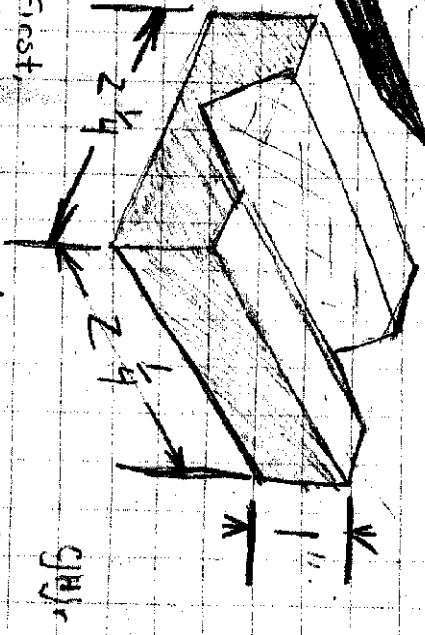


"V" Block and Die (Die Angle 117°)



- Form Die First,
- Make block with top edges pointed inward so the die can push sides into straight position.

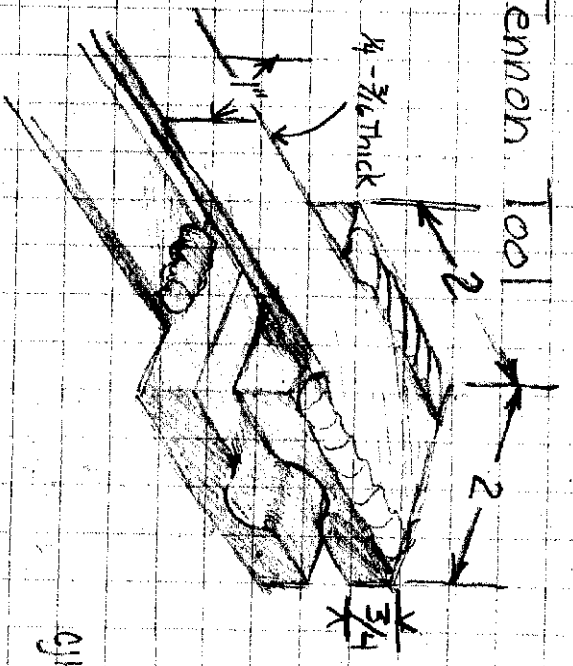


V-block can be used to form pipe, or make 90° bends in flat stock



- Place hot stock over Vblock and use hot cutter to begin bend
- Use die to complete bend, the straighten up on the Anvil

Tennon 100



To make: cut 2 identical pieces of stock,

- clamp together in drilling vice with a business card between them.
- Drill to size through the center of the card.
- Grind and file and sand off sharp corners, on top & bottom.

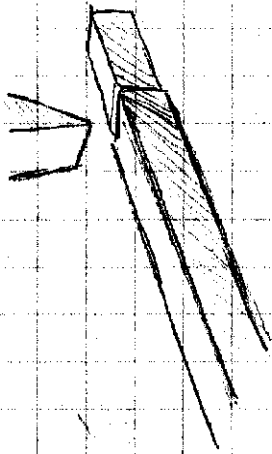


Tennon Tool, Continued.

- Clamp together with spring. Use a rod to align top & bottom swages.
- before welding.
- Grind off excess weld from top an bottom

To make Tennon:

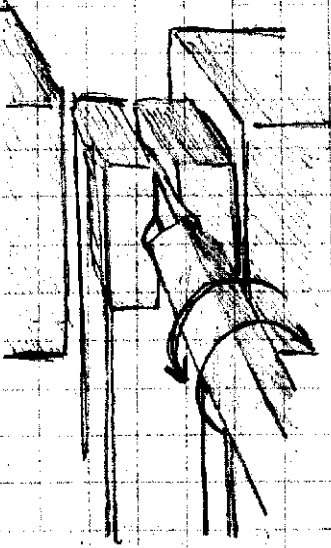
mark stock where tennon will begin



forge to size of desired tennon but in square on Power hammer



Tennon Tool, Continued



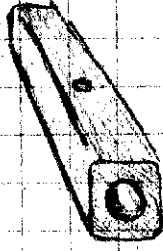
C.H.P.

Place tennon into tool and rotate while hammering.



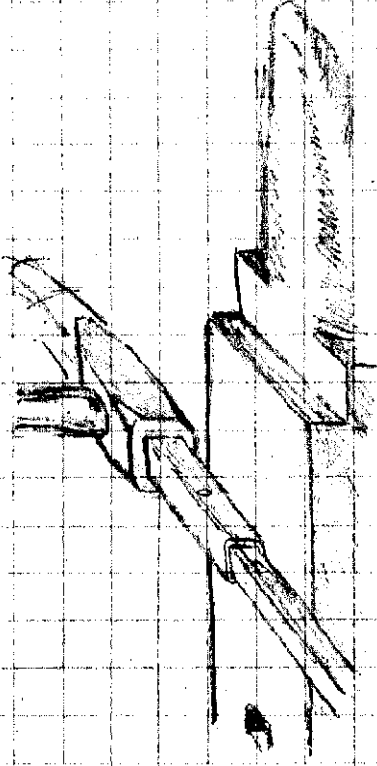
it should round like this.

use monkey tool to center tennon and clean up shoulder



Tool steel Bar with Tennon size hole Down the middle, and vent hole in the side.

