Cleaning the Armisport Pattern 1853 Enfield Rifled Musket

by

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I had been in the “hobby” for about a year before I was able to purchase my first musket. It came to me through an estate sale, and there was no documentation (manual, parts list, etc). I did myself a favor and listened to my “mentor” about “do’s and don’ts”…especially the part about buying “used” weapons. He did me the courtesy of inspecting the weapon, and he found it to be in very good condition.

“Field-cleaning” a musket was already part of my experience, thanks again to my “mentor”. Up to this point, I “rented” my musket from my “company quartermaster”. “Field-cleaning” was expected after the Saturday engagement, but I was not required to clean it after the Sunday engagement. This being the case, I didn’t have any experience in completely tearing the musket down, cleaning it and reassembling it.

Now that I had my own, I needed to learn to take care of it, for a couple of reasons. First, IT COSTED A LOT! My “comptroller” wasn’t thrilled about my buying it in the first place, so I had to make sure that it stayed safe, reliable, and lasted. Second, with more than a few years of military experience, trust me when I say that a “DIRTY” WEAPON IS A “BAD OP”. A clean, well-maintained weapon is safe, reliable, and will never disappoint you. A POORLY MAINTAINED WEAPON IS AN ACCIDENT WAITING TO HAPPEN…AND SINCE YOU’RE CLOSEST TO IT, YOU’RE FIRST IN LINE TO GET HURT.

The first time I tore my musket down, I was pretty concerned that I wouldn’t be able to get it back together, that it wouldn’t work, and/or that I would have “extra” parts left over. So I took my time, thought it through, and laid the parts out in sequence as I took them off and cleaned them. Truth of the matter is, it wasn’t anywhere near as difficult as I’d imagined. This document is the result. Hopefully, it will eliminate any trepidation you may have about the “teardown/cleaning/reassembly” of your Armisport P-1853 musket by taking you step-by-step through the entire process.

Before you get started, I recommend that you take the time to read through the whole procedure. Set yourself up in a comfortable, well-lighted area where you won’t be distracted (my bedroom was my first choice, because nothing ever happens there…but then my Missus saw gun parts spread all over her “doo-VAY”, and, well, let’s just say that I now work on my back porch…). If you have never done it before, give yourself a couple/three hours. Relax, read each step, think it through in your head, and then do it.

I’ve written a brief section on safety so you don’t hurt yourself, and a list of things you’ll need to have. If there’s something you need to worry about before you do a step, I’ll remind you. So relax, and have fun. It’s not magic.
WARNINGS

1. TREAT EVERY WEAPON AS IF IT WERE LOADED. (I am continually amazed every time someone shoots himself or someone else with an “unloaded” gun while he’s cleaning it.)

2. IF ANY “SMOOTH” PART OF THE RAMMER IS VISIBLE AND YOU DON’T HEAR THAT “PING”, THIS COULD BE A “BAD THING”, AS IT MEANS THERE IS SOMETHING IN THE BARREL THAT AIN’T SUPPOSED TO BE THERE (SAY, A POWDER CHARGE AND/OR BULLET…). CAREFULLY WITHDRAW THE RAMMER, PLACE THE WEAPON WHERE AN ACCIDENTAL DISCHARGE WILL CAUSE NO HARM, AND CALL SOMEONE WHO CAN HELP CLEAR YOUR WEAPON.

3. DO NOT MESS WITH ANY OF THE PIECES/PARTS OF THE LOCK MECHANISM. THERE’S NOTHING IN THERE YOU NEED TO FOOL WITH, AND (when I’m ready) I’LL TELL YOU HOW TO CLEAN THIS “ASSEMBLY” WITHOUT TAKING IT APART.

4. “WITCH’S BREW” CAN BE BAD JU-JU, UNLESS YOU -
   - DON’T SMOKE WHILE CLEANING YOUR WEAPON. (No, this is not a diatribe against smoking…if you’re old enough to shoulder a musket, then you’re old enough to understand the evils of tobacco. Besides, I’m an addict myself. Point is, “Witch’s Brew” is 1/3 isopropyl alcohol, so if you feel the need to “light up”, step away from your work and wash your hands before stepping into “flavor country”…if you don’t, you may “light up” in a way you didn’t intend…)
   - DON’T HEAT “WITCH’S BREW” – (Water is a great cleaner, and works even better if it’s hot – everybody who has a passing experience with a “hot” bath or shower knows this. “Witch’s Brew” is 1/3 isopropyl alcohol…heating it may cause you to “light up”, even if you not a smoker…)
   - KEEP “WITCH’S BREW” OUT OF REACH OF CHILDREN. (In addition to the isopropyl alcohol, “Witch’s Brew” also contains hydrogen peroxide and Murphy’s Oil Soap. Mixing a child with any one of these components would be bad enough…put all of them together, and it only gets worse).
   - KEEP “WITCH’S BREW” OUT OF YOUR EYES. (You may even want to consider wearing goggles if you have not yet mastered the concept of “in it, NOT at it”. That being said, DEFINITELY WASH YOUR HANDS BEFORE TOUCHING YOUR EYES… “hurt so bad I couldn’t cry”, or “hurt so bad I peed myself…TWICE”) doesn’t begin to do justice to what you’ll feel if this stuff gets in your eyes…)

