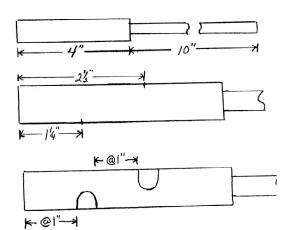
Twist Tongs By Phil Travis

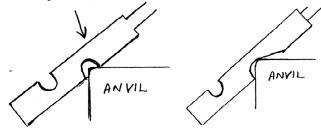
TONG BLANK: Start with a ¼" X ¾" X 4" long hot rolled steel welded to a 3/8" X 10" round bar.

LAYOUT: Make a mark with a center punch approximately $1\frac{1}{4}$ " from the end. On the opposite side make a center punch mark approx. $2\frac{1}{2}$ " from the end.

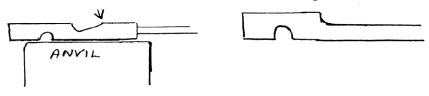
FULLER: Use a 3/8" round fuller and fuller in at the two punch marks to half the depth $\{3/8$ " $\}$ of the 3/4" width of the blank



OPEN OUT FULLER Over the edge of the anvil, start widening the fuller toward the rein end. Once wide enough you can flip over.



DRAW OUT: Continue to draw out and blend into reins forming the reins off center as drawn

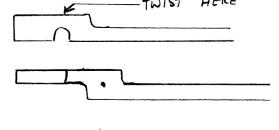


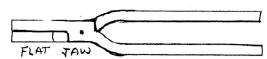
TWIST JAW: Clamp body of tong in vise and twist jaw 90* to right

STRAIGHTEN: Straighten and align all segments of tongs

RIVETING: Center punch for rivet, then punch or drill rivet hole, set rivet

ADJUST: Clamp jaws in vise, offset handles and align for good grip. Make sure handles and jaws are in line.





MODIFY JAWS: Leave as flat jaws or insert square stock and forge around to create V-Jaws

