

# New Jersey Blacksmiths Newsletter

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## BLACKSMITHING IN HISTORICAL PERSPECTIVE

By T. S. Jacobson (Sent in by Tim Jacobson)

Blacksmiths today are often wistful in their thoughts of blacksmithing in earlier centuries. Usually when one's thoughts turn to blacksmiths-of-old, the first thing to pop into one's mind is the important role that blacksmiths played in daily life, and the high standing and respect that was accorded to them. It is easy to visualize the "spreading chestnut tree" and the children watching and admiring the smith at work. Despite this prominence, blacksmiths of the past still had their problems.

Research I did for a college paper about the Chippewa Indians of northern Wisconsin brought to light some of the problems blacksmiths had in the 1800's--some of which are not uncommon today and others which are rather unique.

A treaty between the United States Government and the Chippewa Indians stated that a blacksmith, assistant, and shop would be provided to each band of the Chippewa. Things did not always go well for these government blacksmiths. For example, a conflict arose between one of these smiths and the Bois Fort Indians. The Indians had apparently become quite dissatisfied and angry with their blacksmith, Lars Lenroot, and had burned his shop and threatened to kill him if he returned (Citizens of Superior to Luther E. Webb, Indian Agent, June 19, 1863).

A blacksmith from the Bad River Reservation, W. E. VanTassel, had complained that he had received poor iron in two consecutive years, and that the Indian agent said there was not enough money for good iron (VanTassel to Comm. of Ind. Aff., May 1866, 694). The agent did not provide him with coal either, and VanTassel claimed that the other blacksmiths were provided with coal.

Making a decent living as a blacksmith in the 1800's was not always easy either, even for salaried government smiths. In 1866, these blacksmiths were paid an annual salary of \$600 (VanTassel to Comm. of Ind. Aff., May 1866). VanTassel wrote that the smiths had tried to get their salaries raised, but that the Indian agent said it could not be done without an act of Congress. I certainly would not want to depend on an act of Congress for a raise, unless I was a Senator or Representative.

It was not always the blacksmiths who got the short end of the deal, however. For example, the Lac du Flambeau were not supplied with a blacksmith for nine years after the treaty had been made (Webb to Dole, June 16, 1865, 555).

Good money, iron, and coal are still sometimes hard to come by, but at least today's blacksmiths generally do not have their shops burned down by angry customers.

(The above information from Nat'l Archives Microfilm Pubs, Record Group 75, Microcopy 234, Roll 393.)

Reprint from the Upper Midwest Blacksmith Organization

## 3D Snowflake

Michael Wollowski

In this article, you will find construction notes for a three dimensional snowflake. Don Neuenschwander showed me one that Ken Dettmer made based on Don's specifications. Don himself saw someone up north make one of these.

The snowflake is made from a 3" piece of  $\frac{3}{4}$ " square stock. It needs to be cut several ways. To start, make two  $1\frac{3}{4}$ " cuts along one side, splitting the side three ways. From the opposite end, make two cuts that are  $\frac{3}{4}$ " long, again splitting the side three ways. You will be left with  $\frac{1}{2}$ " in the center that is not cut. The cut layout is shown on the left side in figure 1 below.