5. ONCE THE NIPPLE IS SEATED (STOPS TURNING), DO NOT TIGHTEN IT ANY FURTHER! OVER-TIGHTNING MAY RESULT IN THE NIPPLE THREADS SEIZING WHEN NEXT THE MUSKET IS FIRED!
6. DO NOT SQUEEZE THE TRIGGER WHILE THE LOCK MECHANISM IS IN THE “HALFCOCKED” POSITION. THE LOCK MECHANISM WILL BE DAMAGED.

7. DO NOT “BOUNCE” THE MUSKET IN THE ‘HALFCOCKED” POSITION WHILE IT IS SUSPENDED BY THE TRIGGER. THE LOCK MECHANISM WILL BE DAMAGED.

8. DO NOT STRIKE THE HAMMER THUMB WITH EXCESSIVE FORCE IN THE “FULL COCKED” POSITION. THE LOCK MECHANISM MAY BE DAMAGED.

9. DO NOT ATTEMPT TO USE A MUSKET WITH NON-FUNCTIONAL “HALFCOCKED” OR “FULL COCKED” POSITIONS. SERIOUS INJURY OR DEATH TO YOURSELF OR OTHERS MAY RESULT FROM ACCIDENTAL DISCHARGE OF THE MUSKET.

Required Materials

- Black Powder Solvent (“Witch’s Brew” - Just take equal parts of Murphy's Oil Soap, hydrogen peroxide and rubbing alcohol and mix them in an old milk jug with a screw on lid. You can also use automotive windshield cleaner, or boiling water) – used to dissolve black powder residue inside the barrel and around the external area around the cone.
- Bucket – catches solvent used to dissolve black powder residue
- Small standard (flat-tip) screwdriver – removal/reinstallation of hardware
- Nipple (cone) wrench (you can also use a small crescent wrench or vise-grips)
- Center punch (nail set, can also use a small finishing nail) – removal/reinstallation of trigger guard drift pin
- Cleaning jag (or “worm”) – threads onto end of rammer, accepts cleaning patches for swabbing barrel
- 10-12 Cleaning patches – Used to clean, dry, and lubricate barrel (2-3/8” square, cotton flannel)
- Cotton swabs (“Q-Tips) – used to clean “hard-to-reach” places like the lock mechanism and threaded cone hole
- Pipe cleaners – used to clean “hard-to-reach” places like the flash hole and cone
- Small wire brush (or toothbrush)
- Gun oil (Hoppe’s, Remington, etc.) – used to lubricate barrel, lock mechanism, etc.
- “Bore Butter” (or “Patch Lube”) – all metal surfaces EXCEPT the lock mechanism
- 2-3 Clean rags – used for oiling/wiping down musket after reassembly, removing Never-Dull residue, applying furniture oil, wiping off “Bore Butter”, and to use as an apron when you come into the house so’s you Missus can’t see that you’ve been wiping your hands on the “Dockers” that your not supposed to be wearing...
- Strong Flashlight – used to look down the bore and see if you ACTUALLY got all the “icky-nasties” out

Optional Materials

- 6-12 inches aquarium air tubing - used to seal breech end of barrel by “plugging” cone; allows solvent to remain in upright barrel and “cook” residue
- 1 clothespin – crimps the aquarium tubing
• 1 quart of REALLY HOT water (if you’re not using “witch’s Brew” or windshield fluid)
• Oven mitt – required only if using boiling water as the solvent (the barrel will get hotter than Jack-ass Flats on nuke day...been there, done that, and once was indeed enough!)
• Muzzle Loader Lube (or “Bore Butter”) – used to wipe down all exposed metal surfaces after cleaning
• Scotch-Brite pad – for removal of “stubborn” carbon deposits and surface rust.
• Never-Dull (or Brasso) – for polishing brasswork
• Liquid furniture oil (NOT wax) – keeps stock from dry-rotting

**STEP-BY-STEP PROCEDURES**

**WARNING**

TREAT EVERY WEAPON AS IF IT WERE LOADED. *(Step 1. is making sure that it ain’t.)*

**STEP 1:** Make sure your musket is unloaded. The hammer should be in the “down” or “fired” position. Draw rammer, and insert the “tulip” into the muzzle. Slowly insert the rammer the full length of the barrel. The only part that should be visible is the “threaded” end of the rammer. Draw it back out by the “threaded” end about 1 inch, and let it drop. You should hear a “musical ping”. Withdraw the rammer, and set it aside.

