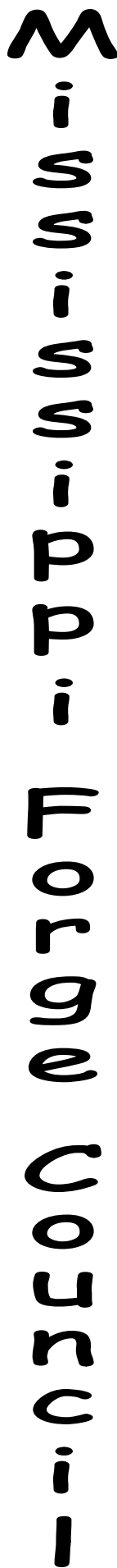




Lyle Wynn ( right) helps ensure the future of blacksmithing in Mississippi by passing the 'Cable Blade' of knowledge to an enthusiastic, and talented Mikey Lord.



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## MEMBERSHIP RENEWAL

ALL MEMBERSHIPS IN  
THE MFC RENEW ON  
JANUARY 1 OF EACH  
YEAR. IF YOU HAVE NOT  
RENEWED YET PLEASE DO  
SO. WE WILL BE PURGING  
THE MAILING LIST AF-  
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AND WE DO NOT WANT  
TO LOSE YOU OR YOUR  
SUPPORT.

Send your check to:  
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### **Meeting Demonstrators / Demonstrations**

Note: Unless otherwise noted; the Mississippi Forge Council meetings are held at the Agricultural and Forestry Museum on Lakeland Dr. Hwy 25, in Jackson, MS. on the second Saturday of each month, except June. Meetings start at 9:00 am. We never know how long we will be there so be prepared to feed yourself if necessary. Snacks are available at the General Store.

If there are new members or visitors interested, we will generally have a 'green coal' beginner's class after the demonstration. This usually lasts about 3 hours.

Be sure to check out the MFC schedule on the web site [www.msforgecouncil.com](http://www.msforgecouncil.com) any late changes in the meeting plans will be announced there.

**ALSO: IF YOU ARE NOT GETTING OUR EMAILS PLEASE CONTACT  
JPIGOTT@JAM.RR.COM AND LET US GET YOU ON THE LIST.**

### **MEETING SCHEDULE IMPORTANT ANNOUNCEMENT**

The February 10 meeting is being moved back one week to Feb. 17. We are doing this because a lot of our members are going to Covington, LA on the 10th and 11th for the meeting of the Gulf Coast Blacksmith group. The featured demonstrator is Frank Turley from Santa Fe, New Mexico. Frank's skill level is such that I don't want to miss his demonstration. He will be too close to miss.

You will find more information on this demo somewhere in this newsletter.

**February 17** - Ricky Wynn will show us how to use a sheet metal brake to make copper items.

**March 10** - Ed Wozniak will demonstrate how to make copper moldings. This meeting may be at his new shop

**April 14** – Ernie Dorrill will demo decorative leaf work.

Has the metallurgy aspects of metal work ever confused you? Would you like help understanding the processes involved with tempering, annealing, normalizing etc.?

Jon McIntosh sent me this web site, this is almost as easy as asking Max Goodman.

[http://www.matter.org.uk/steelmatter/metallurgy/7\\_1\\_2.html](http://www.matter.org.uk/steelmatter/metallurgy/7_1_2.html)

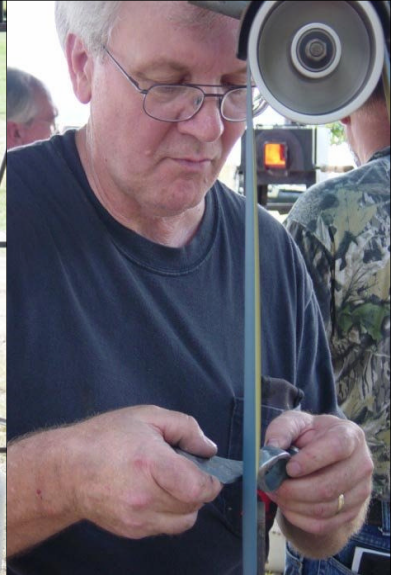
**NATIONAL ORNAMENTAL METAL MUSEUM  
MEMPHIS, TN  
901-774-6380, WWW.METALMUSEUM.ORG**

## Angle Iron Eagle, a la Bill Epps, Mesquite, Texas

*by Eden Sanders, San Andreas California*

Anyone searching the Internet for blacksmithing projects has probably come across something by Bill Epps. This Angle Iron Eagle (*say that five times quickly*) was in *Balcones Forge*, the newsletter of the Blacksmiths of Central Texas, and it caught my eye. You can probably figure out how to make one. If not, it is featured in Bill's new 40-page, spiral-bound book, *Angle Iron Projects* (\$20). If you are interested in seeing the other angle iron projects, including an angle iron leaf, angel, butterfly, dove or winged dragon, contact Bill Epps at 972/285-1004 or 1134 Military Parkway, Mesquite, TX 75149-4127. He produces some very good videos as well. Our library has four of them. ♣





Top three photos are of Bobby Howard and Terry Vandeventer demonstrating at the Bowie Festival. Wizard heads are by Lyle Wynn after an exceptional demonstration by Jim Pigott. Stacy Stegall leads the hummingbird class at Tannehill. Tailgaters Bill Pevey, Stacy Stegall, Tommy Ward and Glenn Martin at Tannehill and new members John Crawford and Emie Dorrill at Walter Neill's meeting in Oxford.

**Brian Gilbert on ABANA**

Should ABANA go away, resources that exist now will go away. This list, for example, will go away, and I think by the number of posts lately that it's at least SOMEWHAT useful.

Another thing that would disappear is ABANAs back catalog of magazines and articles, which I'm trying to get republished. (If there's no more organization, there's no one to grant copyright.

It might be available in 104 years thanks to Sonny Bono and the Disney corp, but that's another story.)

Believe me, I know (and Dave Mudge can back me up here) ABANA AIN'T perfect.

There are plenty of things that could be done better.

Some things ABANA does pretty well. (That Hammer's Blow magazine is pretty darn good, even though that Editor is more than a few bricks shy of a load.)

ABANA is limited in what kinds of services it can provide, just by the nature of the group.

When you're spread all over the country, you can't do much for individuals like the local organizations can. ABANA publishes as much as it can (like magazines, plans, etc) but they do lots of little things that many people never notice that still help blacksmithing as a whole. For example? We've put press releases about any major blacksmithing event (like the conferences or Tom Joyce winning the MacArthur award) in as many national craft and art magazines as possible. You know who reads those? Architects and interior designers, for one. Maybe, just maybe, it's helping convince a few people that forged ironwork IS a legitimate art form, and

**IT'S WORTH PAYING FOR!**

This doesn't just happen... SOMEBODY has to write press releases, contact the magazines, gather photographs, make the whole package look professional, and send them out. ABANA pays for that.