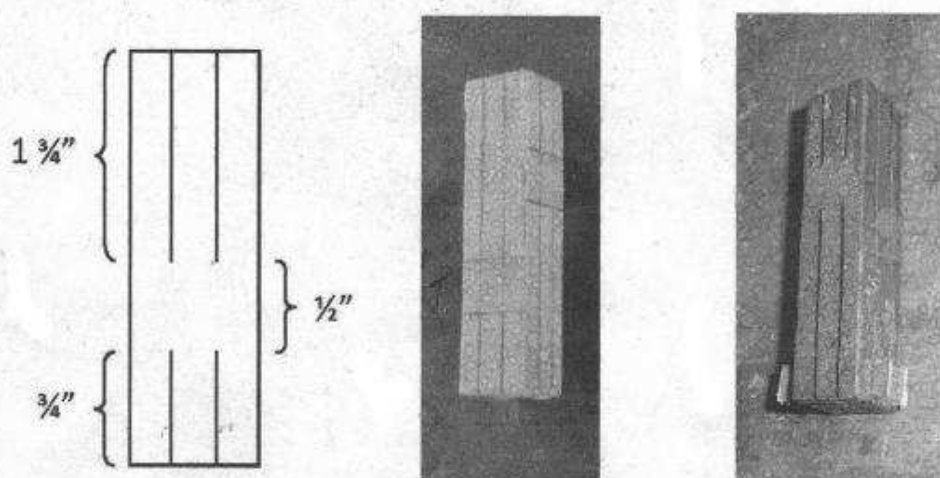


Figure 1: Cut layout (left), blank with marked cuts (center), cut blank with spacers (right)

Turn the bar 90 degrees and make the same cuts except from opposite ends. I like to put masking tape on the steel and draw my lines on it. The marked up blank can be seen in the center of figure 1. I insert some old saw blade pieces in the short cuts of one end. This is the end that gets to be put in the vise first. By placing the spacers in the cut, it is easier to open them up later on. The sawn blank, prepared for heating is shown on the right in figure 1.

In order to get the three dimensions, the primary bends are along the long cuts. When bending this piece, it's advisable to use tongs and a vise rather than a hammer and anvil, as the folds will be rather delicate and can easily be bent beyond repair.

To begin, heat up the bar and place the end with the saw blades in the vise so that the saw blades are parallel to the jaws. You need to place the bar in the vise so that the long cuts are about  $\frac{1}{4}"$  proud of the top of the vise. This ensures that there is space for the jaws of your tongs. Bend down the outer two long sides. Before bending the long sides, it helps to open them up with a chisel first and then use flat tongs to grab a side and bend it out. You may have to perform a sequence of grabbing part of the side, bending it, grabbing some more, straightening it with the tongs and bending it. See about producing a nice bend, not too tight and not too wide. The picture on left side in figure 2 gives you a sense of the radius of the bend as well as how much the long cuts have to be proud of the top of the vise. If the arms are not straight, a chisel can be used to pry them off the vise jaws.

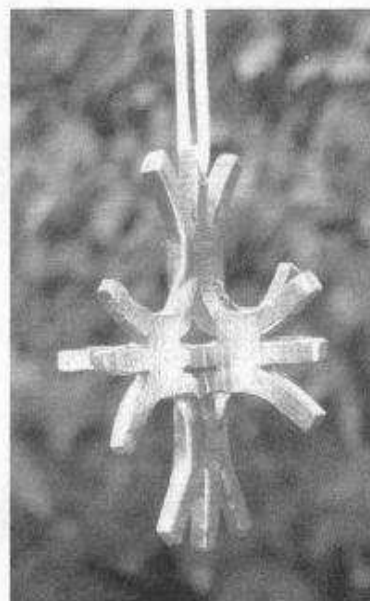
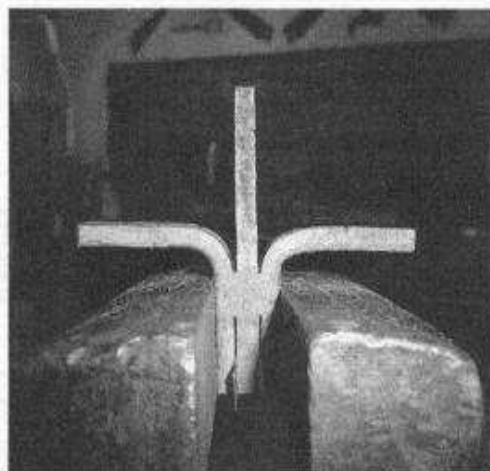


Figure 2: Blank after first set of bends, notice the spacers (left), finished snowflake (right)

