

## Everything you wanted to know about the Sharps— but were afraid to Ask

### *The Reproduction Sharps Rifles*

by  
Bill Skillman

At the 2002 Camp of Instruction at Wolcott Mill, I had the pleasure to work with 4 comrades who purchased brand new Italian made Sharps rifles, or were lucky to borrow one for the weekend. Each of them was unfamiliar with the rifles and it took me two hours to guide them through the various procedures of cleaning and maintaining the guns, I missed supper as a result. Before I tented down Saturday night I knew that it was finally time for me to write a 'how to' article regarding the Sharps rifles, based upon my 7 year love (and occasional hate) affair with them. Considering a new rifle costs anywhere from \$765 to over \$2300 (Shiloh Sharps is now producing their venerable New Model 1863 again), this is a sizeable investment for any USSS reenactor. However, it is also the single most critical piece of equipment that distinguishes us from all the other troops marching and fighting out there on the reenacting field.

I will present information based upon my personal experience with Sharps rifles, blank and live ammunition and its manufacture. Please keep in mind that the information is based upon my opinions from my personal experiences. I strongly encourage any of our new owners of Sharps reproductions to first spend a long weekend (Co. B.'s Camp of Instruction provides an excellent initiation) with experienced and safety-conscious comrades before operating a Sharps rifle on your own. The modern Sharps rifle reproductions are well constructed and designed to provide years of entertaining and safe shooting. But like all pieces of machinery, it is essential that the reader be aware that they can be very dangerous if operated carelessly or neglected.

### **The Big 3**

As of this writing I am aware of 3 basic models of modern Sharps reproductions. Sharps reproductions are like a beautiful woman; to those who own one all others pale by comparison. Fellow Sharp Shooters on chat lines has lambasted me when I cited what I had found to be strengths and weaknesses of the various models. It is important to realize that no matter what the brand or make of Sharps, if it does what you want it to do and when you want it to, then you have a good firearm. All of the reproductions will shoot accurately, per my experience. Some of them have idiosyncrasies that need to be tackled before they become consistent shooters. But with patience and persistence you will be rewarded with a beautiful weapon. It is also important to consider what you want out of the weapon. Some USSS fellows are perfectly content to use the rifle to fire blank cartridges at reenactments. A few snide infantry types refer to these rifles as "\$1000 cap guns". There are others of us who want a rifle that will also shoot live rounds for NSSA competitions, shoot targets or even take into the field as a viable hunting rifle. What you need to consider is (a) cost of the weapon, (b) availability (c) design and manufacturing (d) idiosyncrasies inherent in the rifle.

### **The Shiloh**

The Shiloh Rifle Mfg. Co makes the percussion New Model 1863 rifle. This rifle has almost the exact same configuration as the New Model 1859 'Berdan Contract Sharps rifles (except the set triggers are an 'add on' feature). Richard Lawrence, president of Sharps, reviewed the complaints about the NM1859's and made changes to the new arm. They comprised of a new clean out screw (a large filblaster screw to replace the small and recessed screw of the previous model), and 800 yard folding rear sight. The bayonet lug was removed since experience had shown the triangular bayonet was substantially lighter and more useful than the original saber bayonets

issued with the NM1859 infantry rifles. Lawrence had the NM1859 stamps destroyed and the NM1863's serial numbers were prefaced with a 'C' designation. To my knowledge none of the Sharpshooters ever were issued NM1863 rifles. Based upon Coates & McCauley's Civil War Sharps Rifles and Carbines (1) the majority of these rifles were issued to Winfield S. Hancock's Veteran Volunteer Corps. This organization was made up of veteran soldiers who had re-enlisted for a good bounty and the promise that they would be issued a new Sharps or Spencer rifle. Unfortunately, before this potent combination of seasoned soldiers armed with advanced firearms, and led by one of the best generals in the Union Army could be set loose, the Confederacy crumbled and the War ended. Other than a few skirmishes with Mosby's guerillas this "what if" force was quickly mustered out and went home. I have had the pleasure to hold one original NM1863 rifle that was purchased and brought home by a 'Pennsylvania sharpshooter', according to collector Al Pifer.