The board (and the members, too) continually

tries to come up with new ideas to serve the membership. Various members have totally different needs... weekend blacksmiths vs MFA professionals, for example. It's a tough balancing act.

But remember... if they don't want to be an ABANA affiliate, that's a valid choice, but don't expect services to always be there.

There are NUMEROUS examples of nonmembers calling the central ABANA office, expecting their time and service. "We're sorry, this number is no longer in service" is a real possibility. All of a sudden, posts to TheForge and the editors list all bounce back.

Sure, blacksmithing would survive, other lists would crop up... maybe (ABANA donates money to keep theForge up... I'm sure that all the posters on the forge would donate five bucks to keep the list open... RIGHT?). The local conferences would continue, and things would coast along.

But it'd be a giant leap backward for the craft as a whole.

So please, when considering whether to be an ABANA affiliate, look beyond individual needs and consider what ABANA does for the craft as a whole. Like I said, it ain't perfect, but they work extremely hard, under difficult conditions, and do their best to promote the craft as a whole, with extremely little reward.

Thanks

BG

--

Brian Gilbert

Editor, the Hammer's Blow

*I found this article in the publication of the Rocky Mountain Blacksmith Guild. I completely agree with Brian's argument here. If you are not yet a member of ABANA, reconsider, you are missing too much of what is happening in the blacksmithing community, particularly Brians' work with the Hammer's Blow. The application is in the back of this newsletter.*

*Jim Pigott*

HAMMERS BLOW FALL 2006

THE SAFE SHOP

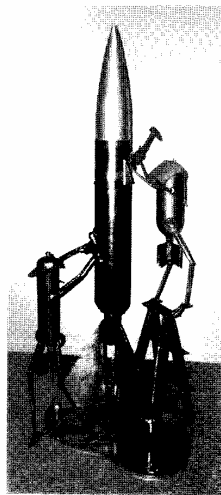
## A Junkyard Time Bomb

By Marvin Tadlock



*A normally good-looking mug altered by amateur plastic surgery  
A reminder that junkyard parts can be very dangerous.*

Here's a picture of a lucky man. This wasn't the result of a late-night wandering into a Memphis bar on the wrong side of town, but a tangle in the blacksmith shop. And no, it wasn't with another blacksmith over the merits of the term, "artist" blacksmith— it was a tangle with a piece of scrap metal.



I needed a certain shape for a sculpture I was working on, and I found the perfect piece in the junkyard. The pan-shaped piece I needed can be seen on my sculpture, *A-Bomb Sculptor*, (left) at the bottom of the large 'bomb' in the middle, just over the tail fins of the missile. I needed to make the transition from a 8" down to 5" and that piece seemed to just fit the bill. It only needed to be cut free.

It really fooled me, as I am usually very safety conscious. While considering removing the pan shape on this piece, I was mainly concerned about the possibility of flammable liquids. It was round, about 12"

to 14" high, and weighed seventeen pounds. I checked carefully for oil and, finding none, I took the plasma arc cutter and cut through the bolt holding the band on the outside, and BAM... the upper part— weighing fifteen pounds— hit me in the face!

I bent over the piece when I cut the bolt for the retaining bolt at the bottom. The top piece flew up and hit me, breaking my nose along with the glasses frame, splitting my

nose at the top, and blackening both eyes. My safety glasses were demolished. I went from bending over the brake chamber with a plasma cutter, to standing straight up in a flash! It didn't knock me unconscious, but it definitely stunned me. I stood there for a minute or so "feeling for parts." You could tell from the blood on the floor the next morning that I expected to find something missing, like my nose or a piece of skull.

Needless to say, I was very lucky, as I could have lost teeth, eyes, life... but by the grace of God. I never once thought of a giant spring lurking inside. I didn't know it then, but I was cutting on a "parking brake chamber." I have been told that when new, the springs inside are compressed to 5,000 pounds of pressure per square inch! (By the way, people are killed every year by doing exactly what I did— opening something they are not familiar with.)

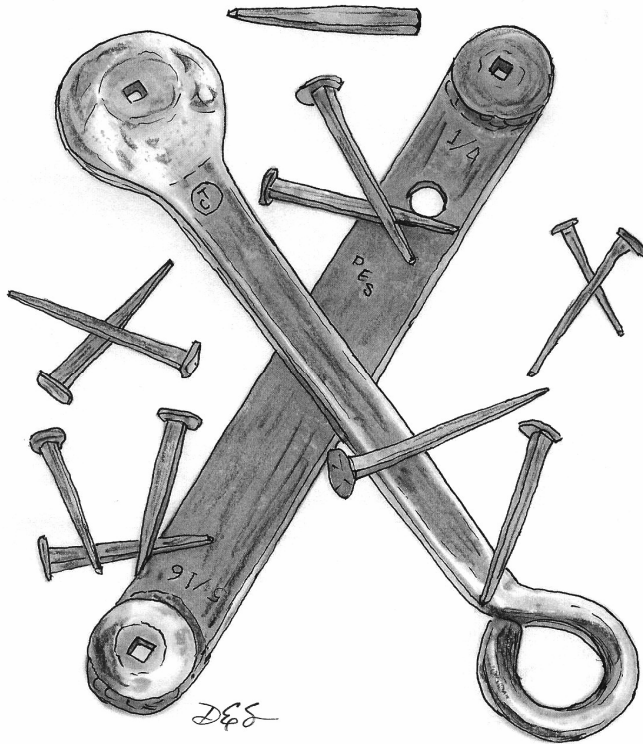
In order to prevent this sort of thing happening to you, let's "I.D. the perp," so to speak... Take a look at the following photo.



*The parking brake chamber in the position when the retaining bolt was cut. The 15-lb. housing flew upward like a missile.*

I showed a maintenance man the spring that was inside the piece. It was over a half-inch in thickness, and 8" high. It was compressed to less than 4 inches! With all my strength, I could not squeeze it more than a 1/4 of an inch. He stood on it, and 200 lbs. only compressed it down less than half an inch.

I've re-learned a lesson I wish I had not forgotten— NEVER cut into anything you are not sure of... that you don't know what's inside, and exactly how it works. I had found the shape I needed for part of a sculpture I was building. I failed to realize that the function of that great shape was to hold 5,000 pounds of pressure being put out by the spring inside!



## Making Nails

by Dave Smucker

with illustrations by the author

Making Nails? Why an article on nail making? After all, nail making is easy or at least looks easy when you see someone else make nails. Many books on blacksmithing show a nail header and devote only a page or so to nail making.

