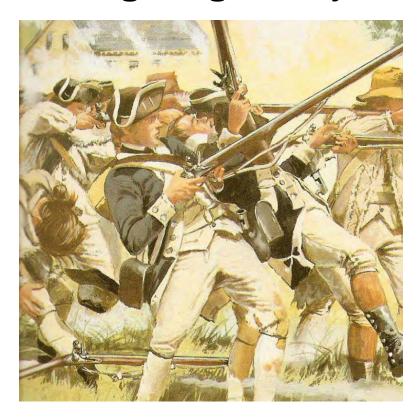
The Big Bang Theory



My theory is that a loud BANG in the ranks is an indication that someone fired with more than one cartridge down the barrel. Although it usually generates some grumbling from guys in the surrounding files, the consequences could be much more serious. The recoil from an overloaded musket can knock you off your feet, and the noise of the explosion can make your ears ring.

If your firelock does not fire, it is important that you safely and quickly assess the cause and take appropriate action. There are a number of reasons why a firelock will misfire. Here are 3 of the most common causes:

- Fowling The buildup of burnt powder in the pan or on the flint may prevent the flint from sparking. Pull the cock to the Half Cock position and open the pan. You should always carry a small rag with you in your haversack or pocket. Wipe the bottom of the flint and the lower jaw of the cock. Clean around the pan. It may be necessary to dump the priming from the pan in order to do a thorough cleaning of the pan area. Wipe down the frizzen. It may also be advisable to clear the touch hole with your pick. Re-prime the pan, if necessary. DO NOT POUR THE REMAINING POWDER DOWN THE BARREL. Either empty the cartridge on the ground or fold/twist the top of the cartridge and return it to your cartridge box. DO NOT KEEP THE PARTIALLY USED CARTRIDGE IN YOUR HAND WHILE FIRING. It could ignite, giving you a nasty burn.
- **Flint** If the flint is not sparking properly it may be that it is worn or has shifted out of position. Minor flint maintenance can be quickly performed without falling out of the ranks. Usually a musket tool is all that you need. By loosening the Cock Pin you can reposition the flint and then retighten the Pin. Tapping the edge of the flint with the musket tool may chip away worn material, often giving the flint new life. In some cases the only option is to replace the flint. If there is a lull in the action you may be able to perform this task in the ranks. However, in the heat of battle you are advised to step out of the ranks where you can perform this maintenance without interference. Let your file partner know what you're doing, as your absence affects his functioning.
- **Blocked Touch Hole** A "Flash In The Pan" occurs when the powder in the pan flashes or burns, but the powder in the barrel does not ignite. The most common cause for this occurrence is a blockage of

the touch hole, which prevents the spark from passing through into the breach. It is easy to assume that your firelock fired properly when the powder in the pan is gone. However, the absence of the sound and kick associated with firing should be your first clue that there is a problem. Ignoring the problem and reloading in the regular way can be very hazardous, as the musket could become overcharged resulting in an excessive explosion. If in doubt, clear the touch hole with your pick, reprime the pan, DO NOT POUR THE REMAINING POWDER DOWN THE BARREL, and try again to fire. If the problem continues, lower the barrel and dump the powder. Perform whatever maintenance or cleaning may be necessary and then prime & load in the usual manner.

There are other conditions that can contribute to the occurrence of mis-fires, such as a weak main spring or a soft frizzen. These conditions require maintenance that can't be performed on the field.

If you're not sure of the correct procedure to follow, or if you have unanswered questions, see me or one of the other NCO's. Everyone's safety depends on you doing it right.

Sit Mir Dave Putnam