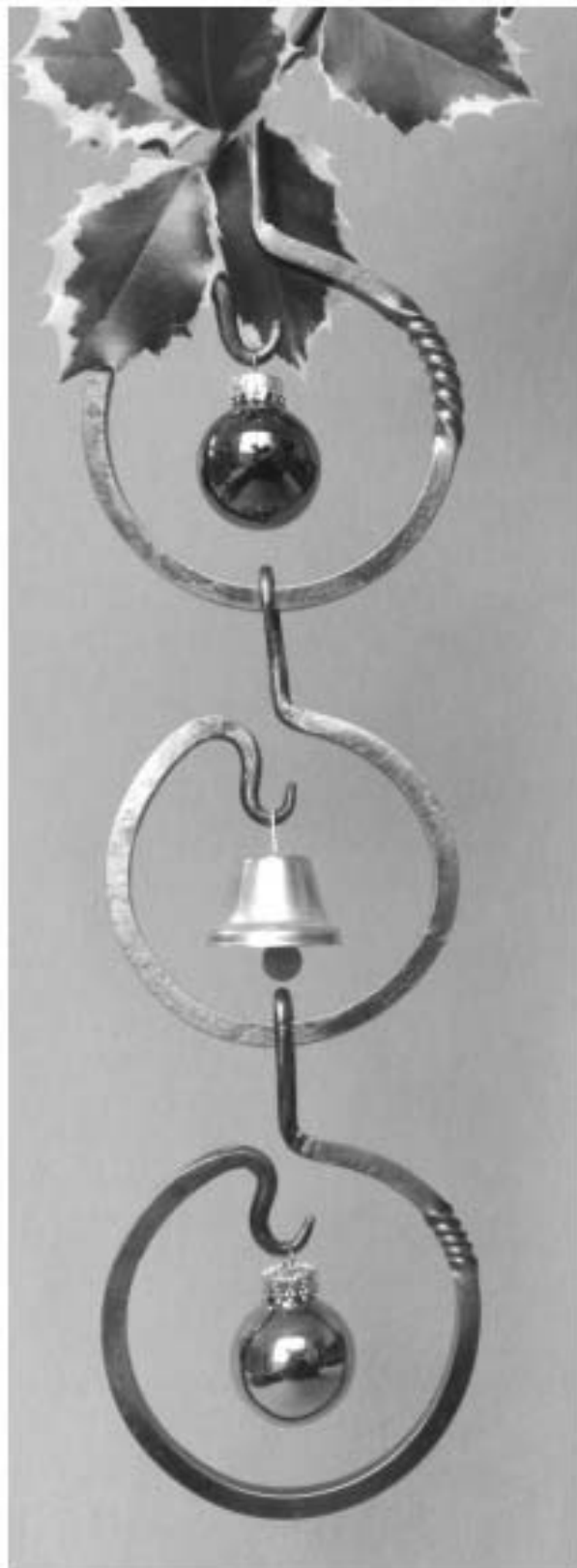
Next, put a little bit of heat in the end that contains the saw blades and knock them out. Heat up the bar and cool down the center of the piece. Use a chisel to open up the long ends that are to be bent next. Put the piece back into the forge and heat it up. Now comes the hard part. The entire snowflake will be orange hot and any attempt to cool parts of it invariably cools down other parts that should not be cooled. Furthermore, any bending you do, will upset other parts of the piece. When opening up one of the hands, you will bend the snowflake out of shape, just ensure that when you bend the other hand, you bend it back into shape. You may consider using several heats to open up the two long hands.

The four bent arms should be in one plane. You may consider placing the piece in the hardy hole, placing a piece of pipe over the hands that need to be aligned and gently tapping on it. Notice that the sum of the two hands that have not been bent remains 3" long, yet the sum of the bent hands making up either of the two other dimensions are about 3 1/2" long. This is due to the fact that the outside hands are 1/4" off the center of the bar. The unequal length cannot be helped except for cutting 1/4" of the ends of each of the bent hands and then deepening the cuts by 1/4". You may consider hanging the snowflake so that the bent hands are vertical.

You are now left with having to bend the outside fingers made by the 1/4" cuts. If you split open the fingers with a chisel, you need to cool down the center of the snowflake as the hammer blows will compress the delicate bends at the center of the snowflake. You want to use some fairly narrow tongs to open up the fingers to about a 45 degree angle. Here again, consider using a process of repeatedly grabbing, bending, re-grabbing, straightening and bending. Notice that fingers of neighboring hands will end up parallel to each other.

