How to make Sharps Cartridges - In pictures

By Bill Skillman

I have written a lot about the ‘flat base’ Sharps cartridges, better known as the “1860 Ordnance Trial” Sharps cartridges. From 1852 until 1860, cartridges made by the Sharps Mfg. Co. were very similar to the ones used by the vast majority of reenacting Sharpshooters; cartridges had a protruding and twisted ‘tail’ of paper that was sheared off when the breechblock was closed, thereby exposing the powder charge. Any soldier, abolitionist, Indian or target shooter who were lucky enough to carry a Sharps was pleased with this ammunition. When compared to the other arms of the day, the Sharps was easy to load and fire (10 aimed shots a minute), and because it was a breechloader, fouling in the barrel was a ‘non-issue’ compared to muzzle-loaders of the day. With the invention of Conant’s ‘floating gas ring’, inserted in the face of the breechblock, the problem of gas leakage (a chronic problem in earlier breechloaders like the Hall) was considered largely solved.

However, in 1860, with war on the horizon, the United States Army issued an invitation for manufacturer’s to bring their carbines to be evaluated for possible service in the cavalry. Surprisingly, during the first trials, the Sharps carbine performed poorly—after 300 yards the carbine’s range and accuracy dropped dramatically. Richard Lawrence, chief engineer for the Sharps Mfg. Co., determined that depending how much of the cartridge was sheared off, powder was being lost, and hence range and accuracy. Lawrence redesigned the cartridge by eliminating the ‘twist tail’ and substituted one with a flat bottom; the base being made from ‘gold beaters foil’ (the inner lining of sheep intestine). During the second round of trials, the Sharps out-performed all the rest of the entries and went on to become the predominant carbine used by the U.S. Cavalry in the Civil War.

I have had a number of Forum readers ask me how to make ‘flat base cartridges’ and I kept promising I’d send them information. Finally, I’ve decided it is a lot simpler to create this article as companion piece to my ‘How to make Sharps Cartridges 101 ’ but using photographs instead.

You will find this ta step-by-step process of how to create 1860 Ordnance (aka flat base) blank cartridges. It takes a few more steps to make them, but from my own experience, and what I have seen and heard from fellow Sharpshooters who use them, these blanks perform significantly better than their old ‘twist tail’ rounds.

I invite you to make up 10 rounds and try them out for your next skirmish or living history event.

Happy Shooting!
Materials: Scissors, ¼ inch brass tube, 1 ½ inch/38 mm adding/calculator paper, shirt tissue cut 1x1 inch squares, Elmer’s school glue & paint brush, ¼ inch solid bar that serves as a former, ¼ inch wood dowel to seat & crimp tissue/tube

Roll 1 ½ inch paper two times around brass tube
Cut paper on 30 degree angle
Glue leading edge

Finish rolling to close tube, run finger over seam, remove

Place 1x1 inch shirt tissue over former

Crimp paper down over former
Lower tube until level with base  Pinch /roll tube to prevent gaps  Remove tube from former, let dry

Pour 60 grains FFG or FFG powder  Place 1x1 inch tissue on tube  Seat tissue over powder
Settling Powder stage: Insert dowel over tube. Pick up tube and rap smartly 2-3 times to compress powder & strengthen tube.

Crimping stage: Take wood dowel and firmly fold/push one side down until it touches opposite side, then flatten over powder. Turn cartridge 1/3 turn, fold/push down second side-seat over first crimp. Rotate tube and seat last tab(last picture). Center dowel over top of crimped cartridge, push down firmly until you’ve created a slight, raised ridge.

Note: Occasionally, when you try to insert a cartridge it will ‘hang up’ at the chamber entrance. This is because a crimp wasn’t properly centered during construction. If you look from above, the cartridge appears ‘off center’ or crooked. Take the crimped end of the cartridge and gently roll it between your fingers until the end becomes cylindrical. Now you should be able to insert the cartridge as intended.

Slide the cartridge in so it is flush with the chamber. If the bugler sounds ‘cease fire’ you don’t shoot it unless you want to. Simply drop the block, rap the side of the receiver smartly and the round will drop out into your hand—ready for the next drill or skirmish.
Pasteboard box and 5 flat base blanks—notice crimp on the top three cartridges—this is how your rounds should look like

Pictures of Ordnance/Flat base blank cartridge in a Sharp’s ‘feed trough’ and seated in the chamber

I welcome your thoughts and comments

Bill Skillman

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