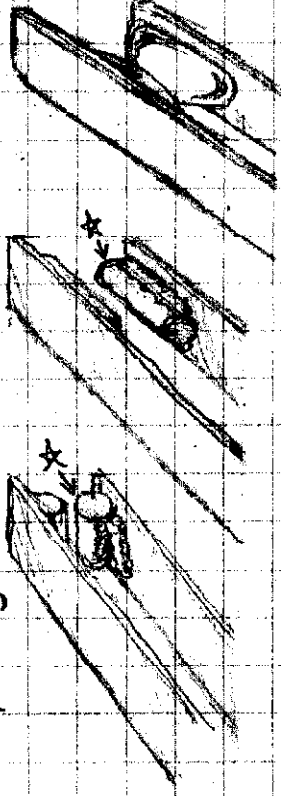
Monkey Tool



CJHjr

- Insert hot tennon into monkey tool and Drive monkey tool into tennon. This will create a clean sharp shoulder. the monkey tool can also be used to center the tennon while it is hot

Spring Fullers



CJHjr

overall spring length bent is About 18"
 * $\frac{5}{8}$ Round welded to spring



CJHjr

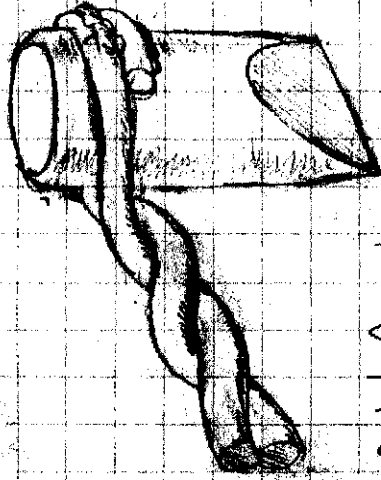
Hand held Spring Fuller

- Made from $\frac{3}{4}$ Round Bar mild Steel

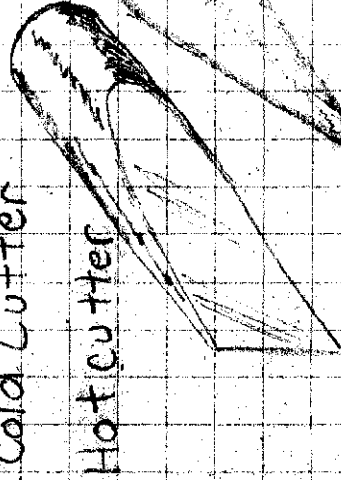


Punches / cutting tools

A large working surface
Reduces the chance of tool moving under the power hammer



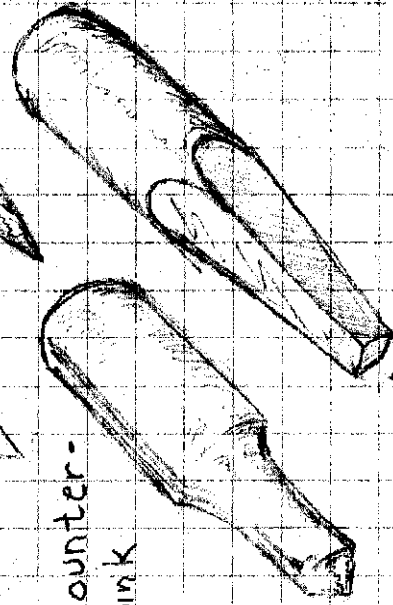
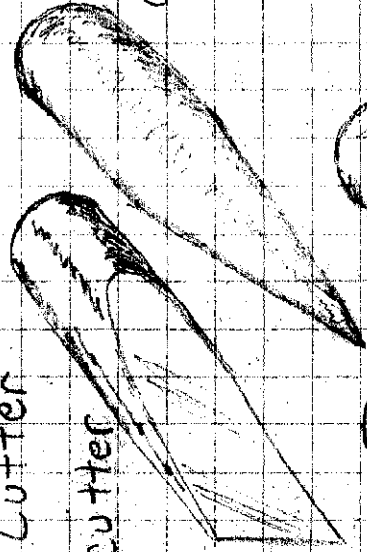
Cold Cutter



