

# Making Justin's Rifle.

By Dominick Pisano

I have been enamored of Remington rolling blocks for a long, long time. The simplicity of design is clearly the work of genius. Of the many varieties of RB actions, I'm in agreement with Frank deHaas who says in his book *Single Shot Rifles*, "Of the several different Remington rolling block actions, the No. 2 action holds the most appeal to me." YES!

At a Houston Gun Collectors Association show about two years ago, the opportunity I had long hoped for presented itself. I spotted a RB #2 in excellent condition save for a missing breech block/trigger return spring. It was in .32 Rimfire, which seems to be the most typical cartridge for this rifle. Although they were made in .22 Long Rifle, these are very difficult to find. The exterior of the action was in very good condition except for a very slight patina of rust on the upper right side of the frame. It was not, in my mind a collectible, so it would make an excellent subject for a custom stock some day. I wanted the rifle, but was unable to come to terms with the seller.

Low and behold, I spotted the same rifle at the very next HGCA show. And this time the price seemed to be more to my liking. After a brief negotiation, the deal was concluded and the rifle was mine.

This event took place some months after my third grandson, Justin, was born. Then and there I knew that this rifle was meant for him, even though I knew it would be many years before he would be of age to use it — under supervision of course. Thus, the project I am about to describe was begun.

Careful assessment of the barreled action revealed that my initial impression of its condition was correct. The action was crisp and tight, except for the missing part that I previously mentioned. It is always a wonder to me how a rifle can have a missing parts. Probably someone took it apart and didn't know how to put it back together? Who knows. The exterior of the barreled action was in NRA very good condition except for the light rust spot on the upper right side of the

receiver. By using 100 grit abrasive paper held against a small block of wood, I confirmed that it was essentially a minor surface blemish. The bore was rough, and therefore useless, however the exterior of the barrel was in superb condition retaining much of the original blue, and the original sights were in place. The barrel will eventually be relined to accept the 22 Long Rifle cartridge. The face of the breechblock was a little rough and might need restoration. I'll leave that decision to my gunsmith when the time comes. The original wood was in fair condition considering its age, but had dried out and shrunk considerably. The tangs and butt plate were above the wood by almost 1/16 inch. The steel butt plate was in very good shape so I decided to keep them together for later resale. This would allow me to use a slightly larger steel butt plate and enlarge the overall size of the stock a bit.

The first step to re-creating this custom stock was to make a template from the original stock to be used as a guide.

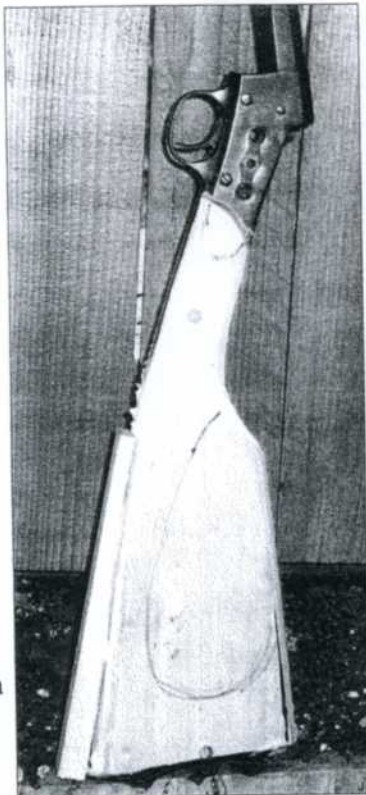
Next I glued and screwed two pieces of poplar together as a basis for the stock pattern blank. The joint between the two pieces of wood would also serve as a handy centerline for the work to come. Poplar is an excellent choice as a pattern wood. It is readily available, quite stable and inexpensive when purchased from the scrap barrel of your local home supply outlet. Additionally, the wood comes in 3/4 inch thickness which adds up to 1 1/2 inches, just a bit larger than the width of the butt plate I planned to use.