One of the principle advantages of the Shiloh is that it comes the closest of all the reproductions that match the dimensions and finish of the originals. I was able to swap out my Shiloh lock plate and install the one from my original NM1863 Sharps carbine without any modification or damage to the wood or plate. I was also able to purchase all of the parts so I have a fully functioning Lawrence pellet primer system as well—(now I need to find a way to make those copper Frisbees). Granted, this passes for one of those "lunatic fringe" add-ons, but my Shiloh always turns heads when I show up at a Sharpshooter event. There is also a poetic justice to know that a portion of my rifle is still kicking CSA butt after 140 years. However, when I attempted to exchange stocks between the guns I discovered a ¼ inch gap that prevented the original stock from mating to the Shiloh action and barrel (Curses!). While a relatively overlooked difference, there is a subtle difference in the circumference at the wrist of the original stocks and the modern reproductions. The reproduction stocks tend to be more 'beefy' due to the tendency for the originals to suffer cracks along the wrist from banging the stock on the ground or other indignities of hard service.

Shiloh Sharps were initially manufactured in Farmingdale, New York under the critical eye of Wolfgang Droege. Owner of an aerospace manufacturing company, Droege developed a passion for American history and particularly the role played by the Sharps rifle. He purchased originals, disassembled them, and painstakingly measured each and every part. He then purchased tools and dies and began making reproductions. In the late 1980's he sold the company and it was moved out to Big Timber, Montana. Shiloh sold the New Model 1863 percussion Sharps rifle until the early 1990's when the movie "*Quigley Down Under*" was released. The winning combination Tom Selleck, a great story, and a hand-made 45-110 cal. Shiloh Sharps gripped the shooting community and the eye of well-heeled shooters everywhere. Suddenly dozens of shooters were clamoring for their own copy of Selleck's rifle, or variations of the famous Sharps 'buffalo rifles'. "Quigley Shoots" that stressed 800-1200 yard shooting competitions with the Shiloh buffalo guns became all the rage. In the wave of demand the Shiloh Company simply couldn't keep up. Deliveries for the 'Quigley' and Model 1874 variants jumped from 1 to upwards of 3 years, and the prices climbed at an equally dizzy pace. In 1996 I called their plant in Big Timber to ask about the NM1863 and they informed me that the line was discontinued.

Dave Fulcher first introduced me to the Shiloh Sharps in 1995. Dave was the 'gunsmith' for the New York Company. Since I was having problems with my fussy Pederoli I let Dave diagnose its 'teething problems'. Meanwhile he let me examine his Shiloh. I drew down the loading lever and amazed at the smooth and effortless action. I then perked up when Dave and comrade Ken Katta described how

they had each fired 80 rounds through their Shiloh's without a stoppage during a sharp skirmish earlier in the day. Since I had started popping caps after 20 cartridges and was out of the fight after 30, I began asking how I could get me a Shiloh. Both Dave and Doug Wickland (of the NRA Museum) referred me to a fellow named Dave King whose Georgia business dealt in acquiring and selling used Shilohs. I called him and he referred me to a fellow in Illinois who had just put a Farmingdale up for sale. After agreeing on the price, (gulp) I scrimped and bought the Shiloh-only fired a few times and basically gathered dust in a closet for nearly 20 years. After I pulled 'my' rifle out of its box I have never had a twinge of regret.

The Shiloh fires both live and blank rounds of all sorts of manufacture and I have rarely had a misfire. Usually the problem has more to do with a bad cap or an undersized round sliding up the barrel. The rifle is easy to clean and maintain. It is also the only rifle that has the potential to incorporate original Sharps parts. Lowering the loading lever is smooth and effortless, and the retaining screw (located under the forestock) can be adjusted to suit the amount of tension the shooter desires. The lock and hammer action is smooth and crisp; the trigger pull is crisp with a factory adjusted pull of about 2-3 pounds. When I pulled the lockplate and works from an original NM1863 Sharps and installed it on the Shiloh (and the carbine got the Shiloh lockplate in the deal) the original mainspring was very stiff and the trigger pull increased to a hefty 4 pounds. This can be a problem if your trying to do fine shooting and requires either a set trigger system or a qualified gunsmith to modify. When Al borrowed my rifle at Jackson he discovered this "pulling a mule from the mud" trigger. When it was time to clear weapons, his rifle was the only one that didn't fire. Al initially thought that the hammer had been on half cock. Because of the excessive trigger pull I usually return the Shiloh lockplate to its rightful place before live shooting the rifle.

