

## A Christmas Star

Created by Joe Wilkinson

Reprinted from BAM Sep-Oct 2003

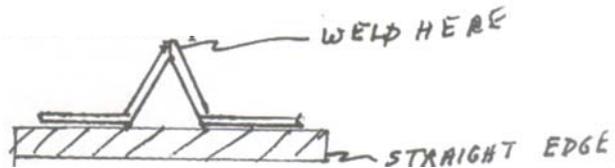
A few minutes of observation of the pictured candle holder quickly reveals the finished product is made up of 9 identical elements plus 2 half elements to complete the base. The elements look like this



Now all blacksmiths know our greatest challenge is to make 2 or more identical elements, therefore we need a jig. I made mine from a piece of 2in angle iron about 7 in long, so I could clamp it in the vise. It looked something like the sketch "A" below.

Next cut 9 pieces of 1/4 in round stock 6" long. Place 1 piece in the jig and using the torch, make a tight bend exactly in the center. Heat the bend so there will be no spring back. Now reverse the stock in the jig to be certain it is bent in the center— if it is off a little, either adjust the jig or adjust the length of your stock, they must be exact.

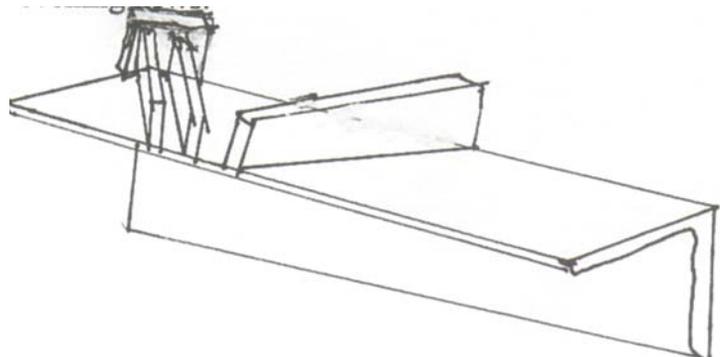
Now lay 2 elements against a straight edge and weld the center tips.



Repeat with the other 3 pairs of element.

We now have 4 and one-half larger elements. Lay 2 and one-half elements flat on your welding table and form a flat star—tack the joints together. In my shop I keep a 4 in deep rectangular pan of dry sand next to the welding table. Stand the first star upright in the pan. Next position the remaining 2 elements in their appropriate position, getting as close to perfect as your eyeball will let you. Now tack weld at the top and remove from the sand pan. Check for alignment and adjust as necessary, heating the tack welds with the torch so you don't break them.

Now add the 2 half elements at the bottom to complete the second star. Reinforce all tack welds as necessary to complete the stars. All that remains is to make 5 candle cups and weld in place. Sweep up, wash your hands and you still have time to catch the evening news.



Joe