I finished my snowflake by immersing it in vinegar overnight, brushing off the scale using a brush and water and polishing it with an angle grinder and the Dremel tool.

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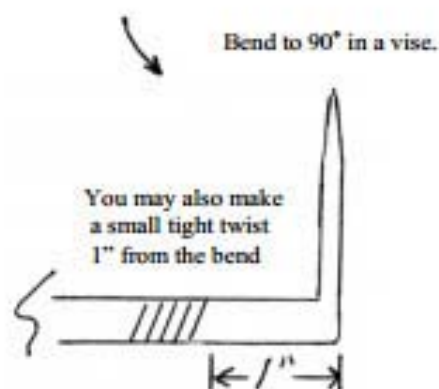
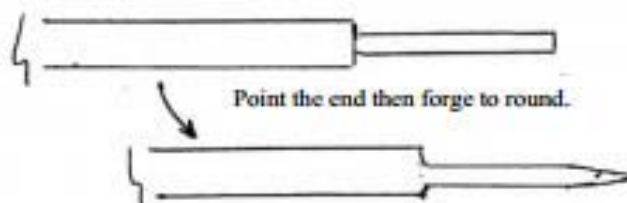


## Christmas Ornament Hanger

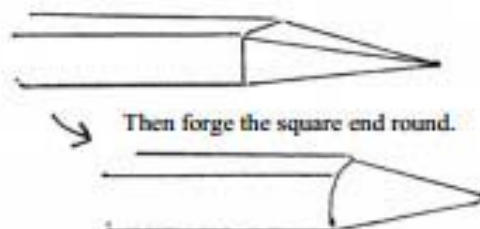
By Steve Anderson,  
a MABA member

Stock: 3/16" square x 9-3/4"

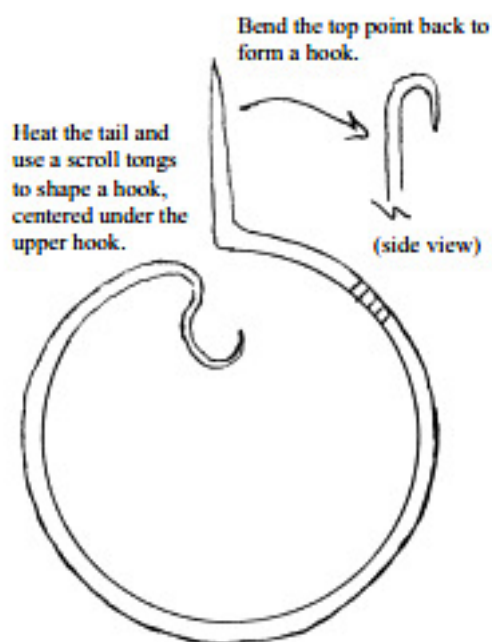
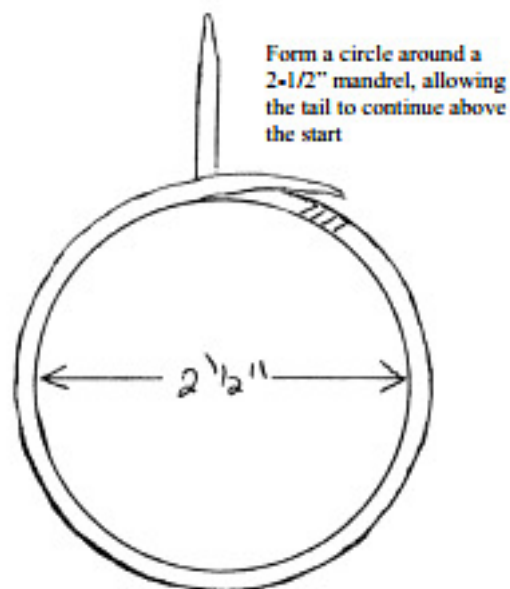
Starting 1-1/4" from the end, forge to 1/8" square.



Forge a long square taper starting 1" from the other end.