While most of the NM1863 Shiloh's I have seen feature the single trigger, a few lucky fellows have purchased set triggers that were installed at the factory or afterwards by competent gunsmiths. While only NM1859 Sharps with the set triggers were issued to Berdan's Sharp Shooters, this small historical compromise is essentially unnoticed by shooters and reenactors alike. Of course, with the set trigger option a shooter can adjust the trigger pull to suit his own personal shooting specification. The wood is dark American walnut. The only aspect of the Farmingdale Shiloh that I found unusual was that the patch box lid was too long, extending almost ¼ inch beyond the recess and into the curve of the butt plate. Taking my Dremel tool and a deep breath, I slowly ground off enough metal so it would fit flush. My rifle (like most of the Shilohs) is a single trigger model. To keep the profile of my rifle with the Berdan Contract Sharps, I remove the lever catch from the trigger plate. The other adjustment I made was to reduce the height of the front sight (to hit center on at 100 yards).

Talking to Dan Davis and Jim Boullion of the NSSA U.S. Sharpshooter group (Co. G. 1<sup>st</sup> USSS) I learned that almost all of their 'live shooters' use Shilohs during competitions. Interestingly, they have to disable their set-triggers to compete. For accuracy and speed of loading/cleaning the Shiloh reproductions cannot be bested. I have discovered a few of the progressive members of Co. B. who eventually trade off their old Pederolis to purchase used Shilohs, and I have yet to find any of them who regretted their decision.

### **The Garrett**

Another 'Best of the breed' reproduction Sharps was manufactured at the same time Droege was starting the Shiloh. It was an Italian rifle imported and distributed under Garrett Arms during the early 1970s. Dan Wambaugh purchased a well used Garrett about three years ago.

Unfortunately, with his rise in the ranks from NCO to officer, he rarely has the opportunity to fire the rifle on a regular basis. The slender fore stock and wrist are nearly identical to the originals. But what really sets the Garrett apart from all other repros is that it is the only one to feature a fully operational pellet primer system, (the Shiloh and Italian Sharps lockplates conform to the general profile but lack the intricate machining of the originals). Just why the Garrett people wanted to produce such a no-compromise accurate reproduction of the Sharps rifle is somewhat mystifying. There is virtually nobody making reproduction pellets (they look like miniature copper frisbees) these days. However, this feature and other attention to details really sets the Garrett apart from all the others.

Richard Lawrence invented his pellet primer to replace the Maynard tape primer system that had been a standard feature of the Model 1851 and 1855 rifles. The Maynard featured small drops of fulminate of mercury sealed onto a long metallic tape. The roll fit into a reservoir and a mechanical arm would advance the tape when the hammer of the rifle was drawn back, and position itself over the cone. When the hammer fell it would ignite (sometimes) the charge, which would send a flame down the cone and into the barrel. Lawrence's pellet primer began to replace the Maynard system in some of the early Model 1852 Sharps (slant breech) carbines. It had become the dominant feature in all of the 1859 and later weapons.

Lawrence's system was even more ingenious. To operate the system, a cover on top of the lockplate slid back to expose a reservoir. A brass tube containing 50 of the Frisbee-like pellets was placed over the reservoir and pushed into place by a wooden plunger (affixed inside the brass tube). The cover would be slid home and the system was ready. The inside face of the hammer was machined to fit the pellet pusher arm extending from the lockplate. When the hammer was drawn back to 'full cock' a pellet would pop up from the reservoir and held in readiness. When the trigger released the hammer/pusher arm, they picked up a pellet from the reservoir and pushed it to the cone. If everything worked as advertised, the pellet arrived at the cone at the exact same instant the hammer crushed it. The fulminate of mercury charge inside the copper disk was ignited, firing the rifle.

The main reason why the pellet primer is not featured on any of the modern reproductions is that nobody makes the wafer-like primers. While they were rarely used in combat, a few fellows like Wyman White appreciated their increasing his rate of fire: "*As I was doing my best sending bullets into their ranks having put in use primers on my rifle, so as not have to put caps on, only open the slide, put in a cartridge in the breech, shut the slide and give the rebels another bullet.*" Another advantage of the pellet primer is it enabled the Sharpshooters to fire their rifles during the cold winter months, when other soldiers' fingers would become so benumbed from the cold they drop the cap or struggle to fit it onto the cone.

Like the originals, the Garrett also features the slimmer forestock and the wrist of the buttstock. All of the other Shiloh and Italian models feature stocks that are 'beefier' by comparison.

