

## A Beginner's Guide to Single Shot Smoothbore Pistols by Jim Leinicke

The recent introduction of smoothbore military pistol competition into the N-SSA has opened a whole new world of shooting a class of Civil War arm which has previously been completely ignored. And, as some of us have learned this past year, it is both lots of fun and very, very challenging. Like everyone else, I am new to this game. But after devoting several months to acquiring, repairing, and shooting these things, I think I have learned a few things that might be useful to others out there who might also be tempted to give this wholly new blackpowder challenge a try.

First of all, there are at this writing no N-SSA approved replicas of this class of arms on the market, although Lodgewood is working with N-SSA's Small Arms Committee to get a percussion version of the M1805 flintlock pistol approved. Some issues need to be resolved before this pistol will be available in an approvable form, so for the present we are dealing strictly with original percussion, U.S. Martial pistols. Fortunately, numerous examples of these are still out there for less than the cost of most Italian repros, and they are usually found in at least antique "Very good" condition. Even better, these have long been regarded as "slow sellers" in the antique gun trade and can often be purchased at prices well below those shown in Flayderman's, especially at local gun shows (The price is rising rapidly at online sites due to N-SSA demand).

There are four basic models out there where very good or even fine examples can be found for prices ranging from about \$400-\$1,000. These are the North Model 1816 pistols, the North Model 1819 pistols, the Johnson or Waters Model 1836 pistols, and finally the Aston or Johnson Model 1842 pistols. The first three types were all originally made as flintlock arms, while the Model 1842 types were always percussion. A discussion of the various types follows:

The Model 1816 North- In comparison with the later types, the Model 1816 is a relatively massive, heavy pistol. It is, however, surprisingly comfortable to hold due to the peculiar "bird's head" form of the butt. Another thing attractive about the Model 1816 is that examples can be had for a very reasonable price, generally less than \$800.00 for really nice examples. Bores tend to run around ".536", more or less. The negatives on this arm include the fact that spare parts are almost entirely unavailable, so if something breaks, you may have to fabricate replacements yourself. Another negative is that virtually all percussion alterations of this arm were done by screwing a drum into the barrel. This makes it impractical or at least very difficult to have the barrel relined. About all you can do with these bores is have them reamed out to a slightly larger size to eliminate roughness.

Great care must be taken in removing the barrel from both this model and the Model 1819, as the barrel tang forms a backstrap along the entire back of the grips, extending down to the buttcap. This strap is very easily broken in disassembly of this type of pistol. Amateur gunsmiths are advised to first remove the buttcap as well as the lower and upper tang screws before gently wiggling the barrel tang from the stock!

The Model 1819 North Army and 1826 North Navy- This is in my opinion the best handling of the martial pistols, being much lighter and more delicate than the M1816, but still made with North's bird's head grip and a longer barrel. Unlike the M1816, the 1819 model also features a rudimentary form of rear sight in the form of a wide, shallow dish on the barrel tang (The Model 1826 Navy is similar but with a belt hook and a higher price tag). Unfortunately, this model is also relatively expensive and scarce and not often found in decent shootable condition due to having had very heavy usage. Locks especially are often out of order, although Dixie Gun Works advertises a fair selection of lock parts as

being available. Like the M1816, these are nearly always found altered with a drum and nipple, sometimes very crudely. Bores on these also tend to run about .536" in new condition examples.

The Model 1836 Johnson or Waters- As a flintlock, this was the general issue pistol of the Mexican War. It was and is regarded as one of the best martial pistols and certainly rivals in M1819 in handling qualities. Although not quite as delicate feeling as the Model 1819, it still a bit smaller and lighter feeling than the subsequent Model 1842. It also has a lock that is much less robust than the later guns, and apparently shares some lock parts in common with the previous M1819. Like the 1819, the 1836 features a shallow dish sort of rear sight ramp, and a really nice example is a good choice for a shooter. Dixie lists some lock parts.

Like all of the altered flintlocks, most of these are found with a drum and nipple alteration and that pretty much precludes having the barrel lined, unless you also replace the drum with a new one having modern treads to fit a new tapped hole through the liner. Bores on these typically run about .545" or larger, making it harder to ream them up to a larger size without damaging the breech threads. You will also see these altered with a bolster (Often Confederate guns and priced accordingly) and very often with a standard government "cone in barrel" percussion alteration. The latter variant, which is relatively common and inexpensive, would be my recommended type for shooting simply because the cone seat will take a standard military 5/16"x24 musket nipple and because the barrel can be easily re-lined by Bob Hoyt to make an excellent shooter.

