

More On the Big Bang Theory



In the August issue (2011-4) of the Yorker Courant you may recall an article entitled “The Big Bang Theory”, which addressed the question of misfires and how to deal with them. Gavin Watt, our former Drum Major, and now the Education/Historical Coordinator for Fort George, Niagara National Historic Sites, responded with the following:

Just wanted to drop a note, if it proves helpful. I was looking through the Yorker Courant at the article regarding “The Big Bang Theory”. As we at Fort George ram all the time, when we get put into a re-enactment and don't ram, our *squaddies* are often unsure as to whether they have fired or not. One of the keys we train them in is to watch for smoke trailing out of the vent after the trigger is pulled. It is the surest way to know whether the charge down the barrel has gone off, other than dinging the piece. The wisp of smoke coming out shows that the charge in the breech has gone, and is a particularly helpful indicator if there are flashes in the pan. Taking a second to visually check the vent has saved us a lot of grief. This year when we were firing through loopholes in the palisade and out of the musket ports in the blockhouse, where you can't physically see the end of your barrel when you fire, it helped keep us safe. If someone is really unsure, we do encourage them to step out of line and run the rammer down the barrel and look at the distance the rammer sticks out of the barrel. Individuals will know how much the rammer sticks out of their barrel normally and if it is out 3 or 4 inches more, then you've got a few rounds down the pipe and the charge should be dumped or swamped for safety.

With our *squaddies* we tell them to dump their prime before knapping the flint just so there is no risk of the knapping setting off the charge prematurely (it is flint and steel after all). Although the risk is slight, with the metal used to make musket tools, we feel better safe than sorry.

In my experience as a Parks Safety Supervisor, when people step out of line to maintain their musket, swap flints, etc., they often lose control of muzzle direction or pay little attention to it, which can be very dangerous. A good NCO will pay attention to these folks to prevent the musket being pointed toward someone else in front, or an officer or drummer standing to the rear.

Lastly, we tell our folks to make sure that they are holding the weapon well when firing - seated in the shoulder, with weight leaning forward. A good grip on the weapon, with proper balance allows you to take the brunt of a double with minimal damage to yourself.

Inevitably there will be doubles, but these protocols help to prevent triples and quads where someone is likely to get hurt. In my experience dealing with people, both familiar and unfamiliar with the weapon, I have seen some terrifying examples of people with a half a barrel full of powder, who if they'd managed to get their musket to go, would likely have seriously hurt themselves or others.

As we fire thousands of rounds during the summer, I thought our experience might assist. Just keen to keep everyone safe.

Here is the advice we post for all squaddies. I know it is different because we ram, but this is our approach if it helps.

Misfire Clues

- No flash when you squeeze the trigger.
- Powder still in pan.
- No flash, but no powder in the pan (loss of powder from pan being unable to close).
- No smoke out of the vent (flash in the pan).
- Length of rammer sticking out of the barrel.
- If the distance exceeds 3 rounds do not fire your musket. Notify your NCO. Dump your prime.

Musket Misfire Protocol

EVERY TIME - look for smoke trailing out of the vent. If the wind is not conducive to venting the smoke, reload, but watch the distance the rammer comes out of the muzzle. If you have a double, brace yourself when firing. NEVER work the lock mechanism with a cartridge in your hand. If everyone around you is about to fire and you have a cartridge in your hand, drop it.

If your musket has misfired (i.e. there is still powder in the pan)

1st misfire.

1. Wipe your flint and frizzen face, redistribute the powder, shut pan and shoulder arms.
2. If there is almost no powder, wipe the bottom of the frizzen and reprime. Shake excess powder on the ground.
3. DO NOT PUT ANOTHER CHARGE DOWN THE BARREL.

2nd misfire [2 options].

1. Move the flint forward and retighten the cockscREW.
2. Ensure there is enough prime. Shut the pan and shoulder arms.
3. DO NOT PUT ANOTHER CHARGE DOWN THE BARREL.

3rd misfire.

1. Replace or knapp the flint [angle the flint if there is only 1-2 shots left in demo]
2. To replace your flint, half cock your firearm. Keep the frizzen open. Loosen the flint, take out the replacement switch leather and tighten the cockscREW. Check the prime. Shut the pan and shoulder arms.
3. DO NOT PUT ANOTHER CHARGE DOWN THE BARREL.

To knapp your flint

1. Half cock your firearm.
2. Dump prime and wipe out pan.
3. Tap the edge of the flint with a musket tool to re-edge it.
4. Reprime, dump the remainder of the charge, shut the pan and shoulder arms.
5. DO NOT PUT ANOTHER CHARGE DOWN THE BARREL.

Flash in the pan.

If the prime charge fires, but the round down the barrel doesn't discharge, that is a flash in the pan.

1. Half cock your firearm. Check for smoke out of the vent.
2. If there is no smoke push your pricker through the vent, reprime and discard the excess.
3. DO NOT PUT ANOTHER CHARGE DOWN THE BARREL.

2nd flash in the pan.

1. Reprick and prime.
2. Use the pricker to push some powder into the vent.
3. Ding the rammer to ensure you are correct.

4. DO NOT PUT ANOTHER CHARGE DOWN THE BARREL.
5. Notify your NCO.

If you full cock your firearm accidentally.

Open frizzen.

Release the cock all the way forward.

Half cock the firearm.

NEVER DO THIS WITH A CARTRIDGE IN YOUR HAND.

If there is a concern you are not familiar with [outside those addressed here] continue the motions with the rest but do not load and fire your musket. Always err on the side of caution. Better safe than sorry.

