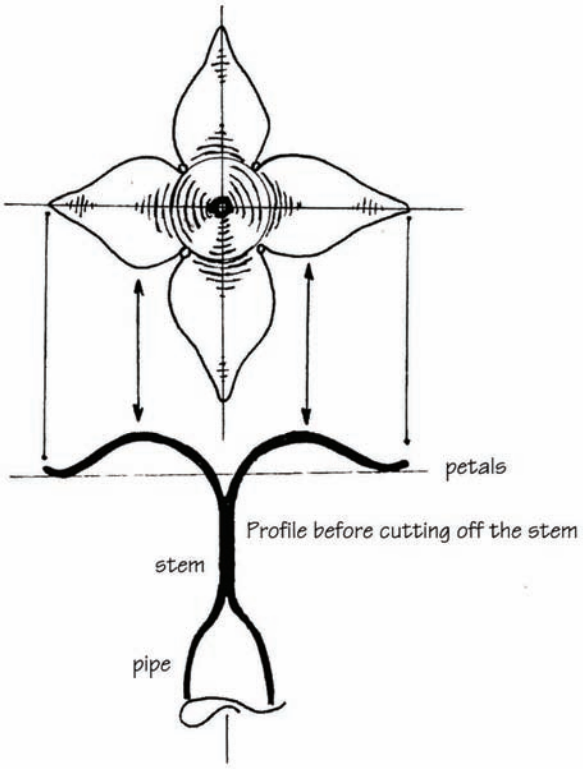
Dogwood Flower

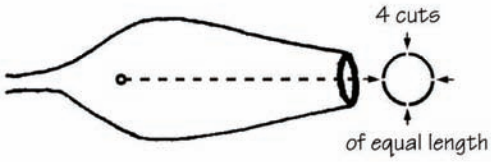
Based on Brian Gilbert's Demonstration at Wayne's World IV, February 2008
by Eden Sanders, San Andreas

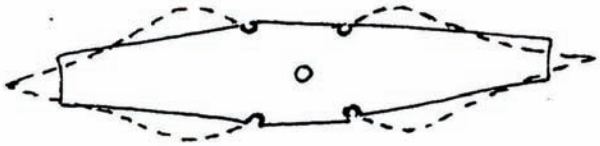
1. Plug (a cork, a piece of a rag or even wadded up paper will work) the handle end of a 3/4" ID pipe leaving a small heat/steam-escape hole. Forging pipe can be dangerous, especially if hot pipe gets wet!
2. Using a fullering tool, neck down the pipe (about 1 1/2" from the end) using gentle blows, turning the pipe with every blow, until the opening is about 1/4 " wide. The pipe will be cut off here to make the dogwood flower, but you might want to flare the end first, while you still have the pipe for a handle, in order to create a candle cup out of the cut off end piece for use on a Colonial Candle Holder
3. Continue to fuller back along the pipe, tapering the fullered section out to the original diameter for about 1 1/4".
4. Neck down about 1 3/4" behind the first neck, just 1/2" beyond where the blend of Step 3 ends. This time, fuller until the pipe closes.
5. Cut off the pipe as described in Step 2.
6. Slit the pipe lengthwise into 4 equal petals. You might want to drill small 1/6” holes in the pipe at the base of each slit for a smoother transition between the petals when they are spread open.
7. Continue the deep fuller for a couple of inches to create the stem. If you are going to make more flowers, continue the deep fuller for yet another couple of inches to create the stem of the next flower.
8. Bend two opposite petals outwards so that you can use a cross peen hammer to shape the petals. You will be defining the shape that was created by blending the first fuller in Step 3, widening the petals a little bit and thinning the edges. Bend the other two petals outward part way. Fold the first two up, and then finish extending the second set for shaping. When all four petals are shaped, point all outward from the center.

The finished shape of the flower



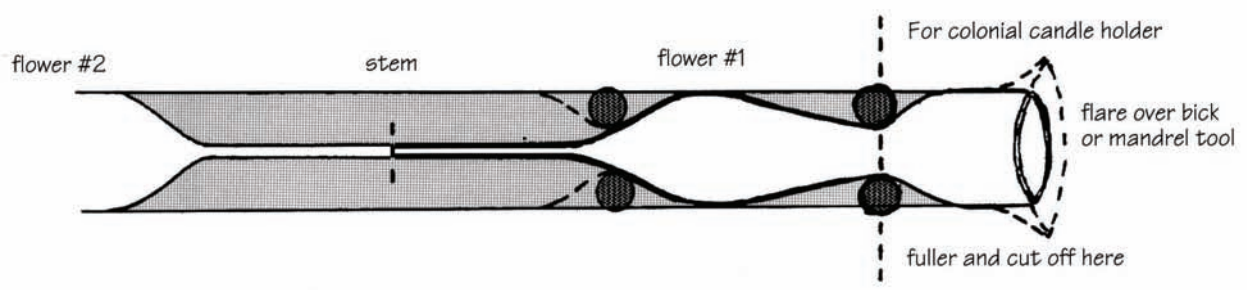
Drilled holes and indications of the four cut lines





Two opposite petals folded back (out of sight) and two folded away from each other 90° to the original pipe. Use a cross peen hammer to fuller the petals into the shape shown by the dotted lines.

