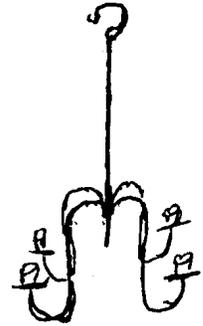


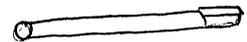
# COLONIAL CHANDELIER

By David Fink, Lumpkin, GA

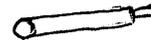
Stock needed: 1 Pc. 3/8", Round x 281,  
 4 Pcs. 1/4" Round x 231,  
 4 Pcs. 18 Gauge Sheet 3 1/4x3 1/4" Square  
 3/4" I.D. Thin-Walled Tubing - With galvanizing burnt off.  
 or 3/4" I.D. Schedule Black Pipe



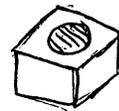
Take 3/8" Round: Hammer square for 2" on one end. Point other end with a long taper. Set Aside.



Take 1/4" Round: Hammer one end flat and taper to match the width of 3/8" Round Bar. Hammer other end into a step tenon 3/8" long, and a little thicker than 3/16". Now thread with 3/16x24 Die. Set aside, then do all four pieces this way, making sure that they are all alike in length.



Take 18-Gauge Squares: Draw intersecting diagonals with a pencil. Center punch and using dividers scribe largest diameter circle possible. Cut with chisel and/or snips, then file edges. Punch or drill 5/32" hole. Sink in Lead, Die or hollow in edge grain of 4x4 to get shallow saucer. Now tap hole 3/16x24. Do all four, trying to get all four even, and set aside.



Take a 28"-36" length of 3/4" pipe/tubing: (Tubing gives more delicate candle cup). Plug one end with a wet paper towel. Heat in forge to bright orange or dark yellow. Place on horn and hit, rotate, hit, rotate, etc., lifting tube to form lip.

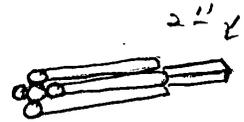


Using a spring fuller neck tube 1-2" from lip, again hit, rotate, hit, rotate; rotation prevents tube collapse. Neck in until you can just pass a 6d. nail through. Cut off. File square and tap 3/16x24. Set aside. Repeat for four cups.





Take 3/8" round and 1/4" round: Stack flat end of 1/4" round over square end of 3/8" round. Wire with mechanics wire in two places, 8" and 12" from square end. Push center of stack to stack out 2".



Heat to dull red. Flux and pull back into bundle, now heat and flux bundle and weld all five pieces. Welding in a bottom swage makes welding easier and smoother. Continue rounding and blend last 2"-2 1/2". Most scale can be removed by heating to orange and using wire brush dipped into the slack barrel. Steam and brush remove most scale.



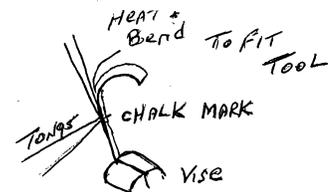
#### TO CREATE COMPOUND CURVES:

First make a tool using 3/16"x1"x15+ inches. Hammer over a 4" or 5" pipe to make the shape of the curve.



Next place one of the arms of the chandelier against the tool. Mark the tool with chalk at the point where you want the radius to start. Place the tool in the vise, high enough to allow you to work.

Heat bundle in the forge, and place bottom at the chalk mark on the tool. Clamp with tongs and pull arm around curve. Heat and rotate until all four arms are the same. Adjust so all four arms are the same radius, and the curve starts at the same place.



Now heat the other end of the arms and do the same thing, keeping the arms even.

Forge the hanging hook on the other end. Screw the saucer and cups on the arms. A drop of solder on the threads will lock cup on.

Apply the finish.

Editor's Note: David Fink, of Lumpkin, Georgia, was the featured demonstrator at our Statewide Meeting at Payton Forge. See the article by Clyde Payton on Page 5.