



## Note to all:

The TMA has had a major loss in the last year, the passing of our leader Longknife. We will all be missing him a great deal. His wit, guidance, and experience helped bring the TMA to where we are today.

There are few articles in this issue mainly because I haven't gotten many to include in it. I included a few things of my own and hope to have a more expanded issue, with more contributions, next time. I know every one of us has a real life to live aside from the electronic one we enjoy with the TMA online. Time is a precious thing. I have had some major things going on in my own life this last year with family issues and major personal health issues so I haven't been as active as I would have liked to be. So I know about finding time for things.

Any help with future issues will be appreciated by all the TMA.

Thanks to Captchee and Gordon for some interesting reading. Enjoy.

**Editors Note:** I included some random photos from our website just for interest.

---Firewalker



## GUN STOCKS FROM SCRATCH

By  
Captchee

So you want to build a stock, but it looks so complicated, so many things to think about. You have the length of pull, the drop, offset. Then, there are wood and grain issues and what if I want carving and inlays? I just don't think I can do it. Well, you're wrong.

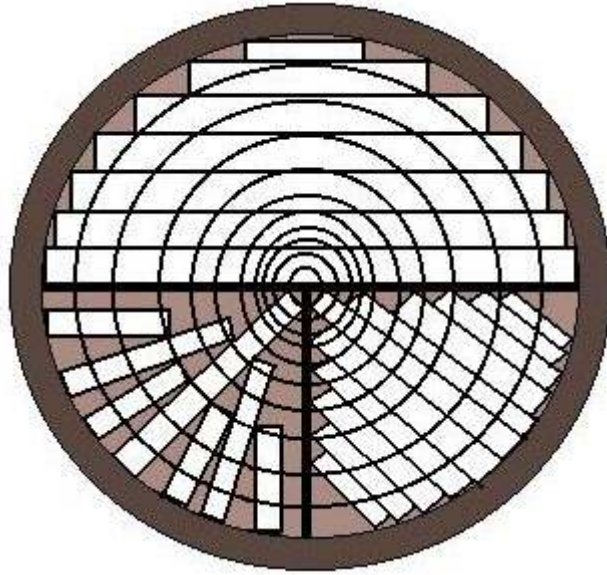
Over the next few issues of the journal I hope to give an outline of building a stock from scratch. The gun we will be covering will be a NW trade gun in 2/3 scale as outlined in the trade gun sketchbook by Hanson. Hanson covers the parts needed quite well. While the drawings are somewhat rough, they are workable.

We will be converting a modern .410 barrel, modifying a lock plate and building the stock from a plank of rough-cut English walnut. Upon completion I will hand it off to a young fella in our local club as a Christmas present. Let's start with the stock for now.

Wood is an interesting subject. It's very much like the saying, "Life is like a box of chocolates, you never know what you're gonna get". Well, if we don't have at least a little understanding of how wood grows and is cut, it can very much be more to the bowl of cherries. For this article we will stick with walnut and maple for our gunstock wood. Sure there are others like cherry and ash, all with their own plusses and minuses but let's keep it simple.

Today, maple with heavy tiger striping is what many people ask for. So how do we get tiger striping anyway? Well, sometimes you don't, that's right you don't. Tiger striping does not come from the way the wood is cut. However the way the wood is cut does have a great deal to do with how well you see the striping and other characteristics in an item, be it a table leg or rifle stock.

Basically there are 2 main techniques to cutting a tree into lumber or planks. The first is how most common lumber gets cut. This is called plank sawn. As you can see below the log is cut into planks until a given distance from center is reached. Then the log is turned and the other side is cut. This is shown in the top half of our diagram.

