

NEW LIFE FOR AN OLD MUSKET

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they are very sharp.

This land saw is to be used first for "trueing up" the bore so that it is a perfect cylinder from breech to muzzle. It is to be inlaid between two of the ridges formed on the cast (which will be the land of the barrel). Do this with the little chisel you made, carefully fitting the saw in level and just a fraction below the surface of the lead.

After fitting, remove the saw and bore and tap a small hole at each end of the mortice. Place a set screw in each of these from the opposite side. Screws can be made by threading a nail and cutting to the right length. With the screws raise the saw until it just touches the barrel when the cast is inserted at the breech end. If you have no tap and die, thin paper shims can be placed under the saw to elevate it. This system will work, but is not as easy and you cannot make as fine an adjustment. Another advantage of the set screws is that once you have inlaid the saw you can press the lead firmly around it so that it cannot move, yet the screws will still easily raise the saw. If you use paper shims you will not be able to do this and therefore will have to be especially precise when fitting the saw. The saw must be secure in the cast, particularly so if your barrel is of cast steel.

Apply cutting oil to the saw and push it through the bore slowly and evenly from breech to muzzle. Remove any scrapings with an old tooth brush and repeat until the cutter works freely.

Now turn the cast one rifling and repeat. Do this until all the lands have been scraped. Set the screws up only the slightest bit for each new cut. When the saw cuts no more at one end of the barrel than at the other, you will know the bore is reasonably true. Work from both ends of the barrel, that is, cut from muzzle to breech as well as from breech to muzzle.

Check the bore frequently by letting light shine through it. If there are scratches, your cuts are too heavy or the saw is dull. Scratches may also appear because of lack of space for the cuttings. To avoid this, file a flat spot in the cast on each side of the saw to allow room for them. If the cut is not even, it is probably because the saw is not tight in the cast.

After trueing up the bore, make another saw exactly the width of the grooves of the barrel. A micrometer is handy for measuring but is not essential. This saw is made the same way as the other one and is inlaid in a new cast. Work the barrel in the identical manner until the grooves are clean and even. If they become too deep, cut down the lands some more, and to finish the job it is best that the last cuts be made on the lands.

Eight thousandths is a good depth for muzzle-loading rifle grooves. You can measure your work by driving a lead slug through the bore and taking your micrometer reading from that. You can tell whether the bore is true or not by the feel of the slug as you drive it.

If the barrel has shallow rifling you may find it necessary to cut the grooves deeper before cutting the lands, but unless this is required, cut the lands at least to some

extent before starting on the grooves.

Remember the following points: Keep your saws sharp by honing. Never force a cut with strong pushing. Instead, lower the saw in the cast to take less of a cut. Make new casts as the bore increases in size or the cast becomes worn. Inspect the bore frequently, cutting out the barrel until it is even and free of pits. When finishing, allow the teeth to fill up well before cleaning; this will make the saw cut more smoothly. Depending on the condition of the bore before you start, a good job will require anywhere from two to six casts and possibly two sets of saws. Cut from both ends of the barrel, but always make your last cuts from the breech to the muzzle.

If you do a good job of recutting, it will not be necessary to lap out the bore with a sawless cast, lead, and emery. However, you can easily put a slight choke in the bore this way and this little operation sometimes makes the difference between an average shooting barrel and a "gilt-edged" one. Work the lap back and forth to within about four inches of the muzzle and then make a few passes all the way through.

Proof of the quality of your workmanship becomes apparent on the range. If your barrel has narrow grooves, use a ball a few thousandths smaller than the bore diameter. If the grooves are wider and the lands are narrow, use a ball full bore diameter and perhaps a few thousandths larger. Experiment with different patch thicknesses, but don't use anything much heavier than .016 or thinner than .006". Before you assemble the rifle, try different patch and ball combinations in the bore.

Use Three FG black powder. Start with forty grains for a 36 caliber rifle. Try fifty grains for a 40 caliber and 60 for a 45 caliber. These loads should be about right if your ball and patch are correct.

You must test your rifle from a bench, and don't give up your work as a poor job until you have tried all the variations of powder, bullet, and patch that you can. If you have followed directions and have done your work carefully, you will have a pleasant surprise in store for you and all the work will have been worth the effort and time.

Frequently, recut barrels are the most accurate of all. If you can keep your shots within inch groups at fifty yards, your cutting job has been a success and you have a right to be proud of your work. 

A JUDGE SPEAKS FOR US

This article appeared recently on Page 1 of the Second Section of the Indianapolis "Times." It should

lift the spirits of all those who fear that all men in high places are blind to the cause we cherish.

U. S. Right To Keep Firearms Is Guard Against Dictators

*By Joseph N. Myers
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The constitutional guarantee of the right to bear arms had its origin in the fear of a standing army, as well as in the necessity of self protection in a frontier society.

Out of the extreme difficulties experienced in obtaining arms for men during the French and Indian Wars and the American Revolution, our forefathers came to the realization that the inalienable right to bear arms in self defense should be protected by a constitutional guarantee which would place it beyond the power of any temporary legislative majority to circumvent or abolish.

In those trying times, since the frontier was still primitive, arms were not only necessary for the equipping of the militia, but also were necessities for each man, in order for him to be able to protect himself and his property.

If the pioneer had money or other things of value, he had to protect them and himself, and if he wanted personal security for himself, his family, and his home, he had to accomplish this by self

help. Hence the necessity of keeping and bearing arms. . .

Danger in restricting the use of weapons too much by state legislatures lies in the fact that such acts tend to disarm the law abiding citizen, while the criminal element ignores such a statute. Restricting gun ownership too much tends to provide security for the outlaw.

The constitutional right to bear arms being in itself an exercise of the sovereign power and being a part of the Constitution, the legislature is prohibited from legislating any part of it out of existence.

The complete disarming of the people is the ultimate objective of the advocates of any police state, because they cannot tolerate arms among a subject people.

The preservation of the right to keep and bear arms as established by the second amendment of our Federal Constitution is one of the strongest safeguards which we have today to combat the encroachment of any type of dictatorship. This inalienable right will be and must be preserved.