

# Improving on a Perfect Stock Design

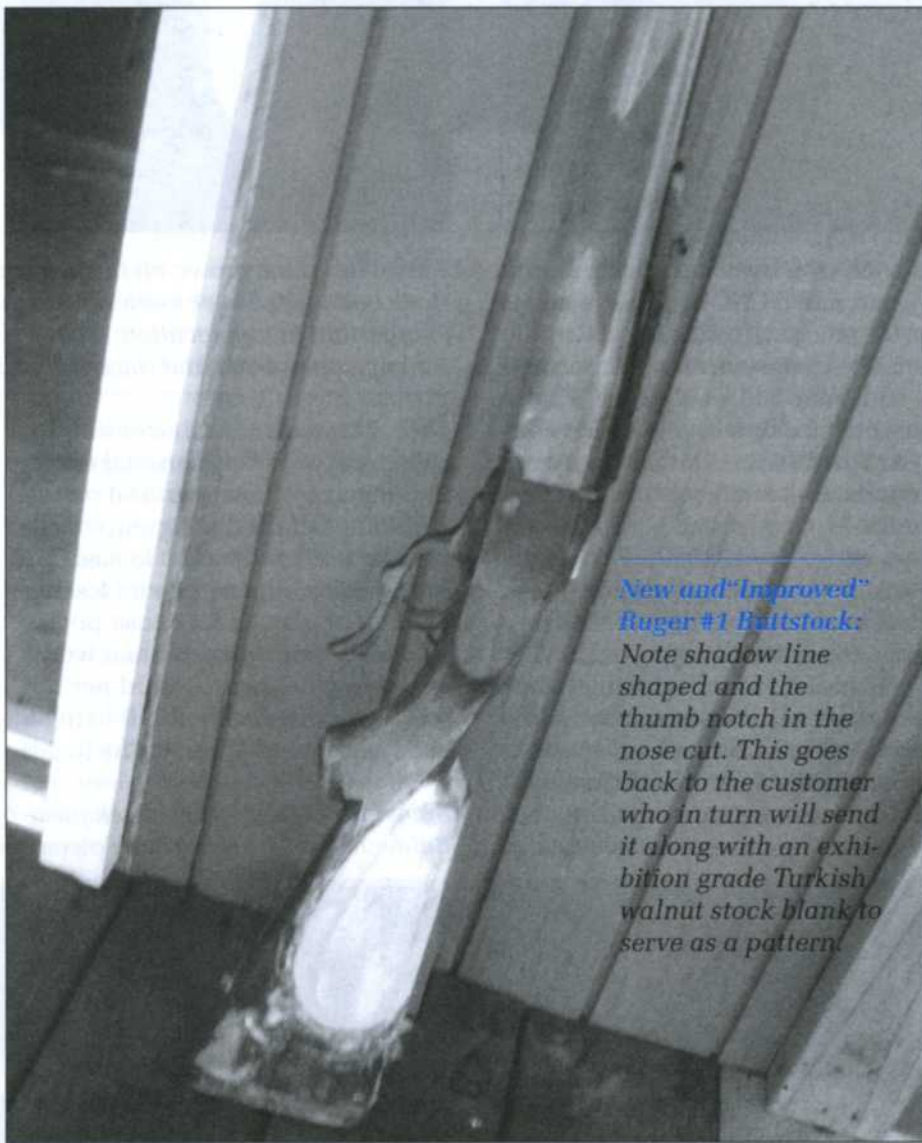
*The Ruger #1 may be the perfect stock design, but the customer is always right! Here's how to add a custom touch to the finest wood.*

by Dominick Pisano

**B**ack in the mid-1960's Sturm, Ruger & Co. came out with the Ruger #1, a falling block rifle featuring a completely new action. It was an incredible move on Ruger's part because single-shot rifles were not nearly as popular as they have since become. If you were interested in a single shot, be it a falling block or other action type, you were limited to the used gun market, such as Winchester High Walls and Low Walls, Stevens, and a plethora of military Rolling Blocks being given away at ridiculous prices.

The Ruger #1 is an outstanding example of the falling block design. It is incredibly strong and will handle everything from the .22 Long Rifle up to the .458 Winchester Magnum and larger. It will digest rimmed cartridges like the .30-40 Krag and rimless designs, such as the .30-06, and it does it with aplomb. Needless to say, it is a beautiful and compact design. Above all it is American made. That is saying something in this day and age.

As a professional stock maker I have seen many Rugers come across my bench over the years. My customers have one thing in common: They want a custom stock with a cheek piece and shadow line. However, the Ruger #1 comes from the factory without this feature. As with the rest of the Ruger line, the #1's stock was designed by the late Leonard Brownell who insisted that a well-designed stock did not need this. He's probably correct because every Ruger I have ever handled felt perfect as it came out of the box. Legend has it that Brownell moved to Connecticut to teach Ruger employees

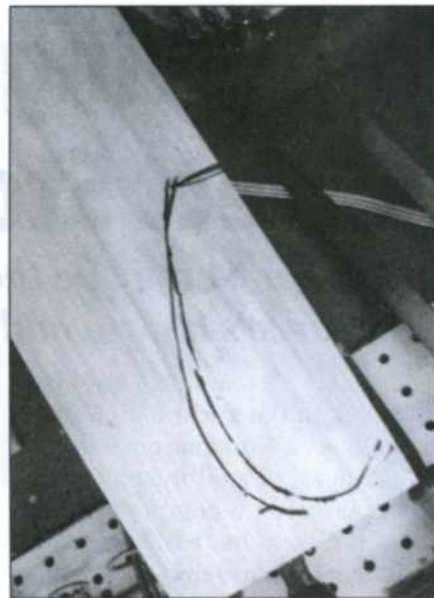


*New and "Improved" Ruger #1 Buttstock: Note shadow line shaped and the thumb notch in the nose cut. This goes back to the customer who in turn will send it along with an exhibition grade Turkish walnut stock blank to serve as a pattern.*