Well here are some of my reasons you should try it and I hope to show you some things that are not in all of those books.

- Nail making is one of the very oldest forms of forging.
- Square hand made nails have 4 times the

holding power as a round wire nail.

- It is a great way to learn better hammer control.
- If you want to change the "style" with which you hold your hammer and use it then nail making is a great item to practice on.
- It is a great way to warm up when starting out forging for the day.
- Even though factory nails are cheap, there is a market for hand made nails.
- It is a great demo item, and something that you can make and give away to kids. (Adults should pay for them.)
- Making a good nail header is not hard, unless you follow the information in all of those books.
- It is a fun contest item to test you skills against other blacksmith at local forge meetings.

## The Basics

To make nails we start with a round or square rod usually in a size from 3/16 up to say 5/16 in either diameter or square. The ideal material would be very low carbon steel but we can make good nails from either hot or cold rolled mild steel.

We first heat our steel and then draw out the shank of the nail, working on two sides at right angles to each other. Then using our hot cut hardie we cut most of the way through the stock rod leaving just enough material for the head.

Now, placing the shank of the nail into our nail header we break off the stock rod with a twist and then follow by forging the head on the nail.

Sounds quick and easy - and if you are really really good you can do this in one heat. Most good nail makers will do it in two heats. One to



form the shank of the nail and cut almost through on the hardie and then a second heat to heat the now cool head area and forge the head.

Starting out making nails you will need 3 or 4 heats and should not feel bad about more until you get the speed and rhythm down.

There are several variations on this basic method and we will discuss what I will call the "Peter Ross", "Jerry Darnell" and "Tom Clark" approaches later in this article.

### A Short History of Nails

Man has been making and using nails for a long time, at least 5000 years and maybe longer. Along with forging of weapons and knives, nails were one of the first metal items made in volume from copper and then iron. Copper and bronze nails continued to be used in shipbuilding as iron came into wide use in other construction. Iron nails from the Romans have been found in Britain.

All of these nails were hand forged one at a time. For centuries, the stock for nails would be hand slit into square cross section from iron that had been pounded out. The "sheet" was most likely made with waterpower heave hammers. Then in 1606, a major improvement was made with the invention of the slitting mill by Englishman Bevis Bulmer. This slitting mill could cold shear a series of square sections from a thin bar of wrought iron. Bundles of these nail rods were "loaned" to local folks who would convert them to nails often using the home hearth as their forge. They would then be paid by weight of good nails re-

turned less some allowance for waste. Most of this work took place on British farms and everyone made nails from kids to grandparents. The pay was very low.

Nail making in America followed a similar pattern with most of the nail stock coming from England. Nail stock has been found at Jamestown so local forging of nails took place from the very start in the USA.

In 1775, Jeremiah Wilkinson, a Rhode Island inventor devised the first machine to make cut nails from iron sheet. By 1795 there were machines that could cut and head nails in one operation.

Nail making didn't really change again until after the large volume production of mild steel by the Bessemer Converter process. By 1880, mild steel wire was being produced and the wire nail became king because of its lower material / high volume production. Most nails today are wire based with some cut nails still being produced. Increasingly, nails being driven by pneumatic nail guns to the point where some construction workers today don't seem to know how to hand drive a nail.

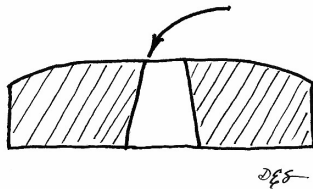
### Making a Nail Header

First, we need a nail header and you can easily make your own. Or you can purchase a very good nail header from Tom Clark for about \$ 35.00. Tom makes these himself and they are not something that he imports.

If you want to make your own, there is one very important thing to keep in mind "DON'T MAKE IT LIKE WHAT IS SHOWN IN THE BOOK." Now what do I mean by that strong statement? Well, I have looked in 7 different books I have on blacksmithing

and all 7 show a form to the nail header that will not work without modification - and none of these books tell you what to do.

They all show a form like the following for the opening in the header. A square tapered hole in a domed forged with the taper larger at the bottom and a sharp top edge. In other words a square hole, punched from the bottom of the tool.



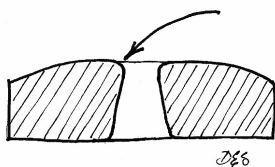
DO NOT make a nail header like this

If you make a nail header like this with that sharp top edge what happens? When you go to head the nail a small amount of metal is forged downward into the hole in the header. Because of the mass of the metal in the shank of the nail and because the metal right at the head is usually hotter you will get a small amount of upsetting just below the sharp edge of the nail header. This upset is now larger than the opening at the top of the nail head and locks the nail into the header. "Game Over".

However, if we look at all of the old historical nail headers, they were made this way - how did they get them to work?

One of two ways, and swearing wasn't one of them. One of the ways was to very carefully file or dress that sharp edge to remove it and give some top relief to the header.

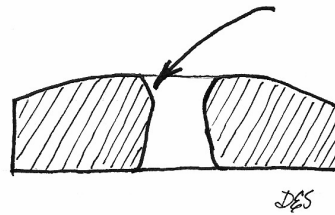
It looked something like this.



This will work.

The second method was to first punch through or nearly through from the bottom side. Then reverse the punch and punch gently through from the top forming a somewhat hour-glass form. I say somewhat because the waist of the hourglass is close to the top of the tool. This form may also have been dressed with a file. I think that this is the most common form on historical headers.

It looks something like this in section.

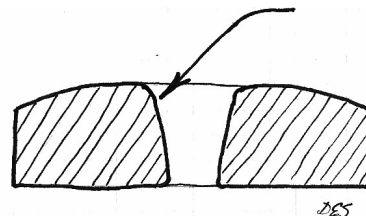


I have had good luck with this form.

I find that in making nail headers rather than using a very small needle file required to fit the hole that I can dress the hole using a small strip of emery cloth.

Now Tom Clark has done just the opposite. He puts the taper hole in the nail header with the large side at the top and small side at the bottom. He is also very careful to make sure that the header has no sharp edges. Looking carefully at the Top Clark Header my guess is that he dresses the hole with emery cloth as I do.

Here is the way the section looks through a Tom Clark Nail Header.



This form also works very well

Nail Header? I have seen workable nail headers made from mild steel. Not my choice because when I take the time to make a tool, I want it to last a long time. Tom Clark makes his nail header from 5160 - a good choice. The nail header that Jerry Darnell has with which he has made 1000's of nails is made from the end of automotive steering or suspension rod. I also like W1, O1, 4140 or 4340. S7 or H13 would also be good choices. The problem with the last two steels, since they are air hardening, once you get them hot, you can't drill or file them, any finishing work is going to be by grinding or polishing them with emery cloth. Historically, W1 or similar high carbon plain steel would have been used. The W1 tool steel "bit" would have been welded to a wrought iron backer bar as a handle.

