shape (see Fig.10.).

The strike-a-light and flint would have been carried in a separate pouch or pocket away from the powder. However, I have seen one strike-a-light that had five functions (see Figs.11a. and 11b.). The primary function of this device was obviously for creating sparks; the second for scraping the lead shot; the third for cleaning out the burnt powder from

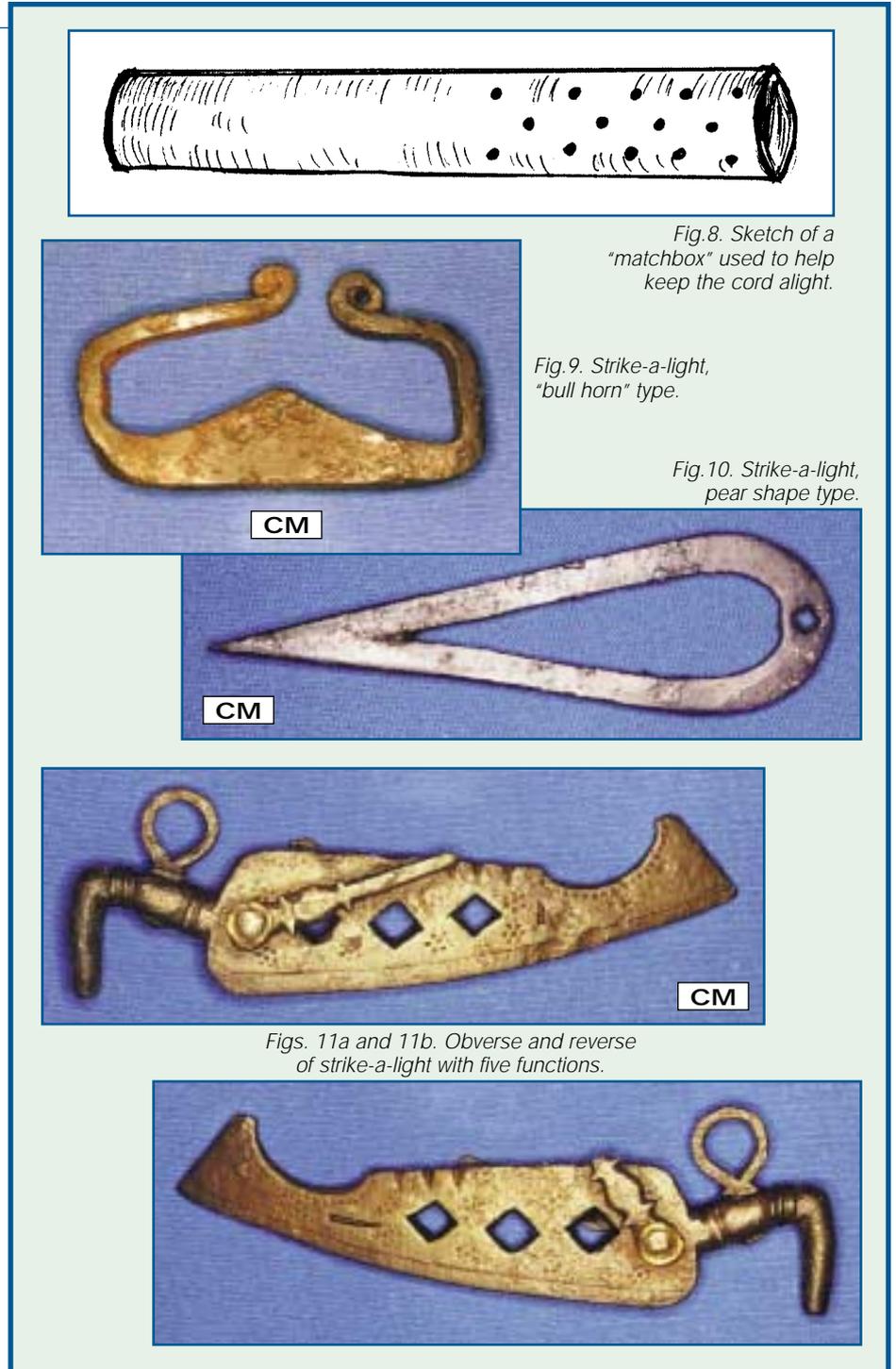


Fig.8. Sketch of a "matchbox" used to help keep the cord alight.