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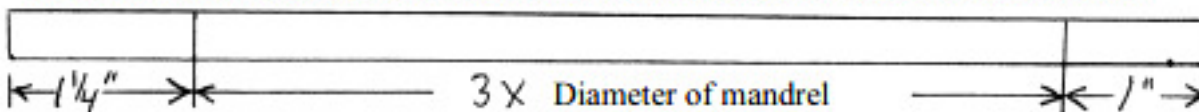


Editor's note: When Steve Anderson sent us a sample of the ornament hangers with his article for the newsletter, we knew the large 3-1/2" diameter hanger would be perfect for a chip carved ornament made by my cousin, Dick Baker.

We hope you enjoy making these hangers to accent your special ornaments. Happy Holidays!



To finish, use hot wax or use a wire wheel and a clear coat to finish. Using a brass brush is optional.  
For a different size mandrel, use the dimensions below, you may want to go up to 1/4" square stock for larger hangers.





## The Angle-Drop Christmas Tree

Robert Dixon Gumm

This is an easy project to accomplish.

It can be a blacksmith project, using “unplugged” tools and forging techniques, or it can be a welding project, using stick or mig welding, a cutting wheel, and angle grinder. Obtaining angle drops shouldn't be too difficult — ask around your blacksmiths' guild, or a metal fabrication shop. You can also cut angle iron and bend the angle to obtain the desired shape.

### Materials:

Angle drops of any (identical) size

Steel pipe proportionate to angle drops

Steel nut

Blacksmith's glue gun (MIG) or glue stick (7018)

1. Line up your drops and determine which ones would look best.
2. Determine the height that you desire and use as many drops as you need. Then mark the cut-off points on the drops to match the preferred shape.
3. Cut a 1" or 2" cross section of steel pipe. I had access to a band-saw, and cut a 1.5" section at an angle.
4. Take the tree branches and shape them for the desired effect.
5. Line up the completed branches to form the tree figure. Leave a gap between each piece so that there will be enough room to get a weld that will penetrate between the branches.
6. Weld the completed tree to the steel ring. Then weld the nut to the top.

Depending upon the size that you choose, this can be a freestanding tree for mantle or table, or it can be a tree to hang from your Christmas tree. If you choose the latter, make sure that it is small enough not to bend the branch. If you have cats, dogs, or small children, consider hanging it near the floor and away from glass balls and lights.

The Blacksmiths' Guild of the Potomac, Inc.      November/  
December 2012



# New Jersey Blacksmiths Newsletter

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## NJBA Membership Renewal and Ballot

*Mail completed renewal form and ballot, along with check for dues, to:*  
**NJBA Election, P.O. Box 224, Farmingdale, NJ 07727-9998**

Name\_\_\_\_\_

Address\_\_\_\_\_

City, State, Zip\_\_\_\_\_

Phone Numbers: Day\_\_\_\_\_

Evening\_\_\_\_\_

Cell\_\_\_\_\_

Email address\_\_\_\_\_

My check is enclosed for ☐ \$20 (regular membership dues), or  
☐ \$40 (business membership dues).

### Ballot

To vote for a nominee, please check the box next to his name.

☐ **Check here to vote for ALL nominees.**

<u>Nominee</u>	<u>Nominee</u>
<input type="checkbox"/> Billy Barrett	<input type="checkbox"/> Marshall Bienstock
<input type="checkbox"/> Larry Brown	<input type="checkbox"/> Eric Cuper
<input type="checkbox"/> Dave Ennis	<input type="checkbox"/> Bruce Freeman
<input type="checkbox"/> Bruce Hay	<input type="checkbox"/> Adam Howard
<input type="checkbox"/> Ron Jani	<input type="checkbox"/> Doug Learn
<input type="checkbox"/> Tom Majewski	<input type="checkbox"/> Mark Morrow
<input type="checkbox"/> Daniel O'Sullivan	<input type="checkbox"/> Bruce Ringier
<input type="checkbox"/> Ben Suhaka	<input type="checkbox"/> Damian Toryak
<input type="checkbox"/> Eric Von Arx	

