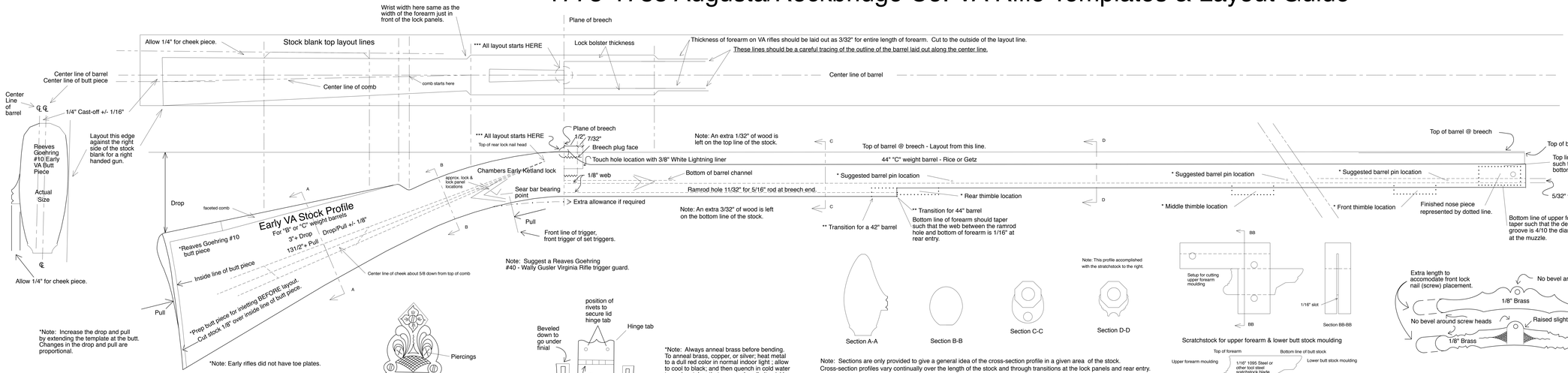
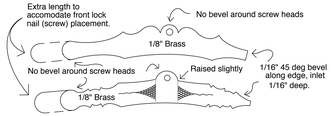
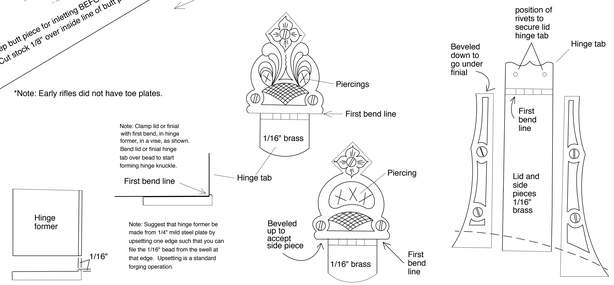
1775-1785 Augusta/Rockbridge Co. VA Rifle Templates & Layout Guide



Note: Sections are only provided to give a general idea of the cross-section profile in a given area of the stock. Cross-section profiles vary continually over the length of the stock and through transitions at the lock panels and rear entry. These cross-sections respresent the FINISHED profles including the moulding formed by the scratchstock.

Scratchstock for upper forearm & lower butt stock moulding





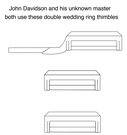
*Note: Always anneal brass before bending. To anneal brass, copper, or silver; heat metal to a dull red color in normal indoor light ; allow to cool to black; and then quench in cold water to cool metal so that you can handle it quickly. If the metal isn't dead soft, repeat the above process heating to a slightly brighter red. Don't heat brass hotter than a salmon color in normal indoor light (shade outside). Brass can melt suddenly if you get it too hot.

Lid /Finial Former

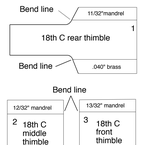
Make approx 9" long.

File a groove across th bottom block at about 5 1/2" for the hinge knuckles.

Lid and finial should be formed before assembling the hinge.



John Davidson and his unknown master both use these double wedding ring thimbles



Ramrod/Thimble Notes

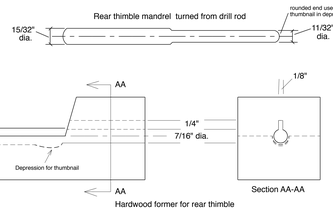
Thimbles for a ramrod tapering from 3/8" to 5/16".

Muzzle end of ramrod may flare larger than 3/8".

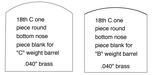
Start with at least 7/16" split hickory rod.

Use drill bits for mandrels, use various diameter drill rod, or turn a stepped mandrel from 7/16" drill rod.

Will need a special mandrel turned from 1/2" drill rod, and a special hardwood former to make the rear thimble.



Note: To make the rear thimble former, drill a 7/16" hole through a block of dense wood. Open the hole up to 9/16" half way through. Then make the two cuts indicated; opening up the area for the tang. Use a chisel to form the depression for the thumbnail. Cut out the slot with a 1/8" chisel.



Nose Piece Mandrel Cross Sectional Profile Templates

Nose Piece Mandrel Notes

Nose piece mandrels may be forged and filed from mild steel or wrought iron.

Nose pieces can be formed around the mandrels using either matching swages /dies cut and forged from 1/4" plate or using two stainless steel hose clamps.

"C" Weight nose piece mandrel Top profile template

"C" Weight nose piece mandrel Side profile template

General Notes

1. Template layout & measurements are to the center of lines.

2. Glue templates to thin, stiff cardboard such as mat board. Cut out templates along the center of lines, never INSIDE the lines, using a large Xacto or mat knife. Use a straight edge for long lines.

*****3. The stock profile template is a STARTING point for parts layout. Always layout the actual parts on the stock blank relative to the plane of the breech, top line of the barrel, and center line of the barrel.**

For the top layout, the center line of the barrel can only be established from the cast-on(off) from center line of the butt piece once the lock side of the butt piece is located at the edge of the stock blank.

4. Position the stock profile template as far back on the stock blank as possible, such that the grain runs through the wrist parallel to the center line of the wrist. Curl runs perpendicular to the grain. So, the curl should be perpendicular to the center line of the wrist.

* 5. Location of thimbles is approximate for 44" barrels. Barrel tenons usually work out best just forward of the thimbles. On an early VA gun, the first pin/barrel tenon is usually in front of the rear thimble. The typical PA rifle would have four pins instead of the three on this rifle, and the first one would be in the middle of the lower forearm.

****6. The locations of the rear entry hole transition are only starting points. You should not make these cuts without stepping back and taking a long look at the location of the rear entry transition relative to the line from the muzzle to the comb termination. A longer pull than indicated on this drawing will move the comb termination back and also move the rear entry hole termination back a bit. A 1/32" change in these positions can make a world of difference as to how the whole rifle looks when finished. The final decision of transition locations should by eye. How it looks is what matters most.**

7. Refer to **The Gunsmith of Grenville County** by Peter Alexander for detailed instructions on making mounts and stocking a rifle.

8. Use stock scrap for hardwood formers.

9. Contact Reaves Goehring or his kids at 717 684-2022

10. This stock profile template may also be used for an early Lancaster rifle with the caveat in note 5 reguarding the number and location of pins or keys.

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Everything is drawn Actual Size