5160 is a good place to start because most of us can put our hands on a used leaf spring - which is most likely 5160. Tom Clark, since he is selling his nail headers only uses new 5160 material, but for most of us, a leaf spring will do.

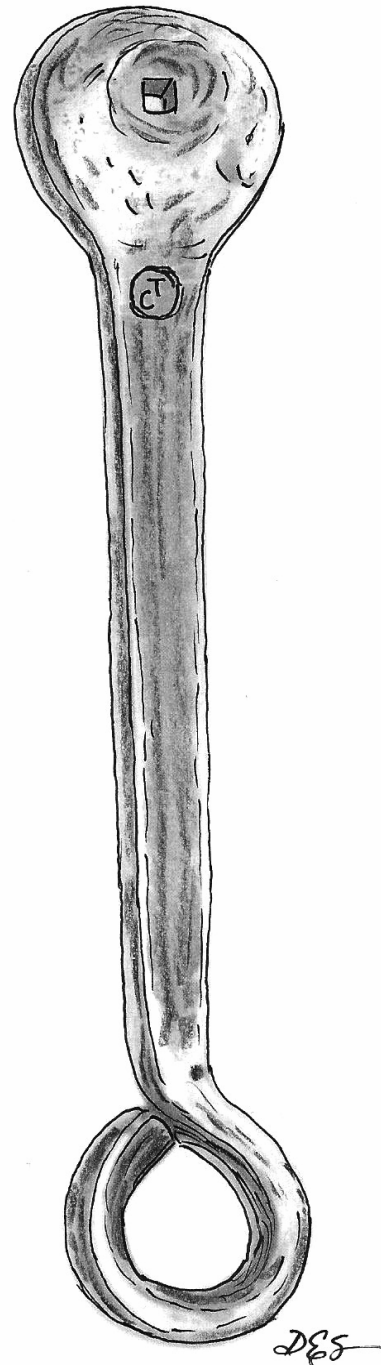
How Tom Clark makes a Nail Header.

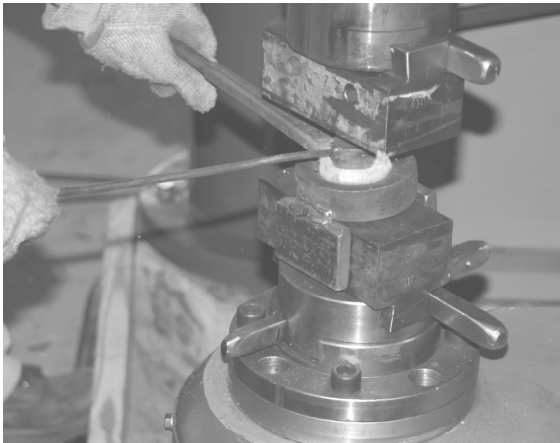
Tom makes the Header shown here by first drawing out the handle on the power hammer and then forming the head. He rounds that on the power hammer and then takes another heat and dishes the head using a fixed female bottom tool and a hand held male top tool.

He then puts in the taper hole and dresses the tool. Before he sells it, he makes a nail to make sure there are no problems.

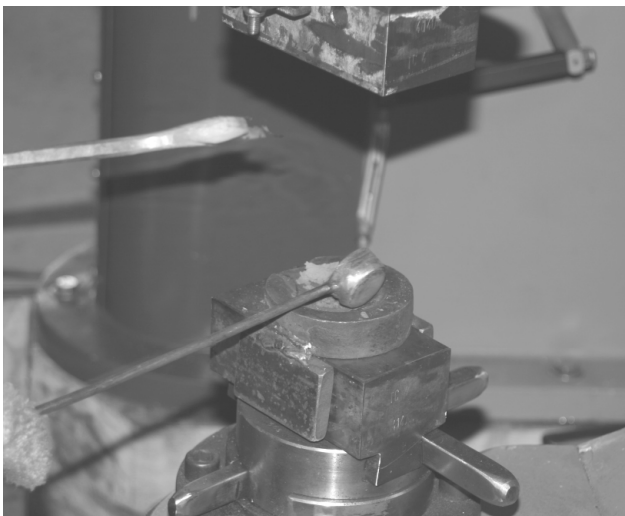
It will be some work, but you can do all of these steps without a power hammer. Or you can weld a handle onto a smaller piece of leaf spring and then dish the tool in a

swage block, especially if you have the help of a striker.





In this photo Tom is putting the dome in his nail header under the power hammer.



In this photo are both the bottom tool and the top tool used to form the dome on the working end of the nail header.

To purchase nail headers from Tom. Contact him at:

Tom Clark, Ozark School of Blacksmithing, Inc

20183 West State Hwy. 8

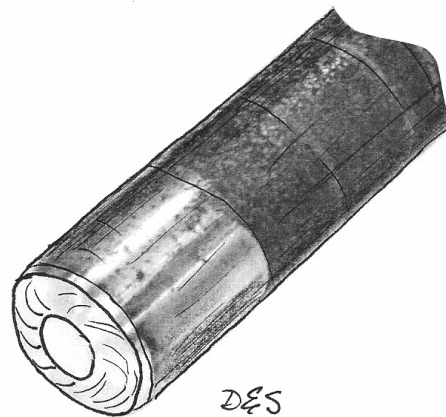
Potosi, Missouri 63664

phone 573 438 4725 fax 573 438 8483

email ozarksch@therural.net

My method is a little different and you might say it is a machinist or welder's approach.

I first grind a domed surface on the end of a round piece of tool steel.



I just do this free hand on a 2 X 48 inch belt sander but you could also do this with a 1/2 inch angle grinder. Or, being a blacksmith, you could forge it on.

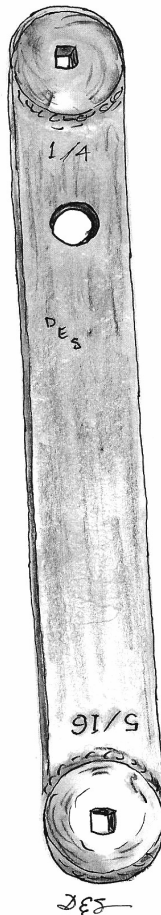
Then I cut off a small slice of the tool steel about 1/4 inch thick. The reason to remove the end before cutting it is that it is much easier to hold and grind a piece that is a foot or so long. You can try making this cut in a horizontal band saw if your tool steel is annealed, but a chop saw will work with hard material and save your saw blade for mild steel.

Now, weld your disk of domed tool steel to a mild steel bar which will become both the backing material and handle. I do this with a disk on each end so that I can have two nail header sizes in one tool.