![Image of a musket and rammer]

**Note**

If all you see of the rammer is the threaded end and you didn’t hear the “Ping”, that’s OK. It just means that your musket needs cleaning…but then we already knew that. Withdraw the rammer, and set it aside.

**WARNING**

IF ANY “SMOOTH” PART OF THE RAMMER IS VISIBLE AND YOU DON”T HEAR THAT “PING”, THIS COULD BE A “BAD THING”, AS IT MEANS THERE IS SOMETHING IN THE BARREL THAT AIN’T SUPPOSED TO BE THERE (SAY, A POWDER CHARGE AND/OR BULLET...), CAREFULLY WITHDRAW THE RAMMER, PLACE THE WEAPON WHERE AN ACCIDENTAL DISCHARGE WILL CAUSE NO HARM, AND CALL SOMEONE WHO CAN HELP CLEAR YOUR WEAPON.
STEP 2. – Remove the sling, and set it aside. Of course, if you don’t have a sling (or you do and you’ve already removed it), please feel free to go on to the next step. By the way, remember how you took it off…for me, “re-slinging” is a lot harder than putting the musket back together.

STEP 3. – Prepare to remove the lock mechanism. To do this, first make sure that the hammer is in the “half-cock” position. Then, roll the musket over so that the lock-plate is “down”. You’ll see two “slot-head screws” which hold the lock mechanism in place. Using a standard (flat-tip) screwdriver, unscrew each about 5-6 revolutions. Then press down on both of them. This will “pop” the lock plate from its cutout. Then remove both screws and set aside.

STEP 4. – Remove the lock mechanism. To do this, roll the musket over so that the lock-plate is “up”. Then, grasp the hammer and GENTLY pull up. You may need to “wiggle” it a bit…relax, you’re not going to hurt it. Once it comes free, remove the hammer screw and hammer from the lock mechanism, then set them aside.

WARNING

DO NOT MESS WITH ANY OF THE PIECES/PARTS OF THE LOCK MECHANISM. THERE’S NOTHING IN THERE YOU NEED TO FOOL WITH, AND (when I’m ready) I’LL TELL YOU HOW TO CLEAN THIS “ASSEMBLY” WITHOUT TAKING IT APART. (If you decide that you just won’t be able to sleep unless you disregard my “If you don’t know what it does, don’t screw with it” WARNING and take it apart anyway, have a ball. But before you do, please call me first, let me know where you are, and give me enough time so I can sell tickets to the next episode of “The Monkey and the Football”, because you ain’t putting it back together once it’s apart, and a LOT of people will pay to watch you try.)
**STEP 5.** Prepare to remove the trigger guard. To do this, you will first need to remove the drift pin. There is a small hole that is located in the space occupied by the lock mechanism, and goes through to the outside (left side) of the stock. Using a small center punch, a nail set, or even a small finishing nail, push the drift pin through from the lock mechanism side until it exits out the left side of the stock.

**Note**

This is a very small pin, and you DON’T want to lose it. Take your time, make sure you’ve got positive control as soon as you’ve got enough out to get hold of, and set it where you can find it.

**STEP 6.** Remove the trigger guard. To do this, roll the musket over so that the trigger guard is “up”. You’ll see two “slot-head screws” which hold the trigger guard in place. Using a standard (flat-tip) screwdriver, remove both screws and set aside. Then, grasp the trigger guard and GENTLY pull up. You may need to “wiggle” it a bit…relax, you’re not going to hurt it. Once it comes free, set it aside.

**STEP 7.** Prepare to remove the trigger. To do this, roll the musket over so that the trigger is “down” (or, if you prefer, the barrel is “up”). You’ll see a “slot-head screw” in the barrel tang (breech end). This screw seats the breach end of the barrel in the stock, and is secured in place by the trigger. Using a standard (flat-tip) screwdriver, remove the screw and set aside.
STEP 8. – Remove the trigger. To do this, roll the musket over so that the trigger is “up” (or, if you prefer, the barrel is “down”). Grasp the trigger and GENTLY pull up. You may need to “wiggle” it a bit or even use your screwdriver to “get it started”...be gentle, but relax, you’re not going to hurt it. Once it comes free, set it aside.