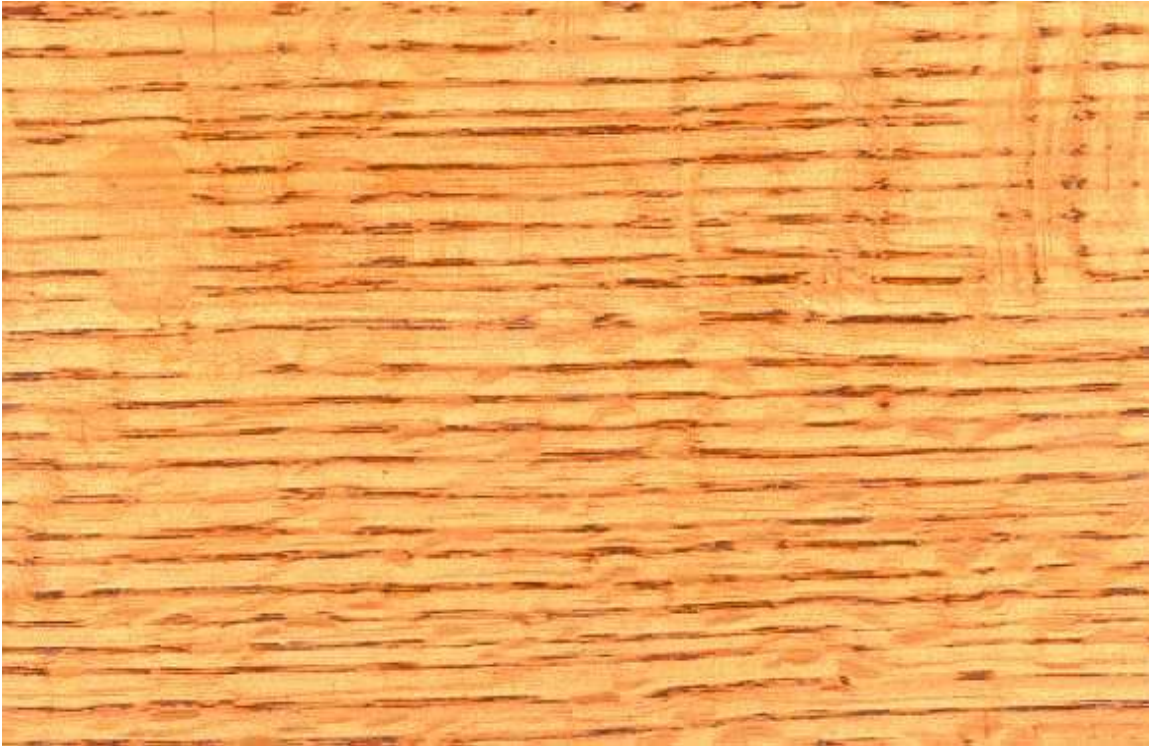


Now with quarter-sawn lumber, the cuts are made by splitting the log into 4 parts. Then each of those parts is cut normally at a 45-degree angle to the first cut. Now depending on the grain and purpose these cuts can also be changed to different degree angles. Note lower half of diagram.

Now hold on you say the center cut of a plan sawn board will have lots of character. That's true; however, you only get one premium board from a log. Where quarter sawing will yield many more usable boards with optimal character.

Here are a couple examples of oak cut from the same log. The first is plank-sawn and the second is quarter-sawn. Notice the difference





Now finding the striping character itself is a challenge that takes years of knowledge to understand. But normally your best chance is down around the base. Large roots will also provide lots of character. Personally I have never been too good at identifying good candidates. So through the years I have come to look at cutting a stock plank kind of like opening a Christmas present. I can't say I have never been completely unhappy with what I have found.

So now we have a candidate for plank of wood that we're going to cut to our desired thickness and length. But hold on now before you cut. Remember, this plank will have to be dried. During that drying you will get shrinkage. Cut a ½ inch or so over size and you will not be sorry you did.

Now we must dry or season our plank before we can even think on cutting into it a shape. 200 years ago the only option was to seal the ends of the board with wax and set it aside in a protected dry area for a year or two, sometimes more depending on its thickness. Today we have a lot of options from freezing to kiln drying even microwave drying just to name a couple.

Ok, so, I hope I have given you something to think about. Throw it around in the gray matter so to speak. Next time we will go over or layout and hopefully start some inletting of the barrel.

Until then, be safe.





## Homemade Gun Vice

By  
Bob McMahon

Anyone who works on rifles can use a gun vise. Even if you don't build "scratch" guns or kit guns a vice will come in handy for repairs or just tinkering. You might even want to use it when sighting in a new rifle.

This is one of three that I have. It comes in handy a lot. It is easy to build from a 24" 2x12 and a 24" 2x8. The base is 24" and the other board used for the forearm rest and the vice. I used a 3/8" all threaded rod and a homemade crank to open and close the vice "jaws".









## Kemp's Korner of History

By  
Gordon Kemp

Time once more, for a new issue of the TMA Journal. I have not received any poison pen letters threatening to set me on fire if I wrote any more so here goes. We were examining the history of the axe, and its importance in the development of the United States. As with many here, I tend to ignore that the TMA embraces the time period up to 1900. Although many embrace the period between 1740 and 1840, I'm certain there are some that like to portray the Civil War and what was termed the last of the Indian Wars, as well as the Gunfighter phase.