One of the main complaints that Dan has about his beloved Garrett is that it is handicapped like many of the other modern rifles. The gas sleeve is frozen and the gas plate/check does not push forward far enough to seal the gap between the block and breech. This causes his rifle to quickly foul during live firing. We will discuss this phenomenon later in the article, but it by no means limited to the Garrett rifle alone.

### The Pederosoli

These rifles manufactured by Italian firearms dealer Davide Pederosoli Mfg and imported for sale in the USA by Dixie Gun Works and Navy Arms. From what I have been able to learn about this rifle, the New York boys of Co. B 1<sup>st</sup> USSS were the first reenacting group to purchase them. Dave Fulcher informed me that it took him and his comrades nearly two years of gunsmithing to get the weapons to fire consistently. The biggest problem was the diameter of the cone hole was too small to allow sufficient flame from the cap to reach the powder charge. They drilled the cone out to 3/32 diameter and overcame the ignition problems. They had to pry the gas check loose from the block face and re-machine it so it would easily slide out of the recess. Like the original rifles it is the gas check that seals the gap between the block face and the chamber. Instead of using the original system, Pederosoli relied on a 'floating' sleeve that fits within the chamber. There were also cosmetic problems with fit and finish of the first run of 'Peds' that also needed to be corrected.

### Lever Tension & Blood Brothers

The tension on the loading lever/trigger guard can be adjusted by removing the forearm and tightening/loosening the screw that retains the 'I' bar shaped lever spring. Loosening the screw relieves tension on the trigger guard/lever, this translates in your being able to throw down the loading lever with less force and it speeds up reloading. By keeping the loading lever screw tight the lever has a tendency to slap back into place. At Wolcott Mill I had failed to inform Van Richards about this peculiar characteristic of the Pederosoli until I heard him yelp from the skirmish line. When closing the block, Van didn't move his hand away from the lever as it slammed home, causing his baby finger to become impaled on the protruding set trigger. It had been years since I had been initiated by this 'blood rite', and Van vowed he would heretofore keep his fingers on the OUTSIDE of the loading lever/trigger guard when closing the breech.

### Wood and Finish

One of the other problems I experienced with the Pederosoli Sharps was with the polyurethane finish used to protect the stock. While sitting in a sleet storm on the side of a steep moraine (waiting for a buck to show up), I was shocked to see the finish of my brand new rifle begin to bubble and slough away like dead skin. I took the rifle home and after removing the last bits of finish noticed that the stock was a blonde, open-grained wood. After talking to other shooters I learned that Pederosoli uses a European fruitwood for their stocks instead of American black walnut. To obtain the correct color, I stripped off the rest of the finish and applied WATER BASE dark walnut dye (using 0000 steel wool lightly between coats). The water-based stain doesn't use a linseed carrier/sealer like most of the MinWax products. The oil-based stain seals the wood grain after a single application and this prevents the wood from absorbing any more color. I used 4 applications of the water-based stain to achieve the dark color like the original Sharps. To protect the Shiloh and Pederosoli wood stock and forearm, I apply raw (unboiled) linseed oil after every event. This is especially important if the wood begins to dry out or has been exposed to weather extremes (high heat/cold/damp). I put a few drops of linseed oil on a rag and then run it over the wood until a nice sheen develops. The oil is allowed to sit for 1-2 hours (longer if badly dried) so it can be absorbed into the wood. Sometimes, repeated applications are needed. I try to avoid allowing the oil to accumulate where the barrel band mortise is, as excess oil congeals and makes sliding the barrel bands back into position a real challenge. I use a clean cloth to remove any excess oil. **BE SURE TO DISPOSE OF LINSEED RAGS IMMEDIATELY AFTER USE-DO NOT STORE!** The Colt Firearms factory (and a few Depots filled with linseed treated haversacks) burned to the ground when the linseed oil impregnated rags spontaneously combusted.