STEP 9. – Remove the barrel bands. To do this, roll the musket over so that left side is “up”. Each of the bands is secured using a “slot-head screw”. Starting at the muzzle end of the barrel, loosen the screw of the first band using a standard (flat-tip) screwdriver. Once the band is “loose” slide it off of the musket and set it aside. Repeat this step for both the remaining “middle” and “breach-end” bands.

STEP 10. – Remove the barrel from the stock. To do this, roll the musket over so that barrel is “up”. Carefully lift the barrel by the muzzle out of the stock. Set both the barrel and stock aside. (If you need a smoke, a stretch, or just a plain old “take :10”, this would be a good time to do it. The next step starts the “getting nasty” phase of cleaning, and you’re going to be “nasty” for a bit...).

STEP 11. – All right...let’s get the nastiest part taken care of, and that would be cleaning the barrel. First, get that piece of “optional” aquarium tubing I mentioned way back in the “stuff you need” list. “Work it” onto the cone.

Note

This step isn’t required...I know folks what just let the solvent run out as they pour it in. But the “cool” part about using aquarium tubing is that you can pinch it off, which lets your solvent stay in the barrel and “cook”.
WARNING

BEFORE YOU GO ANY FURTHER, WHICH SOLVENT ARE YOU GOING TO USE? IF “HOT WATER” IS YOUR THING, THIS WOULD BE A GOOD TIME TO GET SOME BOILING (IF YOU HAVEN’T ALREADY DONE SO. AND IF YOU HAVEN’T DONE SO, THEN YOU DIDN’T READ THROUGH THIS MESS LIKE I TOLD YOU TO BEFORE YOU STARTED, DID YOU? NAUGHTY, NAUGHTY…). BY THE WAY, YOU’LL WANT TO USE AN OVEN MITT, OR SOMETHING THAT WILL KEEP YOU FROM BURNING THE BEJAZZUS OUT OF YOUR HAND WHILE YOU’RE HOLDING THE BARREL.

IF YOU’RE PARTIAL TO “WITCH’S BREW” OR WINDSHIELD WASHING FLUID, THIS WOULD BE A GREAT TIME TO GO BACK TO THE “WARNINGS”…ESPECIALLY IF YOU DIDN’T BOther TO THE FIRST TIME! NO, I ’M NOT KIDDING, GO BACK AND REFRESH YOUR MEMORY!

STEP 12. – Place the breach end of the barrel into your bucket. (If you’ve elected to use the aquarium tubing, go ahead and pinch it off with the clothespin…it’ll keep your solvent in the barrel).

Note

If you’re using “hot water”, now would be a real good time to put that oven mitt on the hand that’ll be holding the barrel…I’m not kidding, it’s going to get “hot”.

STEP 13. – Carefully pour your “solvent of choice” into the muzzle end of the barrel, and fill it up to about ½ inch from the muzzle. This can be a bit of a sticky wicket…be patient, relax, take your time. For them of you what use hot water, BE CAREFUL. If you haven’t mastered the art of “in it, NOT at it” yet, take my word that the oven mitt won’t stand up to a direct “douching” (as the French would say) with hot water, and a trip to the ER is what you want to avoid. After you’ve filled the barrel with your “solvent of choice”, prop it up so that it stays in the “muzzle-up” position, and let it work. While the “solvent” is taking care of the inside of the barrel, the other parts will require some “direct action” by you.

Note

From this point on, it doesn’t matter what the solvent is, they all work the same….well, maybe. If you’re using “hot water”, you may have to empty and refill the barrel again to loosen up most of the “gunk” (after all, it’s just water…). If you’re using “Witch’s Brew”, once should be plenty. I can’t speak for using “windshield cleaner”…you know, that blue stuff what goes in your car. My “mentor” says that it works great, and I’ll take his word for it…just haven’t tried it myself…yet.
STEP 14. Pick up the stock and take a REALLY good look at it, ESPECIALLY the part that is hidden by the barrel, AND the cutout where the lock mechanism lives. If you field clean your musket with water at events (if you’re in my unit, YOU WILL clean your musket immediately after the Saturday fight, and before you do anything else!), it’s inevitable that you’re going to “have an accident” and dribble some water outside the barrel. Also, if you have been just letting the water run through the cone, you WILL get some small amount of water into the lock mechanism. The barrel lay and the lock cutout attract water as a magnet does iron filings. The reason you need to check these two areas especially is that water will cause damage that won’t be seen until too late. The wood should be every bit as tough in these two places as it is on the outside. If it isn’t, you’ll be needing to re-invest in a new stock.