The axe remained an important and productive tool well into the 20th century. It still, to this day is relied on for many jobs that powered equipment is impractical or over kill, or plain dangerous. It's my guess that the axe will be with us as long as trees grow, and I hope that to be a long time.

The axe more than likely reached its apex of "Americanization" by 1840. After this any changes were in the casting, forging and blade inserts etc, the general shape and balance remains the same to this day. I had better qualify that statement, any well-made axe. The trash that they sell at many department stores and hardware outlets is junk, and you may as well try to chew through the wood. As use one of these abortions, and its less dangerous.





Some where between 1800 and 1900, the idea of the curved handle on single bitted axes became the norm on store bought axes. This seems to be a good idea at first, but it not only makes the axe strike poorly it tires one out trying to control it. Most folks that really used their axe for hours on end made, or had made, a straight handle...Many full time axe men preferred the double bitted axe for general felling and cutting. The single bitted axe was handy for tapping in, or setting a wedge, but too much hammering on the poll ruined many an axe.



We have been primarily interested in the full size felling/cutting axe, this being the primary tool that cleared the forest of North America. There were axes developed for many special purposes, along with the many hatchet designs. The design and manufacture of cutting edge tools was a large and profitable industry for well over a century; a few of the other type axes and hatchets would make a long list. There were chisel type axe for cutting mortise, slate hatchets, hatchets for shingling, lathe making, and a dozen other

special jobs of the building trades of the time. But the long handled felling axe remained the mainstay of the hand cutting tool industry until power tools became the norm. The three largest of these manufacturers were Isaiah Blood of Ballston N.Y, The Collins Brothers of Collinsville, Connecticut, True Temper, and the American Axe and Cutting Tool Company of Pennsylvania. Of these the only one still in the same business under the same name is True Temper. Outside of a few local foundries, the rest went out of business or were bought up by other industries.



Monopoly was on the rise during the late 1800s and the American Tool Co. made great efforts to take over control of these other plants. Being the largest of them and with much investor backing they put extreme leverage on the others to gather them under their control. When this tactic didn't work, the leverage was increased until it was impossible for them to survive. If all goes right there should be more photos with this article. In the last issue of the Journal the photo of the large brick mill is the Collinsville mill, it is still there, and in use as a museum and I think there are some shops or small businesses. The hatchet in the photos is a "broad hatchet" that was manufactured there near the turn of the 20th century. This mill turned out tools until it closed in 1950.

There is a stamp on the blade but is hard to read in the photo it says "Collins & Co. Hartford", this being where there sales office was. You may also notice that the blade is only beveled on one side. The handle is not the original but I'll leave it is the way I found it. The photo of the destroyed mill is what was left of the Isaiah Blood Axe Shop. It is shown in the black and white photo in the article. You can make out a flat belt drive pulley on a piece of equipment. All these mills used waterpower to drive the equipment. There were hammer mills, grinding wheels, forge blowers lathes and a multitude of other equipment driven by the flat belts. The drive shafts ran along the ceiling and the belts dropped down to the machines. There were simple clutches to tension the belts or release them. The reason or I should say one of the main reasons New England and New York had so many of this type of mill were the abundance of year round fast flowing small rivers and creeks. In some cases the river that powered the mill served to move the goods

in and to market.

Sorry! Getting a little off topic but the mechanics of these times fascinate me. As stated in the last article we as youngsters used to dig in the gravel bars of the creek near where the axe shop stood and find many broad head blanks and finished blades. I only wish I had kept a few. Most of the iron and metal left after the fire of 1902 lay undisturbed until the scrap metal drives of WW2. This mill made only the heavy tools axes, picks sledges crowbars etc. The scythe shop was located a short distance upstream and didn't burn but went out of business shortly after. We rarely found scythe blades that were more than a thin, rusty, wire-like strip. The scythe shop at one time manufactured weapons for the civil war designed by the founder's son. They were short-sword type weapons. Only a few were made and issued and are of great collector value today.

The photos I hope to include with this article will be of an Isaiah Blood broadaxe and scythe blade I recently acquired. This axe has the proper handle. Notice that it can be hung for either left or right hand working.