After the glue had set, I replaced the screws with dowels so I wouldn't inadvertently ruin any of my tools in the shaping process. The template from the original stock was then traced onto the pattern blank and carefully cut out just a bit strong (oversize) with a band saw. I allowed a bit of excess wood for the final shaping. I then drew the shape of a cheek piece on the blank, then band sawed the cheek piece on another smaller piece of poplar.

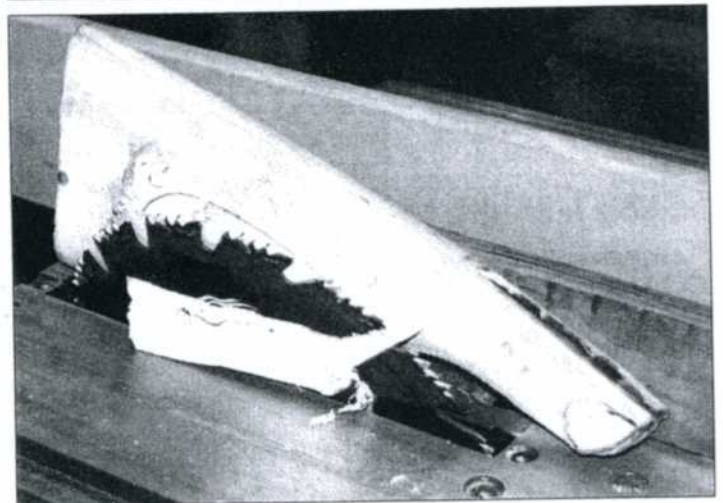
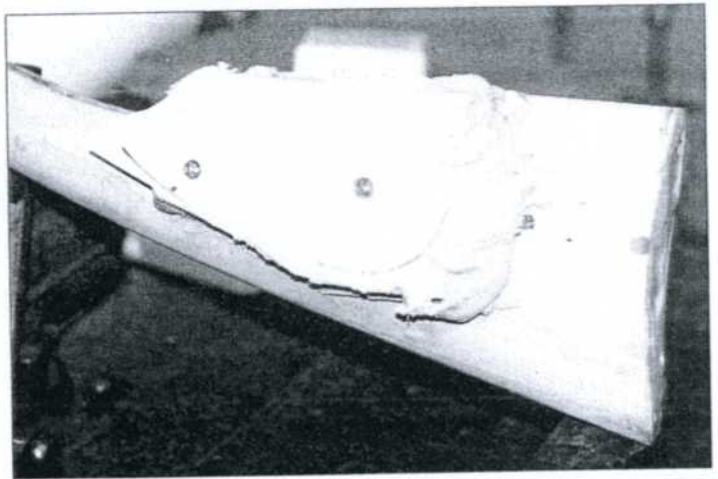
The cheek piece was also glued and screwed to the stock pattern blank at the appropriate position. I also used Bondo around the curve of the cheek piece as Bondo is easy to work with rasps just before it fully cures. This makes it easier to shape the cove of the cheek piece as well as the shadow line. Excess wood was cut from the cheek piece after, the screws were removed, using a table saw with the blade tilted to the appropriate angle. I now had the basic stock from which the final pattern would be made using rasps, drills, and a lot of elbow grease.

**WARNING:** *The table saw (or band saw) is potentially a dangerous machine. This is especially so as the blade guard must be removed in order to run the irregular shape of the pattern through the blade. I strongly recommend that you attach a 3/4 X 6 X 24 inch board to the pattern. This will give you control as you hold the board tightly against the table saw fence, and will keep your hands a safe distance from the blade. Be absolutely certain the blade has come to a complete stop before removing the pattern from the table saw. I can't emphasize this safety procedure too much!*

The pattern-making process is begun by carefully measuring the upper tang of the receiver and transferring these dimensions to the rough pattern using the aforementioned centerline of the wood joint as a reference. I use a brad point bit, or Forstner drill of the approximate width of the upper tang, to carefully drill a series of holes to the correct depth (use a bit of masking tape on the bit to mark the depth of the holes) to hog out as much of the excess wood as possible. Keep the original stock handy and refer to it to approximate the correct depth. Then carefully chisel out the remaining wood where the drill holes overlap. Neatness counts!