STEP 15. If the stock passes muster, the next thing to do is oil it. I recommend a good quality furniture OIL, not polish. The oil will revitalize the wood, and go a long way to keeping water from doing damage to it, ESPECIALLY in the two above-mentioned areas. Do not be afraid to lay it on thick, and make sure to get some in ALL of the nooks and crannies…you might need a Q-tip. Let the oil set for a minute or so, then take a rag and get as much excess off as you can (remember to use a Q-tip for those “hard-to-reach” spots. If your stock is outfitted with brass butt-plate and nose cap, break out some “Never-Dull” (or “Brasso”) and shine those bad boys up.

STEP 16. Since you have the “Never-Dull” (or “Brasso”) out, you may as well go ahead and give the trigger and trigger guard the same treatment. (of course, this is if your model has the brass trigger and guard…if not, proceed to the next step).

STEP 17. For all the remaining “hardware” EXCEPT THE LOCK MECHANISM, rub it down real good with a piece of Scotch-Brite, and wipe it off with a clean rag. For screws, take a wire brush and knock out all the…stuff, yeah, that’s the word…stuff in the threads. When you have all of the hardware cleaned up, take just a touch of “Bore Butter” (or “Patch Lube”) and rub it all over the metal. Once you have done this, take a rag and wipe all the parts free of excess. The idea is to get just a very light coat…“too much” lube will cause more problems than “not enough”.

STEP 18. “THE DREADED LOCK MECHANISM”. Folks, the lock mechanism is not a 17-jewelled Swiss movement, but it is nonetheless a finely crafted piece of machinery. Unless you know what you’re doing (no, REALLY), DO NOT MESS WITH ANY OF THE PIECES/PARTS OF THE LOCK MECHANISM. THERE’S NOTHING IN THERE YOU NEED TO FOOL WITH. (If you decide that you just won’t be able to sleep unless you disregard my “If you don’t know what it does, don’t screw with it” WARNING and take it apart anyway, have a ball. But before you do, please call me first, let me know where you are, and give me enough time so I can sell tickets to the next episode of “The Monkey and the Football”, because you ain’t putting it back together once it’s apart, and a LOT of people will pay to watch you try.}
First, your can rub down the outer (crowd-pleaser) side of the lock plate with “Scotch-Brite”.

Second, “do no harm”. Look the workings over, and see how much cleaning is required. (I take my weapon completely apart after EVERY event, and despite 80 or more rounds during an event, the inner workings are usually as clean as they were just after the previous cleaning). If the inner workings are clean, a clean rag will be all that is needed (and maybe a Q-tip) to get the dust out. All that is necessary will be “a touch” of gun oil on all the moving parts. Remember that “too much” is a lot worse than “not enough”; as excess oil LOVES dust, and will eventually gum up the works.

If, on the other hand, the workings haven’t seen the light of day since the musket left the factory, chances are that some more serious cleaning measures will be required. One way is to get a pan of water boiling, then remove it from the heat and add a small amount of dish soap. Place the whole lock mechanism in the water, and let it soak for a while (its not going to hurt it). After a bit of a soak, most of the nastiness should be removed, or can be worked at using a Q-tip...if not repeat the process. After you have it clean, rinse it in cold water, then pour a bit of rubbing alcohol over it...this will pull the water away, and evaporates without leaving a residue. Then wipe down with a clean rag and oil the moving parts as above, and then apply a light coat of Bore Butter to the outside of the lock plate, and wipe off the excess just like you did for the other metal parts.

STEP 19. – And now, the “main event”: cleaning the bore. Place the free end of the aquarium tubing into your catch bucket, and release the clothespin crimp. The “solvent” will trickle out the end of the tube, carrying away all the “icky-nasties” with it into the bucket (don’t forget, “in it, NOT at it”). What will be at first coming out of the tube will be blacker than the space between stars, but as the barrel is emptied, the solution will actually be pretty clear toward the end. If it’s not, no drama...repeat Step 13. again (and don’t forget the oven mitt if your using hot water...).
STEP 20. – Use your nipple wrench to remove the nipple (“lefty loosey, righty tightee”). Place the nipple into the bucket of cleaner that just came out of the barrel. “What’s that you say? Why am I putting something I want cleaned into that bucket full of… “stuff”? If you’re using “witch’s brew”, there’s still a lot of cleaning action in it, and you’ll want to let the nipple continue to “soak” while you’re working on the barrel.