### Tales of the 'Sliding' Gas Sleeve

When it comes to shooting the Pederosoli, this is another critical area for the new recruit/owner to pay particularly close attention to. The Italian Sharps designers (at least Pederosoli) decided to rely upon the 'sliding sleeve' insert as the primary system to seal the gap between the breechblock face and the chamber when the rifle fires. The Pederosoli gas check plate is machine pressed into the block and can't be removed unless one resorts to using a cold chisel and brass hammer to pry it loose. The greatest weakness of the 'sliding sleeve' is that it cannot be removed for cleaning. When new it will slide back far enough to touch the rear of the chamber. But no matter how obsessively you clean the sleeve and the recess it slides into, there is always a small amount of black powder crud left behind. The sleeve in turns becomes progressively 'sticky' and is harder to pull back. Finally the sleeve freezes in place and refuses to budge. I tried repeated applications and immersions into penetrating oil and solvents without ever getting the sleeve to break loose again. If a significant gap has developed between the sleeve and the face of the breechblock, a portion of the exploding powder charge will escape through this space. My wife took a video of me firing my Pederosoli during the 1996 Fairfield, PA event and from the amount of smoke jetting out of the block you'd would think I was firing a flintlock. Amazingly, I didn't notice the blowby until slowing the video down.

The blowby of exploding powder and gas causes residue to rapidly accumulate on the face and sliding surfaces of the breechblock. You will begin to notice this problem when the loading lever/trigger guard becomes progressively more difficult to operate. Finally, so much crud has built up that the block will freeze in place. **DO NOT FORCE THE BLOCK OPEN.** I have seen a couple loading levers turned into pretzels after they were 'reefed on' by members of the 'Mr. Universe' squad. If you trickle a bead of canteen water, (or apply a few drops of Break-Free or other lubricant) into the gap between the block and chamber then wait about a minute, this will dissolve the crud and free up the action. Once the block opens, remove the retaining pin and the breechblock. Use a rag or spare trouser leg to give the block face/guides a quick wipe down and re-install. This is a major headache when you are in the middle of a firefight, but the only course of action. Afterwards, be very careful that you **DO NOT PUT YOUR HAND DIRECTLY BENEATH THE RECIEVERWHEN FIRING YOUR RIFLE.** Van got a nasty second-degree burn (like I did at Jackson a few years ago) when excess hot oil splattered out the bottom of the gun and onto his hand. Poor Van, two events and two injuries directly attributed to the Italian Sharps family (my Ped and Dan's Garrett) peculiarities.

Pederosoli makes a 'sleeve removing tool' (sold by Dixie Gun Works) so you can pull the sleeve back part ways (into the empty gap after the breechblock is removed) for cleaning. Terry Pifer designed a similar tool 5 years ago. Terry's tool looks like a tuning fork, except for two small protruding 'feet' on each tine. He pushes the tool (causing the twin tines to contract) into the chamber until they reach the small gap between the gas sleeve and chamber, then they spring outwards to 'grab' the leading edge of the sleeve. Terry works a screwdriver or metal rod between the tines causing them to expand and grasp sleeve tightly. With a few sharp tugs or raps of a hammer, the gas sleeve pops out of the chamber to be cleaned.

Unfortunately, the size and diameter of the sleeve prevents it from being entirely removed from the chamber. Likewise there is always an about a half inch of the sleeve still left inside the chamber that cannot be thoroughly cleaned either. It is this half-inch space that attracts a layer of powder sludge, metal shavings, or rust particles that eventually causes the sleeve to 'freeze'.

One proposal I read about comes from a member of the Sharpshooter Chat line who goes by the nickname “Dragonfly”. He removed the barrel from the block and then extracted the gas sleeve. He then put the sleeve on a lathe and shaved a few thousands of metal off so that the sleeve will drop completely out of the chamber and can be thoroughly cleaned. Nobody among the other reenacting units that I communicate or serve with has done this, but the theory makes sense.

However, for the vast majority of fellows who own Pederoli and other Italian Sharps it is essential that you religiously clean the sleeve and chamber thoroughly after every time you shoot it. This means withdrawing the sleeve with your finger and cleaning the exposed surface with a toothbrush or other instrument. You also have to reach into the chamber and scrub away accumulated powder residue. Rotate the sleeve with your thumb and finger, push the sleeve back and withdraw it again. After each movement inspect the sleeve visually and by feel (use your fingers) for any black residue to appear. Repeat the process until the sleeve is absolutely clean. I am not a great fan of using oil in the internal parts of the Sharps. While oil acts as a preservative and protects the metal from rust, it also attracts and holds crud. I rub a single drop of Break Free CLP between my index finger and thumb, withdraw the sleeve and rub the exterior surface with a light film. I slide the sleeve in/out, rotate it and repeated the process until I know the CLP has thoroughly coated the recess. Other fellows use the more modern gun greases that also appear to work well. Dan and Brian swear by field expedient bacon grease.