Hot cutter

C/Hjr

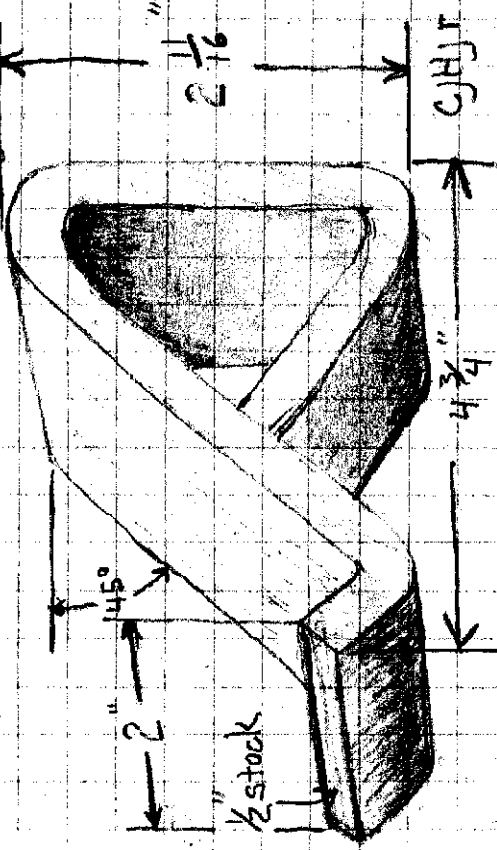
Center Punch



Counter-Sink

Square Punch

Support / Rest for Punching Angles

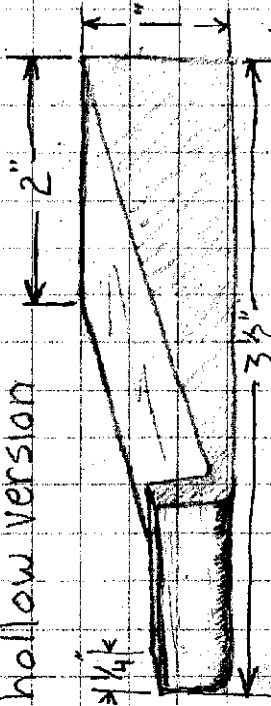


- this can be formed in the "V-block" or it can be made by bending one 90° and welding a heavy piece of angle iron to the back.



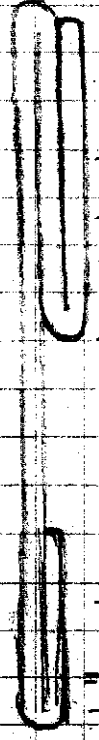
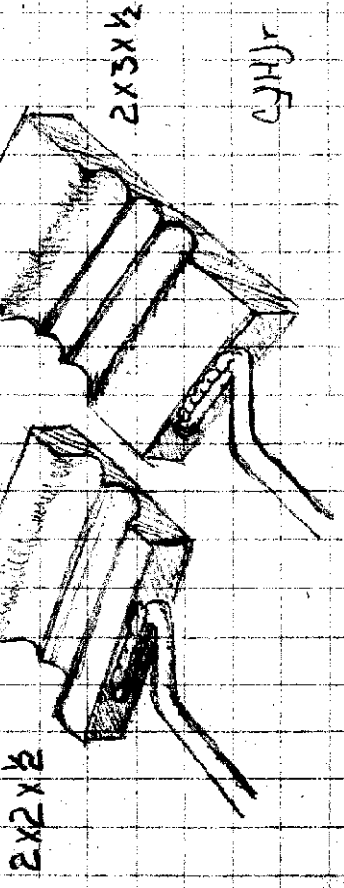
C/Hjr

Shallow version



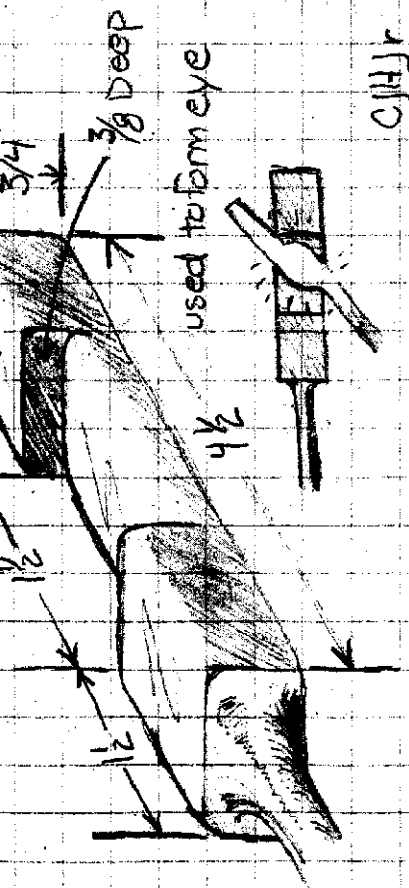
Note: A post could be welded to the bottom to use it in the vice

Veining Tool for collars



1/4" stock bent and welded on back. heat veining block and drive above veiner into block on power hammer to create veins.

Tong making Die



Slide bolt keeper die. (Hot bend)