Clockwise from above: Rough pattern with side panel and cheekpiece outline, plus a strip of wood epoxied and doweled to buttstock's lower edge for more drop at heel. Additional wood for cheekpiece attached with screws, plus Bondo used as filler and shaping material. Excess wood is removed from cheekpiece with table saw.



Next, remove the lower tang from the receiver as well as the hammer and the main spring, which are attached to the upper tang. I fit the upper tang using the spotting-in technique. I find that my work goes faster and is more accurately if I fit one tang at a time. This is not possible with all single shots as the lower tang is not universally removable. Fit the upper tang so that the front of the pattern just butts up against the rear of the receiver. This fit need not be perfect as epoxy, carefully applied to the tang recess, will make for a perfect fit. Use a wood screw to attach the upper tang to the pattern wood to hold things in place while the epoxy cures.

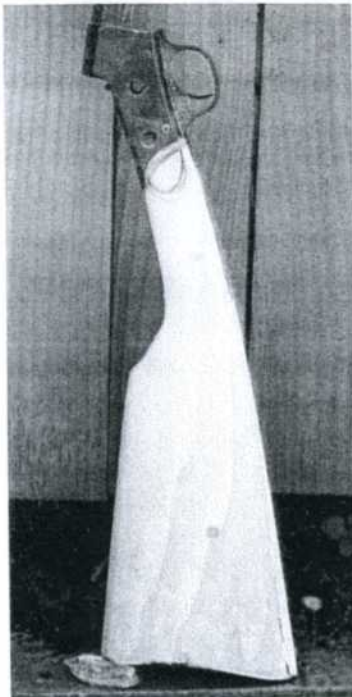
After the epoxy has cured, carefully clean up the excess, remove the screw from the tang, and carefully separate the pattern from the receiver. You might need to gently tap the nose of the comb to get things started.

Replace the lower tang in the receiver, and repeat the drill-and-chisel technique to rough out the tang inlet. Using the upper tang as a guide to slip the pattern on and off, complete the inletting of the lower tang. Epoxy the lower tang into place, being careful not to get epoxy into the receiver. After the epoxy has

*Continued on page 55*

cured, carefully remove the excess and again separate the pattern from the receiver.

The last step is to perfect the fit of the pattern where it abuts the rear of the receiver. The rear of the receiver is curved, and is part of the charm of the #2 rolling block. This is also the only rolling block action that is curved in this way instead of being squared off. (The front of the receiver is likewise curved). Mortises are milled inside the sidewalls at the rear of the receiver to accept the stock tenons at the forward end of the butt. The tenons keep the sides of the wrist from spreading apart with changes in humidity. Shape the pattern wood to roughly follow the curve of the rear of the receiver and rough out the tenons that will fit into the receiver mortises.



Off side of completed pattern.

This need not be a perfect fit as epoxy will take care of that for you. Remember we are making a pattern, not the final stock. However, take some care in this fitting as it will determine the exactness of the final pattern and result in a machined stock that is nearly a slip fit. Now, butter the mortises in the receiver with epoxy, using enough floc to keep the epoxy from getting too runny. Also butter the tenons on the end of the pattern wood and fit the pattern to the receiver using the top tang screw to hold things together. Remember to use modeling clay inside the receiver to prevent epoxy from getting into places where you don't want it. And it goes with out saying; use plenty of release agent.

Although it may seem like a lot of extra work to do the aforementioned in three steps instead of one, in the end it saves time and produces better results in that the resultant pattern is very precise. This will allow for better and more accurate machining of your stock blank. I can't repeat this admonition too much! And you absolutely avoid the possibility of permanently bonding your pattern to the receiver if you try to do it all at once. Believe me, it happens to the best of us!

After trimming off excess epoxy, the pattern is removed and cleaned up. Then I re-attach the pattern to the receiver. The barreled action now serves as a handle for the shaping to come. • (Part 2 in Next issue.)

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