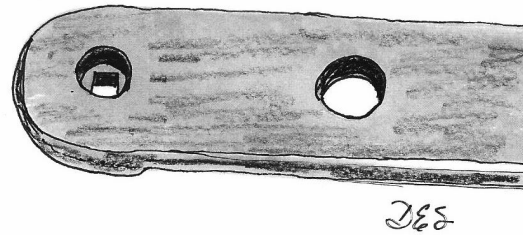
Then anneal your welded up tool. To do this, heat the whole tool to above critical temperature and then place in vermiculite. If you don't

have vermiculite, wood ashes or lime will work. By heating the whole tool - the tool steel part will anneal better because the overall tool will cool slower. You will not be able to anneal S7 or H13 using just a forge, you just can't cool it slow enough.

If using S7 or H13, drill your hole in the disk before welding to the back bar. It should be "soft" as it comes from the supplier.



Now drill a hole in the center of your domed areas. This hole wants to be about 2/3 of your finished nail square dimension. (You could also punch this hole but you will get less distortion by drilling.) I also add a hole so that it can hang on the wall.



Backside of Header, note the relief drill in the backer bar. The other hole is for hanging.

Now heat your tool up and drift your hole to a tapered square form. Like Tom Clark, I drift this one from one side so that the hole is bigger at the top. I have also made nail headers with taper in both directions, just make sure you have that top taper that goes about 1/3 of the way through your tool steel.

Last step is to dress your tool. To do this I use 120 or 180 emery cloth. Tear some very narrow strips (1/8 to 3/16 inch wide) and work them back and forth through the hole to polish all surfaces and especially the edges. This is the most important step in making a nail head - so that the nail doesn't stick.

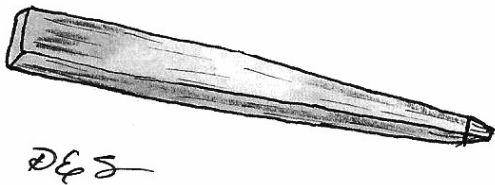
You can also make a Nail Header similar to mine using the head of a Grade 8 bolt.

Because Grade 8 bolts are made from a high strength alloy steel, they will make a good nail header. A 3/4 inch bolt makes a nice size. You first dome the head of the bolt by grinding and then drill your starting hole that will be drifted square in the center of the bolt head. Next cut off the bolt head leaving a few threads. These threads can then be used to attach the bolt head to your backing bar / handle by tapping a hole. Alternately, you can cut the head off flush

and weld it to the backing bar / handle. If you go the threaded route, you will want to drill from the underside with a larger hole so that you will be drifting only a depth of 1/4 to 3/8 of an inch.

### Making your square tapered DRIFT.

In all of the methods for making a nail header that we have shown here you will need a square tapered drift for completing the hole in the Header. This drift should have a taper of 10 to 12 percent over its working area. In other words, taper of about 1/8 inch per inch of length. A very shallow taper such as 5 percent or less will not work for a header because such a taper is self-locking and the last thing you want is a self-locking taper. What is a self-locking taper? Think of the Morse Taper you will find on some drill bits and in the spindle of your drill press. Once set you have to drive out a Morse Taper. A Morse Taper is approximately 5 percent



To make my square drift shown here I start with a square lathe tool bit. I dress one end flat with rounded corners and then grind the taper onto the lathe tool bit. To do this grinding I hold the tool bit in the jaws of a vise set at the approximant angle I want for the taper. I then use a 4 and 1/2 inch angle grinder to grind the taper on one side at a time. If you work slowly and carefully, you can produce a very good drift

this way. Because a lathe tool bit is made from high-speed tool steel, you will have a drift that will handle hot temperatures and never wear out. You can buy lathe tool bits from MSC or Enco or find a machinist friend to give you a few. For these nail headers I used a 1/4 square bit. You can also use a 5/16 or 3/8 square bit. One major caution - **DON'T DRIVE THIS DRIFT WITH YOUR GOOD FORGING HAMMER.** The tool bit is very very hard and you will damage the face of your hammer. That is why you need a "junk face" hammer at your forge. I use an old stonemason's hammer for that function.

You can make your drift from other steels besides a lathe tool bit. W1, O1, S7, H13, 5160, 4140 or 4340 will all make good tapered drifts. You can forge the taper of such a drift and finish it by grinding. I would not use mild steel (A36) You can drift a few holes with a mild steel drift - but if you are going to make a tool and put time into it why not make one that will last. Round drifts can be made from mild steel. They are easy and quick to make and they are uniformly loaded in use. Square drifts take more time to make and the corners of a square drift are highly loaded when drifting. Make them from a tool steel.

Dave Smucker  
Is  
Way Cool

### Making Nails

We now have a nail header - So let's get on with making nails. As noted before, you can use either square or round stock. Depending on the size of your header, a stock size from 3/16 to 5/16 of an inch is common. Historically, nail stock was square in cross section. It was first cut by hand from flat forged bar stock of wrought iron and later cut on a slitting mill into nail stock.

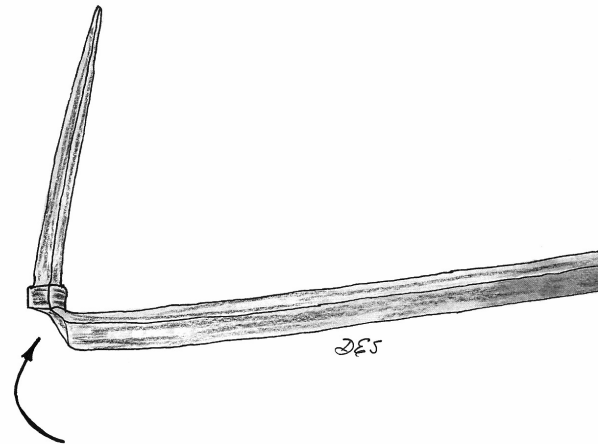
In the "Tom Clark" method of nail making, we heat our stock and then extend a short portion on the anvil and draw out a taper working back and forth between two faces. Typically, we will get a nail length that is about 3 times the length that we lay onto the anvil. So for a 2-inch nail we would start with about 3/4 of an inch on the anvil. By not laying more material than this on the anvil we retain heat in the stock we are going to use for the head. We don't worry about and don't really want a sharp point.

Once we have our taper we now use a hot cut hardie to cut most of the way through our stock just back from the taper leaving enough material for the head. We don't want any more material here than about the diameter or width of the stock. Too much material for the head and it will fold rather than upset when we forge the head.

If your vise is at hand consider putting your hardie in the vise rather than into the anvil. This way you can leave it in place as you make nails. Please don't leave your hardie in the anvil while doing other operations at your anvil - it is very easy to cut off a finger or seriously hurt yourself with that hardie sticking up in your anvil. (Watch for

it in the vise too, but here at least it is usually out of the way.)