If you are buying a Sharps be sure the first thing you inspect is the sleeve and see how smoothly it slides out of the chamber. A few years ago John Gibney excitedly showed me his brand new Pederoli. I promptly stuck my finger into the sleeve and began to work it back and forth. Every time I manipulated the sleeve I could see (and feel) tiny metal shavings gouging into the exterior surface of the sleeve. I told John that he must have been shipped a ‘made on Friday’ rifle, and I pointed out the lines etched into the surface. I suggested that John either exchange his weapon for a new one or have the company remove the barrel, clean the recess and replace the sleeve. With the deep gouges and already fouled chamber this would lead to a quick and complete compromise of the sleeve.

After all the problems associated with gas sleeve I have always wondered why the Italians didn’t treat it with chrome or other modern metal coating, like that used on the bores of our M-16/M-4 and other modern military rifles. I am pretty sure that this would significantly extend the useful life of the sleeve and chamber. If you have a buddy who works in a metallurgical plating plant and owes you a favor, you might try this. If it cures the problem I can give you the names of about 100 Sharpshooters who’d be happy to send their sleeves in for a treatment.

While so much discussion has been made about the ‘sliding’ or ‘not sliding’ gas sleeve, in the book [The Sharps Rifle](#), author Winston O. Smith mentions the original efforts made by Richard Lawrence to improve upon the gas blowby problem in the early Sharps (and earlier the Hall system): “*Subsequent adjustment of the clearance between the block and the barrel breech to compensate for wear was accomplished by driving backward the sleeve which compromised of lining the barrel chamber. This system was not entirely successful, as it still permitted too much gas to escape, and special tools were required in order to adjust the sleeve, or “bouching” as it was then called.*” It is ironic that after 158 years the Italians are using the same flawed system for their modern rifles that Richard Lawrence rejected.

### **The Gas Check—or Problem Solved!**

While the original Model 1851 Sharps leaked gas, the lucky Dragoons who used them (and could compare it to other squadron’s Hall breechloaders), against hostile Indians considered this trade off well worth the trouble.

The 1853 Sharps rifles incorporated the H. Conant patented gas check. Conant’s solution called for a platinum ring fitted into a counter bored recess on the face of the block. The force of the exploding cartridge exerted pressure against the counter bore and forced the ring tightly against the breech, effectively sealing it. In 1859 Richard Lawrence modified the Conant system by eliminating the recessed platinum ring and enlarging the diameter of the recess in the breechblock to fit a flat plate with a flange that fit snugly into the recess. When the cartridge was ignited, the combustion would cause the flange to expand and propel the rest of the plate forward against the receiver, effectively sealing the chamber and allowing for all of the exploding gas and bullet to be propelled up the barrel. This effectively solved the gas-escape problem of the early Sharps and was used on all the Improved Model Sharps. This is also the system incorporated into the Shiloh Sharps.

But instead of an open flange, the Pederoli Sharps has a weird recessed flange/flat washer combination that slides down around the internal cone of the breechblock. Last January Jim Boullion of the Wisconsin Co. clued me in on how to improve the performance on a Pederoli Sharps—without mucking about with the gas sleeve. He got his advice by an NSSA gunsmith by the name of Sam Dobbin. Sam told Jim to remove the gas check, flip it faceplate down and grind down the circular/washer (the part that rests against the breechblock recess and surrounds the protruding block cone). Take very small swipes of metal off until you remove between 1/32-1/16<sup>th</sup> of an inch. Dobbin then inserts a rubber or neoprene 3/4 x 1/16 "O" ring into the space, covers it with grease, and then pushes the gas check down over it. The ‘O’ ring acts like a spring; it maintains enough pressure on the gas check that when fired the check will move forward and seal the breech. Also, the O-ring provides enough ‘play’ that it doesn’t interfere when the block is drawn up and down when reloading. According to Jim his new rebuilt Garret block action stays operational and smooth even after 50 or 60 rounds (both live and blank) have been fired through it.

Dave Goodwin, another NSSA shooter also sang the praises of Mr. Dobbin’s solution: “*Proof: Brand new out of the box my Pedersoli Sharps was good for about 10 or 12 rounds before the action started to seize up due to carbon buildup in the cavity jamming a tight face plate a few microns forward. Carbine was not even functional for competition before the modification. Every 20th or 30th round pull the block, take the plate off with my fingers, apply a little grease to keep the "O" ring from burning out. O rings cheap and plentiful, keep a bag on hand.*”

If you are not sure of your machinist or tooling skills, check with any of the tool and die fellows in the company who might be able to do the work for a cold brew or a box of hand rolled cartridges.