NAME \_\_\_\_\_  
 ADDRESS \_\_\_\_\_  
 CITY \_\_\_\_\_  
 STATE/PRO V. \_\_\_\_\_  
 COUNTRY \_\_\_\_\_  
 ZIP (+4)/POSTAL CODE \_\_\_\_\_  
 PHONE # \_\_\_\_\_  
 EMAIL \_\_\_\_\_



**ABANA**

___ Regular Member	\$55.00
___ Senior Citizen (Age 65+)	\$50.00
___ Full Time Student	\$45.00
___ Foreign Member	\$65.00
___ Public Library-USA	\$45.00
___ Contributory	\$150.00

MASTERCARD OR VISA ACCOUNT NUMBER

**Order Online, Mail, Call or Fax your Check or Credit Card Payment to:**

**ABANA Central Office**

259 Muddy Fork Road  
 Jonesborough, TN 37659

Phone: (423) 913-1022 Fax: (423) 913-1023,

Web: WWW.ABANA.ORG Email: centraloffice@abana.org

\_\_\_\_\_-\_\_\_\_\_-\_\_\_\_\_-\_\_\_\_\_  
 EXPIRATION DATE \_\_\_\_\_

**Join ABANA or Check out other area chapters!**

**Northeast Blacksmiths Association**

Northeast Blacksmiths holds its meets twice a year at the Ashokan Field Campus in New York State.

The Ashokan campus is located in Olivebridge, N.Y., several miles west of Kingston, N.Y. The meets are held around the first weekend in May and in the first weekend in October every year. The main demonstration is in the blacksmith shop and there is a "Hands On" workshop for beginners. A different demonstrator is brought in for each meet. Food and bunk-house style lodging are provided as part of the cost of the weekend long meet.

**Contact :** Tim Neu to register for hammer-ins or subscribe to the newsletter;

Tim Neu,  
511 Beaverkill Rd.,  
Olivebridge, N.Y. 12461

For more information check the web site;  
**www.northeastblacksmiths.org**

**Join The Pennsylvania Blacksmiths Association!**

Name \_\_\_\_\_

Address \_\_\_\_\_

City, State, Zip code \_\_\_\_\_

Home / work Phone # \_\_\_\_\_

E-mail (optional) \_\_\_\_\_

Do you have any particular skills (welder, accountant, carpenter, doctor) that may be helpful to the group or membership?

What is your skill level?

☐ Beginner ☐ Intermediate ☐ Advanced ☐ Professional

Send completed application and \$25 (one year) to: PABA  
 Treasurer - Doug Dayger - 492 Quaker Lake Rd ,  
 Binghamton, NY 13903

**www.pabasite.org**

**PABA Membership**  
**Application**

Membership is from  
Jan. 1 — Dec. 31





New Jersey  
Blacksmiths Association  
90 William Avenue  
Staten Island, New York 10308  
Attn: Larry Brown, Editor



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**NEW NJBA WEB SITE!**  
**[www.njblacksmiths.org](http://www.njblacksmiths.org)**

## **How to Join or Renew your Membership in NJBA:**

**NJBA Dues are \$20 per year**

**NJBA Business Dues are \$40 per year**

**Please make your check out to: "NJBA"**

**Please mail checks to:**

**NJBA, P.O. Box 224, Farmingdale, NJ 07727-9998**

Please include payment with the information listed below.

"I want to join NJBA, and I am enclosing my check for \$20 (\$40 for a business) to cover annual membership dues and newsletter subscription. "I understand and acknowledge that NJBA dues are credited from June to June, that I will receive for my first years dues the current volume, and that dues will be payable again in June."

The following information will be listed in a roster available to other members.

Name \_\_\_\_\_ Home Phone \_\_\_\_\_  
Address \_\_\_\_\_ Day Phone \_\_\_\_\_  
City \_\_\_\_\_  
State \_\_\_\_\_ Zip \_\_\_\_\_  
E-Mail \_\_\_\_\_ Skill Level (optional) \_\_\_\_\_  
Comments \_\_\_\_\_