9. Add life to the shape of the flower by cupping the center into a shallow swage with a hole in it for the stem, or use the Hardy hole of the anvil. Over the bick, arch the base of the petals slightly at the widest dimension and dip them just behind the petal tips.



This is a composite of several steps. The original pipe is shown in light gray. At the right, you can see the flared end for the optional candle cup, and to its left, both of the fullering tool positions (shown in dark gray) and the profile of the flower and stem sections. The darker lines between the two fullered areas and part of the stem highlight the final flower section. Cut the stem at the cut line where the stem lines go from dark to lighter. The lighter side will be the bottom of the stem for another flower already being formed to the left. The dotted lines to the left of the left pair of fullering tools illustrate that the fullering begins by thinning that area and then the fullers are worked back along the pipe to create the stem. Continue the fullering until you have enough stem for the flower to the right and the not-yet-formed flower to the left.

10. Dogwood flowers are mostly white so a shiny silver finish is appropriate. Heat the flower. Wire brush it with vigor, and coat with clear lacquer.

The dogwood flower exemplifies Brian's thinking that if you have your own favorite element but cannot sell it for a fair wage for the time it takes to make it, then use it sparingly on items that can be made efficiently.

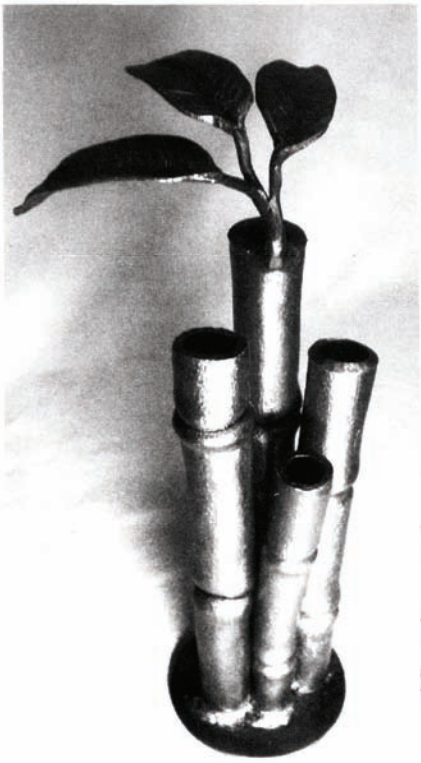
Got an anniversary coming up? Weld three of these sweet little flowers spaced about 1" apart on a curvy 9" branch that has a candle cup mounted on each end. Be sure to put soft bends in the flower stems so that the flowers are at varying heights and orientations. Add candles and set the table for a candlelight supper.--Ed. A From the California Blacksmith

CBA Nail Stump

Shawn Lovell liked the nail stumps she saw at smithies in Europe when she visited there two years ago on a CBA scholarship. Several European smithies have a stump outside where visiting smiths leave their calling cards - a decorative nail or spike.

She really liked them, so much so, that she has committed to maintaining and lugging to CBA events our own CBA nail stump. Any CBA member or guest demonstrator is invited to make a decorative nail. If you do not feel you can make something good enough, you need to clear the cobwebs out of your brain. It doesn't have to be something fancy, just something you can do. It can be any reasonable size.