Tom Clark now does a neat little thing just before he takes a second heat to make the nail head. He taps the partly cut through nail and stock so that he get a form that looks like this.

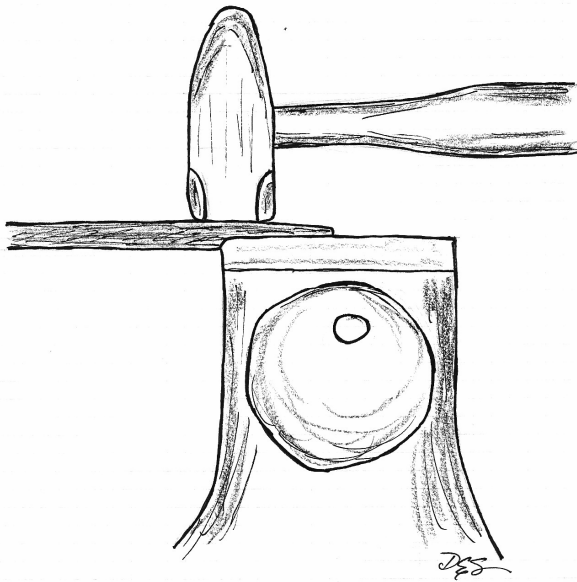


This allows him to go back into the fire with the nail tip up and out of the hot part of the forge.

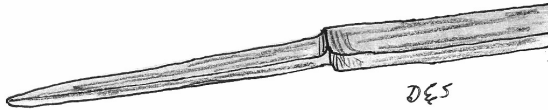
Now he goes to the header, twists off the stock rod and forges the head using a central upsetting blow followed by four quick blows to forge the facets of the nail head.

The Peter Ross Method. I haven't seen Peter make nails so I am basing this method on what Ron Howard has told me and the way he learned to make nails from Peter. In many ways, this is similar to Tom's method except that Peter makes a point of setting off the head area at the start of nail making. He uses a half-on-half-off blow to set down the stock from two sides of the nail stock. The nail is then drawn out.

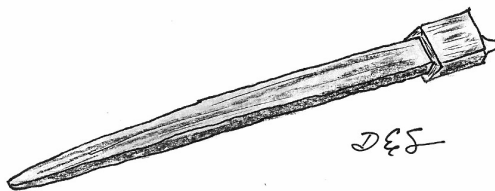
The half-on-half-off blow looks like this.



After the shank of the nail is drawn out the unfinished nail look like this.



Two quick half-on-half-off blows can then move the shank to the center when used on the other side of the shank.

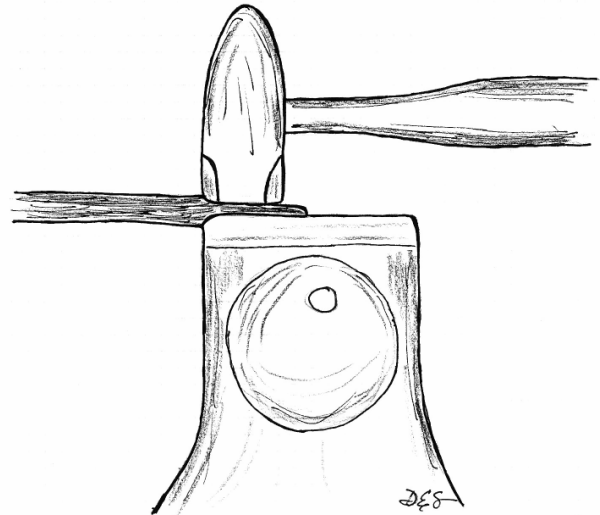


Now cut nearly through with the hardie, place in header, break off and forge the head. Historically a good nail maker could do this in one heat. A good smith could

make 100 nails an hour and do it for 10 hours a day. If you have to take another heat, it is not a sin.

One important result of the Peter Ross method is that the shank of the nail is nearly straight with not as much taper as in Tom's method. This means that for the same given amount of metal, Peter's nail is longer. Not a big difference, but in the days of very high price metal vs. labor cost, getting the most nails per pound was important.

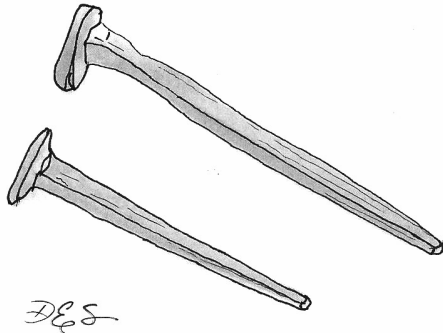
The Jerry Darnell Method. Jerry's method is similar to Peter's but with an important difference. Rather than use the half-on-half-off method of shouldering that Peter teaches, Jerry uses the hammer to shoulder from the top and the anvil edge to shoulder the bottom.



This means that when the nail shank is ed only the final steps of cutting off forging the head are left. Also, because there is no contact with the rest of the stock it retains most of its heat. While it may be hard to believe, I have seen Jerry make two nails in one heat. Each nail was



about 1 inch in length. Historically, really good nail makers would have used this high hammer control method. (I suspect that Peter would use the same method as Jerry when making nails himself but teaches the half-on-half-off method of shouldering because it is much easier to learn.)



Here is a sketch of two Jerry Darnell nails I have from one of his classes at the Folk School.

Light that forge and go make some nails. Have a nail-making contest at your local forge group. It's fun. If you can advance to the Jerry Darnell method of nail making, then your hammer control will have advanced to the point that you will be a much better smith.

**The Great Myth about burning houses for the nails.** In many books on blacksmithing and all kinds of articles on the internet you will see repeated the story that during colonial times nails had such high value that if some family was going to move west to a new area that they would burn down their house and collect the nails before leaving.

**I think that this is pure Myth. Just repeated and repeated - yet no one gives any original source or**

**even a reference to an original source for this story. No one who has built a house and could sell it would burn it just for the nails. It just does not make sense.**

**Where does this Myth come from? Most likely, it is the fact that nails did have high value and when a building or house did burn, the owner would always take the time to sift through the ashes and recover the nails. Fires were not uncommon and destruction was often rather complete so this could have happened many times.**

**A few buildings that had not been used and had failed roofs might well have been burned for the nails but I think this would have been rare. Log cabins and out buildings of a simple nature were built mostly using wood pegs etc. so they didn't have many nails to go after.**

**Think I am wrong about this? Well I'm always open to new information. Why don't you send me an original reference where some record of the time says that "Thomas Jones burned the house on his farm so he could take the nails with him as he headed to Ohio territory."**

**Dave**

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## Dating Antique Items Made by Blacksmiths

by Gary Scasbrick

Close dating of blacksmith made items, especially some hand tools is impossible without makers marks or documentation. Some styles of tools have been made the same for 200 years. Some styles or types came into use and went out of use in certain periods. Here are some clues to come up the approximate date of some hand forge items.