Next time I think a discussion on tracing our ancestors might be of interest. Hope you found some part here of interest. I would like to encourage all members to think of writing something for the TMA Journal. I've seen many posts on the forums on projects that would be of interest to others. Remember as we grow that the Journal may become hard copy.



## Hysterical Trekking Or How It Used to Be Done By Firewalker

Many years ago, in the late 70's, a couple of good friends and I did what folks would now think of as "trekking". I don't remember what we called it. "Huntin'" I think. We went down along the Black River just outside the town of Pray, WI. Pray had a tavern and a couple of houses then, unless it was deer season. Then, you could step from one Illinois car to the next and walk for over a mile in any direction without touching the ground. There were more out of state hunters than trees. A week later or earlier and the woods were ours.

One memorable outing must have been in early November, because the snow was scattered in small patches here and there. We journeyed along the river seeing occasional evidence of beaver activity. There were open areas in the ice on the river and tracks where beaver and muskrats had come up out of the frigid water and sat on the ice. We were dressed in our finery. Leather pants, mountain man shirt, red long johns, capote, "voyageur" hat, wool gloves and Sorrel boots. Even then we weren't dumb enough to wear smooth soled moccasins during a Wisconsin winter.

I carried a "trade gun" I made from an old Zouave with a reamed out barrel. The nipple had blown out of it and I had someone weld up the nipple channel and grind the bolster off and made it into a flinter. Tallwater carried an honest to goodness NW trade gun, and Jack carried a 36 cal. squirrel rifle. We each had a shooting bag; probably made from an old leather purse we got from Goodwill. Except for Tallwater, he was the leather craftsman and made his own "cool mountain man bags". We also carried a canvas haversack of sorts with our food and survival stuff, like half a roll of toilet paper. This is before Mark Baker invented leaves for wiping your butt.

Once in a while we'd scare up a partridge and everybody would shoot at it, even Jack. Then we'd all argue about who got the closest to it and where it flew off to. This particular day Tallwater and I had forgotten to bring wads. So we loaded powder, a ball of damp toilet paper, shot and some more damp toilet paper. Damp with spit that is. You should have seen the confetti display every time we shot! Occasionally we'd see a rabbit and then argue about who was in your line of fire and that's why you didn't shoot or missed.

Every so often Jack would say, "Hey behind you!! Deer!" then laugh when you looked. And then finally, "Hey behind you, no really this time, a deer!" and laugh some more.

Along the river every quarter to half mile there were round bottom ruts leading to the river. These were about 100 yards long, about six feet wide and two to three feet deep. Jack always told us they were from a hundred years ago when the caribou traveled this area and went down to the river to drink. But, Jack had more BS in him than Tallwater, and I did put together and we still got a LOT of BS in us. Never did find out what those ruts were really from, maybe loggers dragging logs?

We went along the river for quite a ways and were getting hungry but had yet to score our lunch. As usual it was Mother Nature 25, hunters 0. We came to an area that was tall grass, waist to shoulder high in spots and we were separated by about 25 yards. All at once Jack yells "Whoa!" and fires, a thump of something hitting the ground, he starts yelling, "I made meat, I made meat! Get over here and help me find it!"

Well, we found Jack after a couple of minutes, grinning like usual. We asked what he shot and he replied he didn't know but it must be edible. He pointed toward the river and said to look in that direction. Well, we searched through the high grass for several minutes, firearms ready in case "the game" was still afoot. Then I found the game. Thinking back, we heard the "thump" before the shot, but never connected it. Lying at my feet was a 2lb. canned ham. Jack was close to tears, we were sure he would soil himself laughing.

"Got you guys that time!"

About a half hour later we got to our destination, the ruins of an old house or cabin out in the middle of nowhere. There were the remains of an old cast iron stove and a cupboard with glass knobs and some old boards. Might have been an old loggers cabin or something. There were certainly no obvious overgrown trails we ever found and the closest road was miles away. We sat down near a big pine and built a fire to cook our "game". We got out the old "cool handle" sheet metal skillet and fried some ham and potatoes.

The three of us sat around and told lies, bragged and talked about mountain man stuff for a while and then headed back home.

All in all a good day in the woods. Those come fewer and further between these days.

Tallwater and I still talk about our next scout, and talk and talk. We're waiting for a day when we feel good enough to go alone in the woods. Seems we've gotten pretty old in the last many years. Jack went on ahead of us years ago, sudden like, in his late 30's while heading for a Rendezvous to meet us. I'm sure he'll be waiting for us with another canned ham and a grin.



