

Blacksmithed Hook

Forge Project

PURPOSE

In this activity you will be practicing basic Blacksmithing skills to manufacture a Coat hook.

PREPARATION

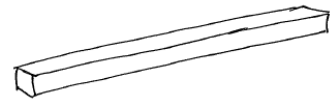
For this activity you will need the following:

- | | |
|---|---|
| <input type="checkbox"/> 6" length of 1/4" square stock | <input type="checkbox"/> Face shield |
| <input type="checkbox"/> Hacksaw | <input type="checkbox"/> Tongs |
| <input type="checkbox"/> Vise | <input type="checkbox"/> Leather gloves |
| <input type="checkbox"/> Ball and Cross Pien Hammers | |
| <input type="checkbox"/> Forge | |



STOCK BREAKOUT

- Cut a piece of 1/4" square stock to 6" length



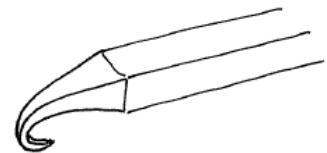
TAPERING

- Blacksmithing is easier when the metal is red hot.
- Heat the metal to cherry red in the forge.
- Use a hammer and the anvil to TAPER BOTH ENDS of the stock about TWO FINGER WIDTHS in length or so
- Reheat it.



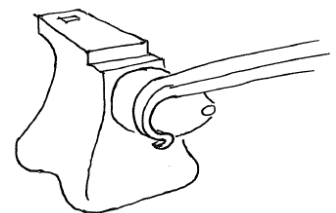
TIP FORMING

- Curl the wee tip of the hook all the way over on the horn of the anvil.
- Reheat it.



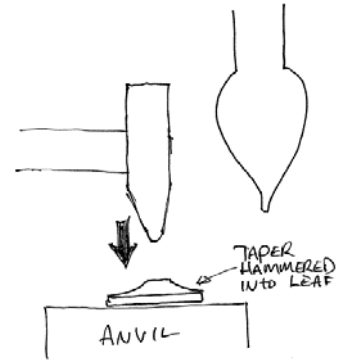
HOOK FORMING

- COOL just the wee tip in WATER so it doesn't get wrecked when we beat on it to form the hook.
- Bend the hook the OPPOSITE way over the horn of the anvil.
- Reheat it.



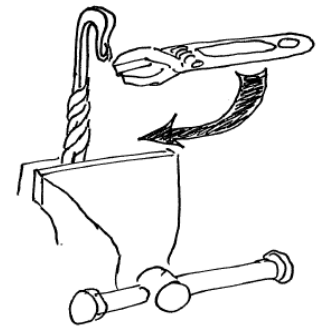
LEAF FORMING

- On the opposite end of the hook, form a leaf shape out of the taper using the Cross of a Cross Pien hammer.
- Hammer with the axis of the Cross inline with the stock.
- Don't make the leaf too thin.
- Reheat it.



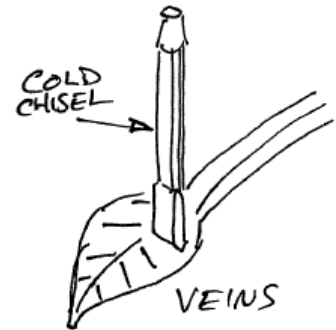
TWISTING

- Use an adjustable wrench and a vice to twist the center a turn or two too look really cool.
- You really only have one shot at this. You can't change a twist once it's been done.
- **DO NOT** cool it off in water (that hardens it, which makes the next steps harder to do. Laugh at your friends who didn't read this step).



VEIN FORMING

- Use a cold chisel on the anvil to hammer veins into the leaf.
- (Laugh again at your friends who cannot chisel their hardened metal)



FINISHING

- Inspect the hook for any defects, and correct them.
- Drill a 3/16" hole in the leaf so the hook can be attached to a wall (laugh again at your friends when the drill bit doesn't cut the hardened metal).
- Wire-wheel the scale off your hook. Watch your skin, and don't feed the wire wheel an edge!
- Reheat the hook in the forge until it just starts to show a HINT OF COLOUR, then BRASS WIRE BRUSH your project to give it a cool antique finish.

HAND IN

- Hand in your awesome wicked cool project for awesome wicked cool marks.

REFLECTION

- ☐ What could you have done to fabricate this more easily?