"the art." Be that as it may, when one is making custom stocks — which usually means highly figured high dollar wood — the customer wants, yea insists, on a cheek piece with well defined shadow line. I must admit as a stockmaker I appreciate the senti-

ment as it gives me an opportunity to demonstrate my ability to produce the same.

To get on with the point of this piece, I have a customer who fits that mold. He wanted me to make a pattern featuring a cheek piece and shadow



line. His stock wood purveyor recently purchased CNC equipment and is in the process of collecting patterns to provide his customers with machined wood. Why add a cheek piece to an existing stock when you can have one machined from scratch? There are numerous stock turners who are set up to do exactly that. I can't answer that except to say that my customer insisted that I use the original Ruger stock and modify it. It was a challenge for me and I readily accepted it.

To begin, I took the original stock and drew a line on it to identify the stock bolt hole. Since I would be doweled a piece of wood unto the stock I did not want to go through the stock bolt hole thereby rendering it useless.

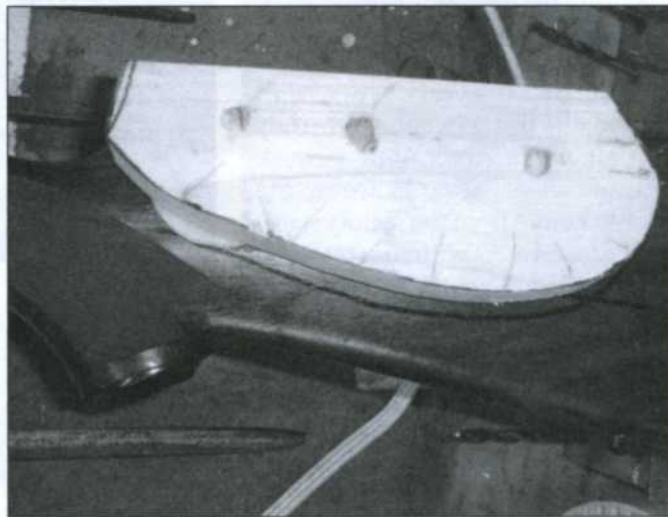
*Above left:* Line drawn on the original stock to identify the location of the stock bolt hole. *Above center:* The tracing is overlaid on the original stock to ascertain fit and location. *Above right:* The tracing is transferred to a scrap piece of wood and the shadow line added.

Then, I traced an outline of a cheek piece from one of my personal stocks in order to see how it looked on the Ruger and cut the tracing out, attaching it to the Ruger stock. It looked OK. Next, I traced the outline on a scrap piece of poplar. I like to use poplar because it is inexpensive and works well being neither too hard nor too soft. This was then cut out using a band saw and attached to the Ruger

stock being careful to get it exactly where I wanted it. I used Brownell epoxy to make this glue up. After the epoxy cured, I drilled and set several dowels in place. This may seem like a belt-and-suspenders situation but I wanted to be certain the new cheek piece would not be knocked off due to the hard rasping to follow.

I trimmed off excess wood on my table saw after affixing the buttstock

*Below left:* View of the cheek piece against the original Ruger stock. *Below right:* The new cheek piece epoxied and doweled into place.






to a piece of scrap 2x4. Scrap wood keeps my hands way from the table saw blade. One can't be too careful. I made several passes so as to not make a mistake and remove too much wood. Having completed that portion of the shaping there was still a lot of wood in the area of what would become the comb and I used a sharp chisel to remove a good deal of this excess wood. Once this was accomplished I used Bondo to fill in what would be the cove on the cheek piece and shadow line. Bondo is excellent for careful shaping as it is soft and takes to rasps and files readily. It took me several applications to build up then shape this area of the cheek piece. Bondo was also used to fill in any areas of the new cheek piece that did not make full contact to the original stock.

**Above left:** Running the cheek piece through that table to remove excess wood. Note how the 2x4 is used against the table saw fence for safety reasons. I made several passes in an effort to not remove too much wood. **Above right:** Using a sharp chisel to knock off the sharp edge along the comb of the new cheek piece.

Using a variety of rasps, including rat tail and half round rasps, I carefully shaped the cheek piece to a pleasing form finishing off the shaping with careful sanding to smooth everything out. The customer told me that the new CNC wood machining equipment would pick up any imperfections, so I was careful to treat the addition to the original butt

stock as though I was prepping the wood to apply the final finish.

As a final step I called the customer and asked him to try the rifle with the modified stock to be certain it fit him. He returned the rifle about two weeks later and said it fit him perfectly. He sent the modified stock off the serve as pattern for his personal and very exquisite Ruger #1. 

**Below left:** Bondo is applied to the top of the new cheek piece to fill in the gap between the flat surface of the new cheek piece to the curved surface of the original Ruger buttstock. **Below right:** Building up the cove from which the shadow line will be shaped. The cove is roughed out and shaped to determine how much more Bondo is needed.