The Model 1842 Aston and Johnson Models- The brass mounted Model 1842 percussion dragoon pistols are one of the most handsome of all military arms and are by far the most readily available type. They are also relatively easy to put into good shooting order. These were made as percussion guns with a bolster for the nipple, and are threaded for a standard musket nipple. Like the 1836 models, the bores on these run rather large (.545" or larger) and there are limits to how much you can ream the bores. Fortunately, Bob Hoyt will line them for about \$60.00 at this writing, and you can have them lined to take a readily available ball size, such as a .535". Although a bit heavier and longer than the M1836, they still handle very well. About the only negative is that they lack any form of rear sight. I have fired them extensively, however, and the lack of a back sight is not a particular problem. A big plus is that Dixie has excellent parts for lock repair. This is good, because almost every example I have handled has had some internal lock damage, presumably from having had locks snapped hundreds of times by generations of kids!

Model 1842 pistols are very, very common. Really nice examples sell for \$1200.00 or more, but the 4 of these I own are all in very good or better condition and were bought for \$800.00 or less on-line. Those made from 1846 through 1850 and marked H. Aston or Johnson tend to run at least \$100 less than the more scarce later production guns marked H. Aston & Co.. You can find them for much less at regional gun shows. Almost the entire Forrest Escort Company team in Deep South Region equipped with these at the Louisville show last August and paid about \$500 apiece for some really beautiful specimens. For the average shooter, the Model 1842 is the least troublesome type and is probably the way to go.

Illustrated below are the four types of pistol discussed, together with a loading rod. They are from top to bottom: The Model 1816 North, the Model 1819 North, the Model 1836 Johnson, and the 1842 Aston, plus a loading rod (Absolutely necessary for safety).



## Stuff You Need to Know

### **Drum and Nipple Alterations from Flintlock**

There a lot of former flintlock pistols altered to percussion with the familiar civilian-style drum and nipple, and these can often be purchased at really low, low prices. Whether or not these turn out to be a bargain in part depends on whether or not you are prepared for what may be a fair amount of gunsmithing.

Drum and nipple alterations were typically performed by contractors working for state governments or arms surplus dealers, and they were usually done on the cheap. Most are done in a reasonably workmanlike manner but now and again you run across a gun where, for instance, the threaded part of the drum protrudes deeply into the bore, and sometimes off-center as well. I have one such pistol where the bottom of the bore itself was threaded, as was the face of the breechplug! Turning this into a shooter was an involved process requiring grinding and filing the inner face of the drum to follow the curve of the bore.

Another issue with drum and nipple alterations is that virtually all feature a nipple with a thread sizes no longer readily available. Some have a thread of about .225x32, which corresponds to an original Colt revolver nipple, and occasionally that nipple will make the pistol functional if the hammer will fire a cap on a short nipple. Many other guns feature nipples of even smaller diameter. Frequently the threads in the nipple east are quite shallow and rusted, and original nipples are found to have only 2-3 threads keeping them in place. In any case, most will require re-threading the drum to take a .250x28 standard nipple, both for safety and convenience. Re-threading a drum is not a job for the inexperienced.

Anyone buying one of these pistols should also be aware that in many cases it is necessary that the drum be removed prior to attempting removal of the breechplug. As the bores are almost always rusted and a bit rough at the breech, removal of the breechplug is absolutely necessary for restoration of the bore. Finally, please bear in mind that the threads on the drum are almost always a non-standard size that you cannot duplicate with readily available taps. Therefore, if you want to re-line the barrel, you will probably also be forced to have a new drum made and installed with a standard thread so that it can be properly threaded through the barrel liner.

### **Rear Sights Ain't Necessarily What They Appear**

That neat looking dish sight on the tang of all of the old flintlock models looks good but may or may not be an aid in shooting, especially in the case of the older North pistols made in the 1816-1823 period. I discovered that although the breechplug on my Model 1819 North was properly installed in line with the original factory index marks, the gun shot 18" to the left at 25 yards. I had to hold the front sight at the right edge of the rear dish sight to hit the paper. Since my 1819 is a re-built junker for shooting purposes only, I re-positioned the breechplug by filing off the breechplug face and rear of the barrel so that the plug tightened about 3/32" further. That brought the shots to center, but of-course also raised the drum a bit off of its original seat on the lockplate.

My conclusion is that the makers of these martial pistols did not really think anyone was going to aim the things at anything smaller than a man or horse at 10 feet anyway, and therefore made no great effort to line the sights up with the bore. That probably explains why this tang mounted dish sight was discarded on the 1842 series percussion pistols.