Fig.9. Strike-a-light, "bull horn" type.

Fig.10. Strike-a-light, pear shape type.

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Figs. 11a and 11b. Obverse and reverse of strike-a-light with five functions.

the vent; and the fourth for winding the mechanism on a wheel-lock pistol. However, when it comes to the fifth function I am unsure of exactly what this was. The tool concerned is the small right angle arm at the top.

Such an item would probably have been carried and used by an officer. It would most likely have been hung from the belt by a cord, and has a suspension loop specifically for this purpose. It is also interesting to note that it carries a maker's mark.

Those who were rich enough to be able to afford and use the wheel-lock musket or pistol, carried a spanner to wind up the clockwork mechanism of

the lock. Rather than use a match for ignition wheel-lock guns were more advanced and used iron pyrites in contact with an abrasive wheel to ignite the priming powder.

Wheel-lock spanners can vary in design. Some are oblong and have one end terminating in a spanner, and the other end in a screwdriver (see Fig.12.). Another type also has a spanner at one end and a screwdriver at the other, but is shaped like a vintage car starting handle (see Fig.13.). Both of these spanners have a small loop to which a cord could have been attached.

There was also another type of combination spanner that incorporated two



Fig. 12. Oblong iron wheel-lock spanner. One end is the spanner, while the other end is a screw driver. The device is also provided with a suspension loop.



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Fig. 14a. Top section of an ornate powder flask that also incorporates three sizes of spanner. To the rear of the neck is the spring lever that opens the flask allowing the powder to be released.



Fig. 14b. Showing the maker's mark on the neck of the flask.



Fig. 13. Iron wheel-lock gun winder.

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Fig. 15. The lower part of the powder flask, which terminates in a turn screw.

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Fig. 16a. Sword chape of 17th century date.



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Fig. 16b. Dagger chape of 17th century date.



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Fig. 16c. Narrow sword chape made from thin sheet brass.

sizes of spanner (one for a match-lock pistol the other for a carbine), a vent pricker, two bullet sizers, and a screwdriver.

Sometimes the spanner and powder flask were combined. This made it possible to load the pistol and wind its mechanism with the same utensil. I have had the good fortune to examine the top and base of one such flask (see Fig. 14a.). This must have once been owned by a very wealthy gentleman, for

it is a small work of art. The top is in the form of a cockerel's head with feathers running down the neck. The lever at the rear of the head is an iron spring. When this is pressed down it opens the top of the head allowing the powder to flow. Below the head are three different sizes of spanners, while to the rear neck of the flask there is a securing loop. On the side is a maker's mark (see Fig. 14b.). The lower part of the flask is bell shaped and terminates

in a screwdriver (see Fig. 15.). Although the main body of the flask is missing, there are small fragments of horn remaining in the neck of the flask. It therefore seems likely that the body was made from horn, most likely carved with an elaborate decoration. These remaining sections of the flask are made from brass that was once gilded. When new and complete, such an item must have looked outstanding.

When it came to swords and dag-

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Fig. 17. Decorated sword belt buckle with suspension loop.

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Fig. 18. Plain sword belt buckle with suspension loop.

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Fig. 19. Decorative adjustable sword belt buckle.

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Fig. 20a. Decorative iron sword belt hook.

Fig. 20b. Sword belt eye made of bronze.

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gers, obviously such large items would not have been overlooked when it came to clearing a battlefield or skirmish site. However, bits of these edged weapons and pieces of the scabbards could well have been missed.

The three-scabbard chapes shown as Figs. 16a., 16b. and 16c., are all 17th century in date and were made from thin copper alloy sheet.

In the aftermath of a battle buckles and fitments could also have been easily missed. Such small items would have been easily stamped into the muddy ground during the fighting. The actual way in which these buckles and fitments were used had altered little over the years. Figs. 17. and 18. show 17th century sword belt buckles with lower suspension loops. An adjustable buckle is shown in Fig. 19., and a hook and eye fastener in Fig. 20a. and 20b.

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