### **Retainers and Barrel Bands**

One of the critical, but often overlooked, pieces of furniture on the Sharps is the barrel bands. While not marked with a ‘U’ or other orienting feature like those found on Springfield rifle muskets, there is a ‘front’ and ‘back’ to each band and woe be to the fellow who doesn’t pay attention when removing them. I have wound up shaving a few millimeters of wood off the fore stock when I attempted to force a reversed barrel band after it had become stuck. I then had to use a wooden dowel rod and a plastic hammer to drive the band

(tapping the band where it joined the steel barrel—NOT THE WOOD FORESTOCK) to free it. When I reversed the band it slid easily down the fore stock and locked into place. It is essential that you remove the barrel bands and fore stock after shooting. Black powder residue and moisture accumulates under the bands and if not attended to will rust the barrel hidden beneath. Despite my obsessive cleaning of my Shiloh this is the only area where noticeable cosmetic damage to the bluing has taken place. Despite applying cold blue preparations (44-40) the area will quickly become rusty in the field unless I keep it oiled and clean. Chronic inattention can cause the barrel surface to become pitted and scored from corrosive action of powder and moisture (creating sulfuric acid).

While not a critical problem, I also discovered that on some rifles the barrel band retainer (these are the three recessed clips on the fore stock) would not sufficiently grasp the barrel band in place after it is slid into place. If the spring hasn't been properly set at the factory for the correct angle it will rest too far in the recess, not grip the edge of the barrel band, which will slide loose. If this happens to the first (smallest) barrel band you could wind up losing it. My friend Steve Partlow inadvertently added to the 'battlefield relics' at Glendale when his barrel band slipped off during the reenactment there.

Since most fellows have attached carrying straps to the second/middle band, this limits the amount of travel and the second band likewise restricts the third band. To correct the problem, slide off the barrel bands, unscrew the retaining screw and remove the fore stock from the barrel. Position the fore stock so that the groove is upright. Using a small brass hammer and punch, locate the small hole that houses the retaining pin and gently tap it free. Using a set of needle nose pliers, position the pliers towards the middle of the retaining spring and GENTLY push the pin end downwards to slightly increase the angle between the pin and end of the spring. Flip the fore stock over and using the brass hammer GENTLY tap the pin and the spring into the mortise. This procedure ensures the barrel bands will stay snug.

### **Screws and Screw Drivers**

The lockplate, trigger plate and stock are all held in place by large screws. One of the quickest ways to earn the ire of an Ordnance officer or "old salt" sergeant is to grab the first screwdriver from your woodshop or toolbox and begin reefing on the screw head. I would recommend that BEFORE you remove a single screw that you trot over to the nearest gun shop and purchase a set of gunsmith screwdriver and bits. Most 'flathead' screwdrivers have bits shaped like a V, whereas the rifle screw heads feature squared-off ends. When force is applied with the V-shaped bit, there is a tendency for the bit to skip out and strip the screw slot or gouge the wood.

It is important to remove the screws at least twice a season to examine them for dirt or rust build up. I twist each screw inside a rag soaked in gun solvent. Afterwards they are dried and the shaft and threads spun in an oiled rag (1 drop in a 3x3 inch rag) to lightly coat them. Where there is rust present in the grooves, I will use 0000 steel wool to remove the rust, wipe it with a cleaning patch soaked in 90 proof methyl alcohol. Then (use latex gloves) wipe the effected area with a cold blue (44-40) patch, rinse with water (to stop the chemical action) and then wipe off with a clean patch. Use the oil cloth on the treated part and then screw the fasteners back into their respective holes.

While you have the lockplate off, examine the stirrup, tumbler, mainspring and other parts. It is always a good idea to take a

toothbrush and give the lock and parts a good scrubbing with 'Mouse Nitre' or other solvent to clean out any accumulated crud. It is important to make sure that the parts are absolutely dry before reassembling the lock to the stock (a hairdryer or heat gun will 'chase' out moisture and heat the metal to improve evaporation of any tiny specks of H2O. Afterwards put a tiny drop of oil on the saddle of the moving parts to keep them lubricated. Any excess oil needs to be absorbed by a rag otherwise oil serves as a magnet for crud. Some of the fellows use gun grease, which is heavier and will stick to the surfaces better than the oil will. But go easy on the grease.