1.) Dome Head factory made rivets were common after 1845. Items with factory rivets should date later than 1845.

2.) Tools from England were Stamped "Made in England" after 1891

3.) Tools stamped with "Cast Steel" were made after 1760

4.) Pritchel Holes in anvils appeared about 1830 in English Anvils.

5.) Earliest Factory made hatchet approx. 1845

6.) Double bit axes first became popular about 1850

7.) On any edged tool, steel bit forge welded to iron body, look for a line where the steel was forge welded to the iron body. These steel bits were generally added after approx 1744 and quit approx. 1870

8.) Pre Civil War handles for axes were straight not curved.

9.) No Poll on Axes in the 1600's, First hint of a poll about 1715, Fully developed polls by 1750, Round polls continued to be made until about 1800 and square polls are still made.

10.) Threads on bolts were hand filed and rounded before 1830 - where sharp and crisp later. (*I have English threads lathe cut and rounded, American a sharp V thread after 1830 - Dave.*)

11.) First practical steel production furnace in America was 1730. Edged tools were scarce before this time.

12.) 1840 First adze eye hammer (long or deep eye) same as on modern hammers

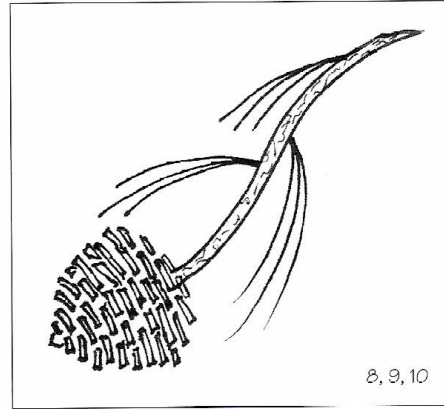
13.) Nail pulling slots in bottom edge of blade in shingling hatchets became popular in early 1800's.

14.) 1815 First cut nails with a square head were made by a machine, these had flat sides a had forge nail had four tapered sides. (*I have this date about 25 years earlier Dave*)

Patina, items stamped with a date, item with a makers mark, items with original wood handles mean "everything" when trying to put a value on any antique hand forged item!

## Lory Wedow's 20-Minute Pine Cone

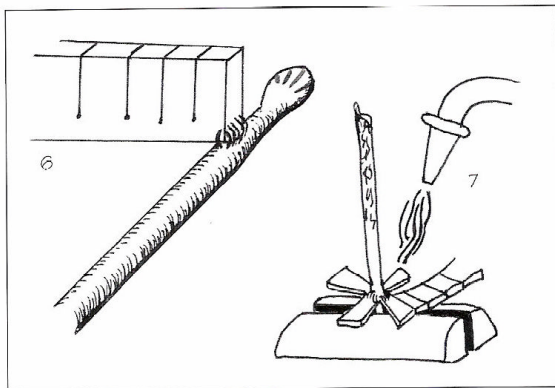
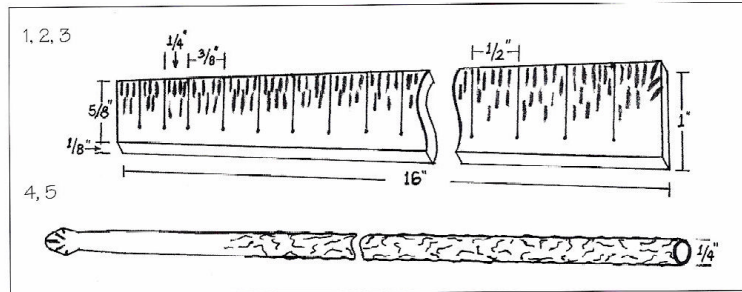
*Tweaked from Tales of the Western Reserve, Fourth Quarter 2005  
Ohio's Western Reserve Artist Blacksmith Association*



1. Start with about a 12" length of 1" x 1/8" mild steel. Taper it to 5/8" width keeping the 1/8" thickness throughout. The tapered length will be approximately 16".
2. Leaving a 1/8" spine, make slits along one edge every 3/8". (You may wish to narrow the spacing to 1/4" for the last three slits at the narrow end and widen the spacing between the first three slits at the wider end to 1/2".)
3. Cross peen the edges of each petal along the slit edge

to 1/16" thickness. Not shown are the resulting fan shape of each petal and the fact that the bar will curl in as the outside edges are peened.

4. Texture about 8" of 1/4" round tapering it slightly for 1" at one end. Use cross peen or texturing hammer.
5. Flare and flatten the tapered end to 1/8" thickness as shown.
6. With the tapered end of the flat stock resting on the round, and the peened petals facing the tip about 5/8" from the tip, tack-weld the two pieces together. They will be at right angles to each other. (When they are attached and the tip is pointed upwards, the peened sides of the petals will face up.)



7. Clamp the tip end in the vise and while heating the spine of the petals with an acetylene torch, wind and tack-weld the first five or six petals around the 1/4" round stem. Subsequent winds will spiral away from and up the length of the stem. Tack-weld as needed to create the proper shape. Use pliers or small tongs to adjust petal positions while they are warm. You may need to let the assembly air cool occasionally. Keep the heat only on the spine. As you get to the last seven or eight petals, spiral in towards the stem.
8. Bring the stem to life by giving it a slight curve, and taper the end as if it were broken off of a branch.
9. Torch-burn the edges of all the petals to unsterilize your pinecone.
10. Cut, bend and weld together three pieces of welding rod for needle bunches along the stem. ♣

### First Queen City Fair Arm and Anvil Competition

Meridians annual Queen City Fair was held from October 2-8, 2006 at the Lauderdale County Agricultural Center. The weather was perfect, attendance was great, the Chick-On-A –Stick and corn dog prices were high, but everyone had a good time.

On Saturday the 7<sup>th</sup>, at 5:00, the center manager (and local farrier) Rob Seal hosted the first Queen City Fair Arm and Anvil Competition. Only three Mississippi farriers entered the competition, Layne Giesbrecht, James Hollingsworth and Stanley Pritchett. Layne has 3-mile farrier service out of Scooba, MS (662-476-8525). James Hollingsworth is a Meridian fireman who shoes his own horses. Stanley Pritchett is a jack of all trades who shoes part time (601-632-1765).



Layne Giesbrecht of 3-Mile farrier Service hammers out a shoe.



James Hollingsworth takes a quick break from hammerin'.

The core of the competition consisted of three divisions. The first division was a keg shoe modification class. The participants had to modify a factory made shoe, clips were pulled and extended heels were put on the shoe.