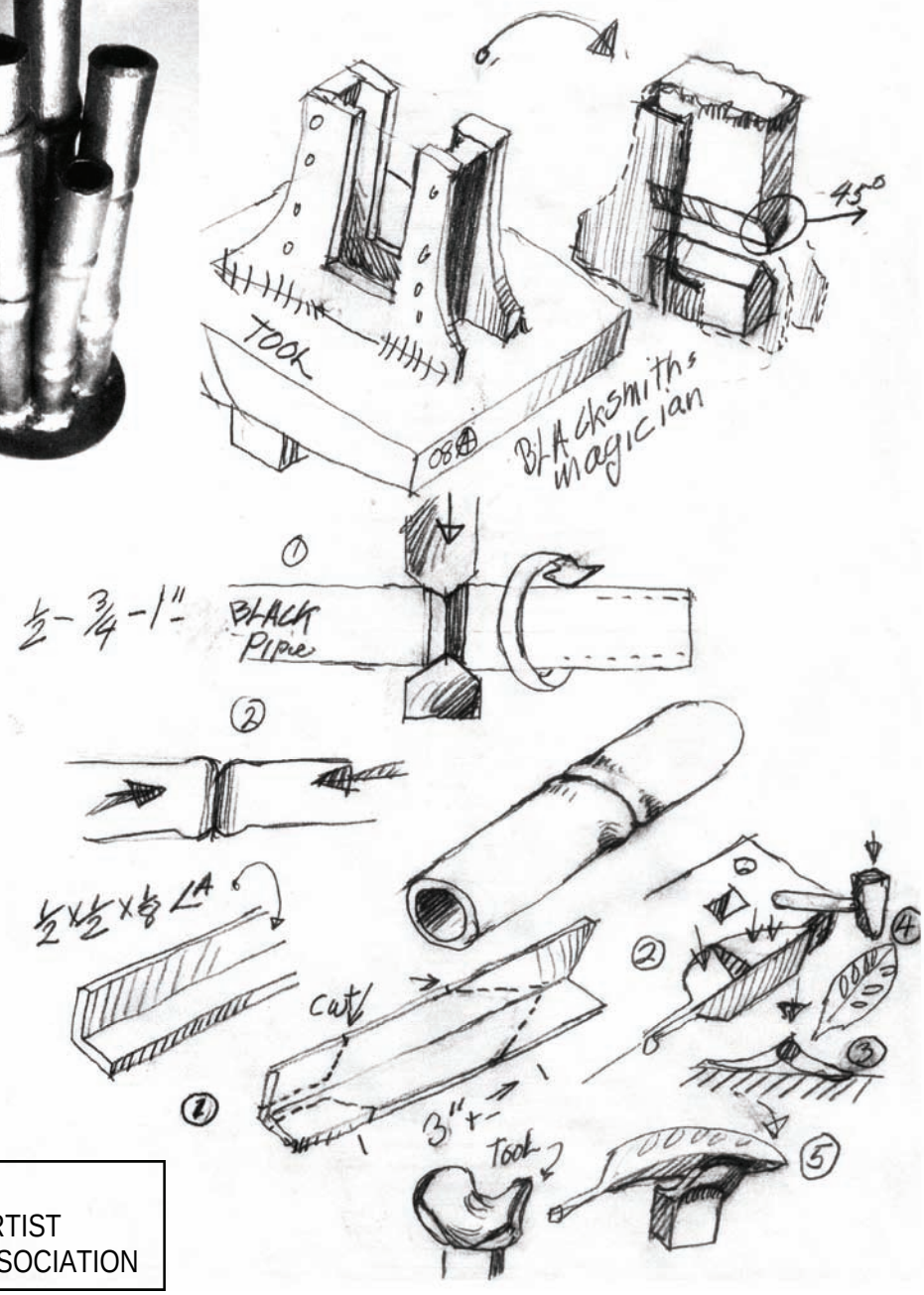
This stump sits outside the late Alfred Habermanri s smithy in Ybbsitz, Austria. Brian Brazeal photo



Bamboo Demonstration

By Larry Carrigan, a MABA member Drawings and notes by Steve Ailing

The pipe bamboo is done with a guillotine tool or you can use a top and bottom fuller like that used for the candle cup but with a triangular shaped blade. The bamboo looks more realistic if the sections don't line up exactly.



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Die Tips

Allan Kress, Cullman Forge

"Everything you always wanted to know about die work but never thought to ask. "

Always work your steel hot. Working cold steel can be dangerous. You can do twice the amount of work hot with half of the effort.

Brush your work to get the scale off before you put it in the die, or hammer it in the die a couple of times then pull the hot steel out and get the loose scale out.

When working with a closed die tool always start easy. Don't hammer too hard or too fast. You will mark it up too much.

Every time you hit the hot steel, rotate it around back and forth. Also, put some oil inside your die as it will pop the scale out and polish your work. Oil it when it looks dry inside. Oil also keeps your steel from sticking inside of closed dies. Closed dies work because your steel is in compression, so it needs a little oil from the first strikes.

Dies are meant to take a lot of punishment. They work better under treadle hammers and power hammers. They work great on the anvil too, but you must strike dead on top of the hot steel or the results will be a misalignment of the dies. They will pull themselves to center even if they are off a little from the first strikes.

When using a die for the first time, warm them up, as putting hot steel in a cold die is like a water quench. After the first time, it remains pretty warm as you continue.

Never put your fingers inside of the spring handles. Grip all the way around them. Most of the dies need no prep work, so stick the hot metal in and hammer. If the image doesn't fill the first time use a larger piece. Practice will teach you how much to put in. My dies have the size of the stock that works best printed on the die. You can also go smaller in size; just upset the end to fill out the image. One easy way is to weld a hex nut on the end of the bar then hammer it out. Practice will tell you what size works best. Its better to be too big than too little.

Always hold the tool flat on the power hammer or anvil and the hot steel level to it. Damage or pain may occur if you don't.

Open Face Dies

When using open face dies, the steel needs to be hot and scale free. If there is scale, you will drive that into the pattern. When the steel cools, it will start to bounce. Stop before that happens or a double image will show up. Oil the open face die. Caution: Too much oil will spatter out. When you hammer flat with the hammer flashing appears on the edge. When it cools off you will not be able to flatten it.

To reheat it, grind off the flashing. You can use a fuller to spread it better or sink it better. Don't stay in one spot or the steel will curl. The stretching and curling will cause a double image to appear.

If you are having trouble with dies call and ask: Allan Kress, 889 CR 1464, Cullman, Alabama 35058, Phone 256-796-0279, akress@bellsouth.net

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