### **The Front sight.**

If you ever decide to shoot your Pederosoli Sharps you will need to take a small file with you to the range. The brass insert used for the front sight stands well above the base, and if you try to shoot before modifying it you will be scratching your head wondering where all the bullets went. Before doing any filing on their rifles, Terry and Bob first wrapped tape (masking, electricians appear to work well) two-three times around the barrel to isolate the sight and protect the metal surface from any accidental gouges. They set the rifle in a vise or immovable rest and began to sight the rifle in. Based upon where the bullet impacted, they would gently shave a few millimeters off the brass sight. This causes the barrel and the point of impact to rise up slightly. The boys would make the corrections, fire another shot and make more corrections. Eventually they had the front sight adjusted so that it would be 'dead on' at 100 yards. Another reason to adjust the front sight is if you are to enhance your USSS impression by putting a modified bayonet on the end of your Sharps. The unmodified front sight sits too tall (and the base too wide) that prevents the bayonet and locking rings from passing over it.

### **The Armi-Sport—Honorable mention?**

Actually there are two versions of this controversial rifle. In 1998 Mike Fahle informed me that another company was proposing to make a reproduction Sharps that was to be like the Garrett, complete with a functioning Lawrence pellet primer. And the best thing was that it was to sell less than the \$1000 Pederosoli. Since Shiloh was still not making NM1863's and the average price for one ranged from \$1100-1400, this sounded too good to be true. And that was the problem, both of us have been around long enough to know that "if something sounds too good to be true, *it's not*", but we were willing to bide our time and harbor a small hope that the new gun would deliver on the promise.

I encountered the first Armi-Sport rifles during the Grant-Lee event at Brandy Station in 1999. Benjie Hansen of the NY Company was starting to speak in tongues after his rifle stopped firing after 5 shots—all weekend. Dan and I encountered fellows from the 13<sup>th</sup> PA Rifles "Bucktails" later that fall at South Mountain bemoaning their new rifles. The corporal we were serving with was simply pouring powder down the barrel and firing the weapon as a muzzle-loader. I can still hear the original Bucktails spinning in their graves on that one.

The Ohio Company had a fellow named Ray, who was briefly the armorer for them. A couple years back I ran into him at Hastings and he informed me that Armi-Sport had retained him to correct all the problems that they had been having with the early models. According to Ray he made corrections (and modifications) and submitted these to the Italians. They supposedly implemented the recommendations and "all problems solved". Despite Ray's cheery outlook, I haven't had the opportunity to talk with anybody who owns one of the new Armi Sport Sharps. But considering all the problems that they have had, I am very reluctant to recommend them to anybody. When I was at the Antietam 140 I got a chance to examine some of them. The new models have the American Black Walnut stocks, the fit and finish looks better than even the Peds. But I am still mighty shy about recommending them ( for \$875 a copy) until I get more up to date information about their performance from shooters/reenactors.

### **Conclusion (for now)**

The best breechloading firearm to come out of the Civil War was the Improved Sharps NM1859 rifle. Its rate of fire and accuracy were outstanding for the time. Also, in the hands of a highly trained marksman, the little Sharps could send rounds out to  $\frac{3}{4}$  of a mile away. For us modern reenactors, we have a choice between 4 reproductions of the famous Sharps rifle to choose from. Depending upon your quest for authenticity, your particular interests in firing live or blank ammunition and the size of your pocketbook, you can obtain one of these little beauties. If you have an opportunity, go to the Mansfield Ohio CW show or Horse Soldier (in Gburg) and ask the proprietor to pick up and examine an original Sharps rifle. Despite the modern steel, beefed up wood and other technological improvements in our reproductions there is a feel to the original Sharps when you bring it to your shoulder that is unlike any other rifle. When I do so I still recall the words of an anonymous fellow who said in 1862: "*now here is a rifle worthy of the Sharpshooters*". I am certainly not going to argue that sentiment!!

I can't believe that this article originally appeared in the Company 'B' newsletter 7 years ago. Since I wrote my original article I have run into more and more fellows who now carry the Armi-Sport 'Berdan' Sharps. Most of the fellows who carry Armi-Sports are satisfied with their performance. I am going to post this somewhat antiquated article on the Co. C 2<sup>nd</sup> USSS website. Please feel free to add your experiences and comments in response this article.