Note

As an alternative to putting the nipple in the bucket, you may wish to consider pouring some of the “witch’s brew” into a smaller container, and placing the nipple in it. If you forget that the nipple is in the bucket, you’ll probably remember that it was - right after you’ve dumped the bucket…not that I’ve ever done that, of course…

STEP 21. – Thread the cleaning jag onto the threaded end of your rammer. Take two of the cleaning patches and put them together, one over the other. Fold them in half (opposite corners) so that they form a sort of triangle.

STEP 22. Push one of the “folded corners” through the opening of the cleaning jag. The “open” (not folded) part should face back towards the rammer. Once you have a small part of the patches through the hole, give the “small” part a tug. Then fold the “big” part back over the end of the top of the cleaning jag.
STEP 23. Insert the “patched end” of the rammer into the muzzle and then run the rammer all the way into the barrel until it bottoms out. Rotate the rammer clockwise (“righty tightee”). Continue to rotate the rammer in that direction while pulling it back out of the barrel. (The reason for the “rotation of the rammer” is that there is a tendency for the cleaning jag (or worm) to unthread itself from the rammer. Rotating the rammer accomplishes two things...first, it adds a little extra “scrubbing action”, especially at the breach end, and second, it acts to continuously screw the rammer into the cleaning jag. You do not want to even contemplate retrieving an unthreaded cleaning jag/patch combination from the inside of a barrel...) 

STEP 24. After you have run the first set of patches in and out, inspect them to see if they’re clean (yeah, like THAT’s gonna happen...). The first set will definitely be “wet and nasty”...chances are that you’ll need to run another set (or three) through the bore. Before you set up for “the second run”, break out that flashlight, and “eyeball” the bore. You’ll probably notice some “icky-nasty” way down there around the bore screw. Yep, it’s a pain in the hine-parts, and yep, it needs to come out. Repeat STEPs 21 through 24 until you are blinded (or at least until your patches emerge looking like (or better than) the picture. Then run the rammer and clean patches all the way into the barrel, then pull it out an inch (or until the patch/jag is just beyond the flash channel).

STEP 25. The next step is to clean the nipple seat. For this, you’ll need a nipple pick, and a couple of Q-tips. First, dip a Q-tip in some of that left-over “witch’s brew”, and go to work on the threads and inside of the nipple seat. Then use the clean end to remove as much of the carbon as will come out. The nipple pick can be used to break up exceptionally heavy fouling. Repeat as required until ALL of the fouling has been removed from the threads and the nipple seat.

STEP 26. Next, dip a pipe cleaner into the leftover “witch’s brew”, and run in into and out of the flash channel. Then use the clean end to remove the loosened carbon. Repeat as necessary. This is also the time that you’ll clean away all the carbon from the outside of the nipple seat. Use the nipple pick (and/or a small wire or tooth brush) to remove any remaining carbon deposits.
STEP 27. Apply a drop of gun oil to a clean Q-tip, and run it around the inside of the nipple seat being sure that ALL SURFACES AND THREADS are covered. Then apply a drop of gun oil to the end of a clean pipe cleaner, and run it through the flash channel. DO NOT USE MORE THAN A DROP OF OIL! OVER-OILING WILL CAUSE A MIS-FIRE. Once you have accomplished this, “bottom out” the rammer, give it a quick twist, and extract it from the barrel.

![Image of cleaning process]

STEP 28. Apply a couple of drops of gun oil to the patches. Insert the “patched end” of the rammer into the muzzle and then run the rammer all the way into the barrel until it bottoms out. Rotate the rammer clockwise (“righty tightee”). Continue to rotate the rammer in that direction while pulling it back out of the barrel. Remove the oiled patches, and replace with dry patches, then run the rammer all the way into the barrel until it bottoms out. This will remove and excess oil that may have been left behind by the oiled patches that you just ran through the barrel. Leave the rammer fully “bottomed out” in the barrel. Also, take a clean patch, fold it, and “worry” it into the cone seat.

![Image of cleaning process]

**Note**

If your barrel is “blued” and you want it to stay that way, skip this next step, as it’ll take the bluing off after you’ve cleaned your musket a couple of times. Simply wipe it down with a rag and some gun oil, then wipe off the excess with a clean rag.