The second division consisted making a handmade  $\frac{1}{4}$  X  $\frac{3}{4}$  "0" shoe with a toe clip. The third division was a  $\frac{1}{4}$  X 1 sliding plate for a reining horse. Each competitor had thirty minutes to complete each class.

Layne Giesbrecht won the 1<sup>st</sup> class competition. Stanley Pritchett took the 2<sup>nd</sup> and 3<sup>rd</sup> class wins. The contest drew a good size crowd, and everyone seemed to

have enjoyed watching the farriers ply their trade. To blacksmiths, farriers seem use small funny looking anvils, but I guess we all have to do what we have to do to get the job done. The blacksmith demonstration was being done with coal and coke (real blacksmithing!!) while the farriers were all cheating and using gas.



Benny Crevitt hammer' out something while Crawford Moore supplies the air.

Benny Crevitt [crevtrad@bellsouth.net](mailto:crevtrad@bellsouth.net) was also there that afternoon demonstrating. Since Benny had to tote his tool box all the way from the parking lot he figured he might as well make something interesting. So he hammered out some miniature horseshoes and decorative leaves that could be used for fan pulls.

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A thoughtful looking Stanley Pritchett



Left to right: James Hollingsworth, Stanley Pritchett, Rob Seal and Layne Giesbrecht. In the center is one of those funny looking farrier's anvils, decorated with horseshoes.

Rob Seal [agricntr@lauderdalecounty.org](mailto:agricntr@lauderdalecounty.org) wants to try and makes this an annual event. Rob is actively looking for farriers who want to compete next year. If we blacksmiths at the Mississippi Forge Council can generate enough interest, then Rob also wants to add some type of blacksmith competition. Drop him an email if you are interested. The tentative date for next years Queen City Fair is October 1-8, 2007.

Vance Moore

**THIS EDITOR GOES OFF —THE SUBJECT.**

For the years I have done this newsletter I have avoided politics and religion and stuck to blacksmithing. I am taking liberty now to relay something sent to me recently that strikes a cord with me. If you have a response to this send it to me, I will publish it, maybe.

Jim Pigott

**SOMETHING NOT TO LAUGH ABOUT!**

If they know of him at all, many folks think Ben Stein is just a quirky actor/comedian who talks in a monotone. He's also a very intelligent attorney who knows how to put ideas and words together in such a way as to sway juries and make people think clearly. The following was written by Ben Stein and recited by him on CBS Sunday Morning Commentary:

Herewith at this happy time of year, a few confessions from my beating heart: I have no freaking clue who Nick and Jessica are. I see them on the cover of People and Us constantly when I am buying my dog biscuits and kitty litter. I often ask the checkers at the grocery stores. They never know who Nick and Jessica are either. Who are they? Will it change my life if I know who they are and why they have broken up? Why are they so important?

I don't know who Lindsay Lohan is either, and I do not care at all about Tom Cruise's wife.

Am I going to be called before a Senate committee and asked if I am a subversive? Maybe, but I just have no clue who Nick and Jessica are.

If this is what it means to be no longer young. It's not so bad.

Next confession:

I am a Jew, and every single one of my ancestors was Jewish. And it does not bother me even a little bit when people call those beautiful lit up, bejeweled trees Christmas trees. I don't feel threatened. I don't feel discriminated against. That's what they are: Christmas trees.

It doesn't bother me a bit when people say, "Merry Christmas" to me. I don't think they are slighting me or getting ready to put me in a ghetto. In fact, I kind of like it. It shows that we are all brothers and sisters celebrating this happy time of year. It doesn't bother me at all that there is a manger scene on display at a key intersection near my beach house in Malibu. If people want a creche, it's just as fine with me as is the Menorah a few hundred yards away.

I don't like getting pushed around for being a Jew, and I don't think Christians like getting pushed around for being Christians. I think people who believe in God are sick and tired of getting pushed around, period. I have no idea where the concept came from that America is an explicitly atheist country. I can't find it in the Constitution, and I don't like it being shoved down my throat.

Or maybe I can put it another way: where did the idea come from that we should worship Nick and Jessica and we aren't allowed to worship God as we understand Him?

I guess that's a sign that I 'm getting old, too.

But there are a lot of us who are wondering where Nick and Jessica came from and where the America we knew went to.

In light of the many jokes we send to one another for a laugh, this is a little different: This is not intended to be a joke; it's not funny, it's intended to get you thinking.

Continued on next page



Continued from page 24

Billy Graham's daughter was interviewed on the Early Show and Jane Clayson asked her "How could God let something like this Happen?" (regarding Katrina). Anne Graham gave an extremely profound and insightful response. She said, "I believe God is deeply saddened by this, just as we are, but for years we've been telling God to get out of our schools, to get out of our government and to get out of our lives. And being the gentleman He is, I believe He has calmly backed out. How can we expect God to give us His blessing and His protection if we demand He leave us alone?"

In light of recent events...terrorists attack, school shootings, etc. I think it started when Madeleine Murray O'Hare (she was murdered, her body found recently) complained she didn't want prayer in our schools, and we said OK.

Then someone said you better not read the Bible in school. The Bible says thou shalt not kill, thou shalt not steal, and love your neighbor as yourself. And we said OK.

Then Dr. Benjamin Spock said we shouldn't spank our children when they misbehave because their little personalities would be warped and we might damage their self-esteem (Dr. Spock's son committed suicide). We said an expert should know what he's talking about and we said OK.

Now we're asking ourselves why our children have no conscience, why they don't know right from wrong, and why it doesn't bother them to kill strangers, their classmates, and themselves.

Probably, if we think about it long and hard enough, we can figure it out. I think it has a great deal to do with "WE REAP WHAT WE SOW."

Funny how simple it is for people to trash God and then wonder why the world's going to hell.

Funny how we believe what the newspapers say, but question what the Bible says.

Funny how you can send 'jokes' through e-mail and they spread like wildfire but when you start sending messages regarding the Lord, people think twice about sharing.

Funny how lewd, crude, vulgar and obscene articles pass freely through cyberspace, but public discussion of God is suppressed in the school and workplace.

Are you laughing?

Funny that you will probably not send this to many on your address list because you're not sure what they believe, or what they will think of you for sending it.

Pass it on if you think it has merit.

~~~~~

I am passing this along, I feel it has merit. I know this publication is for blacksmithing and I will keep that in mind, except, on the rare exception, where I invoke editorial license.

Jim

## TWO NEW/OLD E-BOOKS-

Weiner Kunstschmiedearbeiten (1928) and La Fidelle Ouverture de l'Art du Serrurier, originally published in 1627. Now eight titles are available on CD, \$4/each, or all eight books, \$24 postpaid in the US (overseas please inquire- my email is :

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