



For your Tool Box

Paul Garrett's Three Fingered Bending Fork

by Dave Smucker

Bending forks have been around forever and there are many ways to make them, but I think that Paul's idea is something new or at least it is a design that I have never seen. I even said to Paul "It makes me mad, because I didn't think of it myself."

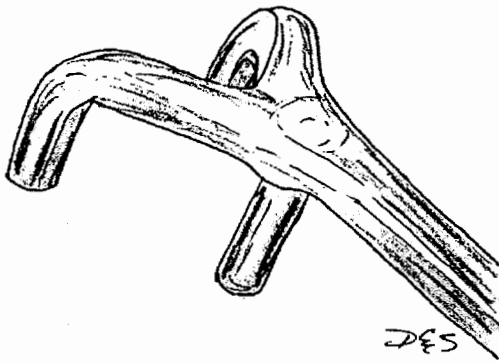
What makes a 3-fingered special is the way you can easily use it to bend stock both toward you and away from you.

The sketch on this page is of a fork that Paul made that is 24 inches long so the drawing is about 1/3 actual size.

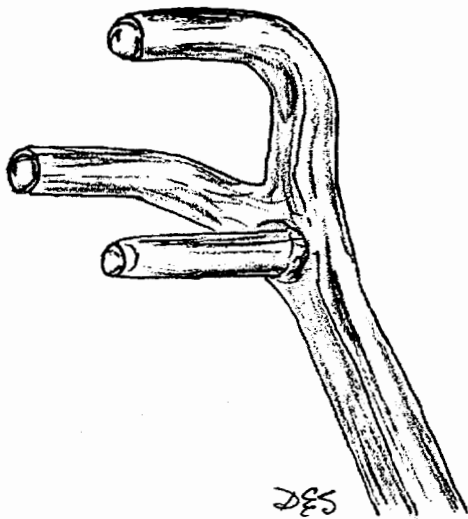
This fork is made from a racecar axle of Hy-Tuf steel. For more on this steel see the article in this issue on "Two Interesting Steels." Paul has this type of material for sale from time to time.

For those that may not know Paul, he is the resident blacksmith at the John C. Campbell Folk School. Make a point of coming to the November meeting of the AACB at the Folk School and meet Paul.

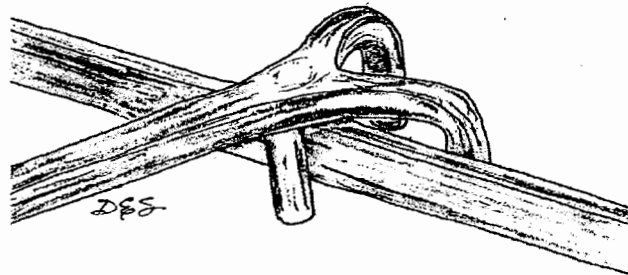
On the following page are some sketches of the 3-fingered head and one way to use this bending fork.



To make the fork Paul first drew out the axle and then flattened the bending end. He then split this end and forged the two fingers and bend them 90 degrees. He then hot punched a hole in the base of the wye for the third finger. This finger he drew out of additional axle material fitted in place and arc welded top and bottom.

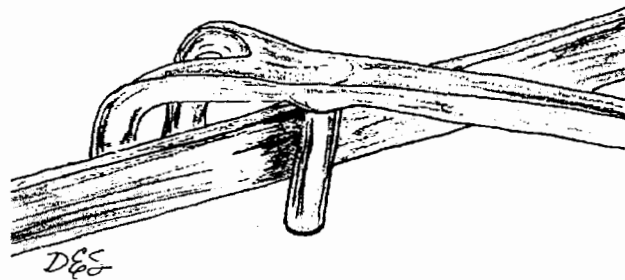


Here is a view from the other side.



This view shows one way of using the fork. In this position, the blacksmith is bending the material towards themselves. In other words, towards the bottom of the drawing.

(There are many positions you can use the fork because of the many ways you can place stock between the three fingers.)



In this view, the smith is bending away from himself or herself, towards the top of the picture.

The really neat thing here is to make a correction to an over bend one does not have to reposition the fork, only shift from one pin (finger) to the other. This requires a handle movement of only about 90 degrees, much much less than in a 2 pin or fingered bending fork.

Making this tool out of a 220,000 psi (pounds per square inch) steel makes this a supper tough tool you can really lay into.

Make some of these forks in different sizes and you will really like them.