That being said, I have read (where eludes me at this writing) that soldiers used “brick dust” or fire ash when cleaning the outer metal parts of their musket, and this would also have made pretty short work of “blued” barrels. My “defarbed” Enfield arrived with a “blued” barrel; after three years of cleanings, the barrel is just about as “white” as a Springfield; I think that my rifle is now even more “defarbed” than when I took it out of the box (not to mention the number of “character marks” in the stock which resulted from countless “hits”…)
STEP 29. Now it’s time to tackle the outside of the barrel. Rub it down real good with a piece of Scotch-Brite, and wipe it off with a clean rag. Then take just a touch of “Bore Butter” (or “Patch Lube”) and rub it all over the metal. Once you have done this, take a rag and wipe all the parts free of excess. As with all the other hardware, the idea is to get just a very light coat...“too much” lube will cause more problems than “not enough”. Remove the rammer, remembering to rotate it in the “righty tightee” direction, and the patch that you “worried” into the nipple seat, and set barrel aside for the moment.

STEP 30. Remove and discard the patches from the cleaning jag, then remove the cleaning jag (or worm) from the rammer. Rub the rammer down real good with a piece of Scotch-Brite, and wipe it off with a clean rag. Then take just a touch of “Bore Butter” (or “Patch Lube”) and rub it all over the metal. Once you have done this, take a rag and wipe all the parts free of excess. Then set this aside, too.

STEP 31. Reseat the barrel into the stock. To do this, place the stock on your lap so that the barrel lay is “up”. Place the barrel tang (that’s the little tail with the hole through it at the breech end) into its cutout, then lay the barrel into the cutout carefully from rear to front.

STEP 32. Reinstall the barrel bands.

Note

These are not interchangeable! If you look at all three together, they are different sizes. The one with the swivel link attached is the smallest, and goes on last. This leaves only two that you have to figure out, size-wise. Bottom line is that they came off easy, and they should go back on the same way.

Place the largest band over the muzzle, with the screw head facing away from the lock plate side, and slide it down the stock until it sits against its cutout in the stock. Repeat the process with the next band, and the then the last band with the swivel link. Again, all the screw heads should be on the side opposite the lock plate. Tighten them all in the order in which you put them on (i.e., “big, medium, then small). Tighten each band down until snug...DO NOT OVER-TIGHTEN!
STEP 33. Roll the musket over so that the barrel is “down”. Insert the trigger into its corresponding “slot” in the stock. Holding the trigger in place, roll the musket back over so that the barrel is “up”. Insert the tang screw through the barrel tang, and then thread it by hand a couple of turns into the trigger. Finish screwing the tang screw in with a screwdriver, remembering DO NOT OVER-TIGHTEN! (an 1/8 to a ¼ turn past “snug” is fine).

Once you have the drift pin inserted, roll the musket back to the “barrel down” position and insert the two trigger guard screws into their corresponding holes in the trigger guard, and start them into the stock. Finish seating them with the flat tip screw driver. Remember, DO NOT OVER-TIGHTEN! If you do, chances are you’ll strip the wood, and that will be a VERY BAD THING.

STEP 34. Roll the musket over so that the barrel is “down” Insert the trigger guard into its cutout. Holding the trigger guard in place with one hand, roll the musket so that the lock mechanism cutout is “up”. Insert the drift pin into its hole from the lock plate side until it is flush with the hole. This may be more difficult than it sounds…you may have to “wiggle” the trigger guard a wee bit in order to get the holes lined up.
STEP 35. Roll the musket so that the lock mechanism cutout is “up”. Use one hand to hold the trigger in the “forward” position, place the lock mechanism into the cutout. As with getting the drift pin through two holes, getting the lock mechanism to seat may also take a bit of wiggling, this time with the trigger. Be patient…it WILL go back in.

STEP 36. Holding the lock mechanism in place with one hand, roll the musket so that the lock mechanism is “down” (sure was a “whole lot of rolling” going on, wasn’t there? This was next to last “roll”…no, REALLY!). Insert the two lock plate screws through their corresponding escutcheons (I didn’t make that up, they really are called “escutcheons”), and start them into the lock plate. Tighten each screw down until snug…DO NOT OVER-TIGHTEN!

STEP 37. Roll the musket over so that the lock plate is “up”. Place the hammer back onto its shaft, then insert the hammer screw and tighten it down, remembering…you guessed it…DO NOT OVER-TIGHTEN! (By the way, did you notice that the hammer was already attached in the picture for Step 35.? Just wanted to see if you are paying attention…). Set the musket aside for the time being.