### **A Tight Ball is a Necessity and Little Powder is More**

The initial advice I got on these was to use a ball about .005" smaller than the bore, with a load of about 30 grains 3fg. It didn't take me long to figure out that this was not the formula for success with a pistol. Almost immediately, I dropped the charge down to about 15 grains and then 12 grains, and started hitting the paper at least once in a while. I didn't start hitting the paper with regularity, however, until I tossed out the old rules entirely and started loading a bore-sized or larger ball. I discovered that even if the ball is .001" or .002" larger than the bore, it is easily loaded with a stout, short rod such as the one pictured. Bore sizes vary wildly in these early pistols, ranging from .536" to .552" even in bores in near-new condition. You will need to gauge your bore after the bore is cleaned or reamed, and then order a mould of that size on-line from Jeff Tanner in England. Cost is about \$45 and you get them in a week or two. If you are having a barrel lined, ask Bob Hoyt to bore it about .536", which is as small as he can go. That makes a good match with a .535" ball from a Lee mould.

The closely fitted ball also permits a further reduction in powder charge. At this writing, I am having

pretty good success (By my standards) with a charge of just 8 grains of Old Eynsford 2fg using a bore-sized ball lightly lubed with a thin coat of liquid Alox. I have had good luck with loads as low as 6.5 grains, actually, but have bumped up a bit to move the group a bit on the paper. I tried pistol powders such as Old Eynsford and Swiss 3fg but found I still got better groups with the 2fg grades. GOEX 3fg also shot well but with noticeably more fouling.

These loads produce light recoil and minimal fouling. Eventually, however, a bit of fouling in the breech will prevent the ball from seating all the way down, a condition which curiously does not seem to affect accuracy. When this occurs, however, I simply wipe the bore out quickly with a patch pre-lubed with tallow or Crisco and resume shooting. You can carry a few of these wiping patches in a percussion cap tin in your pocket.

I did try dipping the noses of my ball in melted lube, as I would do for a smoothbore musket. It was very destructive to accuracy, apparently because the lightness of the load was insufficient to vaporize or melt the lube as the ball traveled out of the bore. So, lube very lightly.

### **Buy a New Nipple**

Model 1842 pistols and Model 1836 pistols altered to percussion at U.S. Arsenals feature a standard musket nipple with a 5/16"x24 thread. You will find accuracy is improved if you replace that musket nipple with one sized to take a NO. 11 pistol cap. Currently, Track of the Wolf has the best selection of these. With the low pressures involved, you can buy a stainless steel nipple and assume it will last literally a lifetime.

### **Look Inside Before You Buy**

When you are considering purchase of one of these old pistols, you are strongly advised to inspect the lock internals before buying, because a large percentage will have damaged or badly replaced internals. Broken bridles and damaged sears are especially prevalent on the 1842 series pistols, even those which appear to be in very fine condition externally. In the case of the older flintlock conversion pistols, I have found that a great many will feature replaced tumblers, or will have a tumbler from which the half-cock notch had been removed (A common civilian alteration). All of this is fixable by a competent gunsmith, but you want to avoid problems if you can do so as replacement parts may require hand fabrication.

The guys in Forrest Escort told me that as many as 50% of the pistols examined at the Louisville Gun Show had damaged internals, mostly broken bridles. Dixie has replacements, fortunately and bridles can be welded. But it pays to know what you are buying. Of the 7 single shot martial pistols I have bought in the last year, only two were found to have all-original internals in good condition, undamaged condition. Again- Shop carefully or expect to do a bit of gunsmithing.

### **Is This Really Worth the Trouble?**

In a word, "Heck, yes!". If you think smoothbore muskets are a hoot, you haven't lived until you step up to the line with an old single shot dragoon horse pistol. I have never been much of a pistol shooter and never cared too much for all of the fiddle and mess of revolvers. But these front stuffers are simply a lot of fun with minimal fuss. And, it is a real thrill when you finally find yourself hitting the target with any degree of regularity and positively dumb-founding when you manage to do so at 50 yards. I

was getting kind of tired of the same old stuff season after season, but since firing one of these old “hoss” pistols in competition last fall down in Deep South Region, I have been thoroughly hooked almost to the exclusion of anything else. I am probably still the worst pistol shooter in our region, but I am having a ball with these things.

I don't know if this will catch on up North here, but they are certainly catching on in other N-SSA regions. Bob Hoyt told me this last week that he has about 20 pistol barrels in his shop right now and he has been swamped with the things all year. Anyway, we have always been on the cutting edge out here in the West, and we are definitely going to offer awards for these at the April skirmish at Lefthanders to see where this goes. Hope to see a few of you joining our “Pirate Pistol” club!