STEP 38. Now fish the cone out of the bucket (or smaller vessel, as the case may be), and give it a good scouring on the outside with the nipple pick (and wire/tooth brush, if needed). You’ll also want to run the pick through the hole. Next, dip a pipe cleaner into the “witch’s brew”, and then run it through the hole, then follow it with a clean pipe cleaner. After you have it “sparkling clean”, dry it off thoroughly with a patch. Take just a touch of “Bore Butter” (or “Patch Lube”) and rub it all over the outside of the nipple. Once you have done this, take a rag and wipe all off the excess. Then place a drop of gun oil into the hole, and swab it out with a clean pipe cleaner.

STEP 39. Reinsert the nipple into the nipple seat, using a nipple wrench (or small crescent wrench or vise grips). Continue threading the nipple in until it stops.

WARNING!

ONCE THE NIPPLE IS SEATED (STOPS TURNING), DO NOT TIGHTEN IT ANY FURTHER! OVER-TIGHTNING MAY RESULT IN THE NIPPLE THREADS SEIZING WHEN NEXT THE MUSKET IS FIRED!
**STEP 40.** What you will do now is check to ensure that the “halfcocked” feature is working.

**WARNINGS!**

DO NOT SQUEEZE THE TRIGGER WHILE THE LOCK MECHANISM IS IN THE “HALFCOCKED” POSITION. THE LOCK MECHANISM WILL BE DAMAGED.

DO NOT “BOUNCE” THE MUSKET IN THE ‘HALFCOCKED” POSITION WHILE IT IS SUSPENDED BY THE TRIGGER. THE LOCK MECHANISM WILL BE DAMAGED.

Return the hammer to the “fired” (or “down”) position, and then return it to the “halfcocked” position. Position the musket in the vertical with the muzzle end “down”. Place a finger of your “off” hand on the trigger, and then gently release the musket from you other hand. If the musket remains in the “halfcocked” position, the “halfcocked” feature is functioning properly.

**WARNING!**

DO NOT STRIKE THE HAMMER THUMB WITH EXCESSIVE FORCE IN THE “FULL COCKED” POSITION. THE LOCK MECHANISM MAY BE DAMAGED.

Regain control of the musket with your free hand, and bring the hammer back to the “full cocked” position. Lightly tap the backside of the hammer thumb to ensure that it remains in the full cocked position. If the hammer remains at the “full cocked” position, the lock mechanism is functioning properly

**WARNING!**

DO NOT ATTEMPT TO USE A MUSKET WITH NON-FUNCTIONAL “HALFCOCKED” OR “FULL COCKED” POSITIONS. SERIOUS INJURY OR DEATH TO YOURSELF OR OTHERS MAY RESULT FROM ACCIDENTAL DISCHARGE OF THE MUSKET.

**STEP 41.** Take a clean patch, and fold it in half three times. Place it over the nipple, and while holding it in place, carefully pull back on the hammer with the thumb of your free hand while releasing the trigger with your forefinger of the same hand. Gently allow the hammer to come forward until it rests on the patch. Return the rammer to its race. Store the musket muzzle “down”; or if storing horizontally, ensure that the muzzle is lower than the lock mechanism – storing in this manner ensures than any excess oil in the bore will not accumulate in the breach end plate.

Oh…there’s just one more thing - *If you’ve come this far, come just a bit further, please. This article has been a “work in progress” for almost as long as I’ve been reenacting (nigh on to 5*
years). I’m pretty sure that I’ve gotten it right (it has, after all, been working for me). But I need to say that this article would still be unfinished were it not for the help of the following folks:

Mr. Steve Paulus, Esq., a first rate cook and a great American, for his patience in allowing me to use him as my “model” in the images.

“Witch’s Brew” recipe was obtained from “Blockade Runner” (my name, their ingredients...)

Aquarium tubing and other helpful tidbits courtesy of Private Robert Arrison, Company K, 7th Regiment of Florida Infantry

Company K (Key West Avengers), 7th Florida Infantry, Company D (Walton Guard), Company G (Tatnall Invincibles, 47th Georgia Infantry, Company G (Union Rebels), 6th Florida Infantry, and Headquarters, 1st Infantry Brigade, Department of the Gulf, for honoring me with the opportunity to be a “teacher” as well as a “member”.

And mostly, my deepest and abiding respects and gratitude to my “mentor”, Lieutenant Colonel Roger Statzer for his interest, patience, and invaluable assistance in my becoming more knowledgeable in all manner of things. Sir, I don’t have the words.

Captain Mtw. “J” Sterman, Military Secretary
Headquarters, 1st Infantry Brigade
Department of the Gulf

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