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Lab # 10 - Hot Metal

Description: In this lab you will learn to work metal while hot. These projects will be heated on a forge, but could be created using an oxy-acetylene torch with a rosebud tip. You will also learn how to temper steel (demonstration). This is a useful skill when reconditioning tools. CAUTION: Steel will be very hot. Be cautious not to burn yourself or others.

Materials: Tools:

20" - 1/4" mild steel round stock

Hammer Anvil Tongs Forge Hacksaw

Chaining Pin Directions:

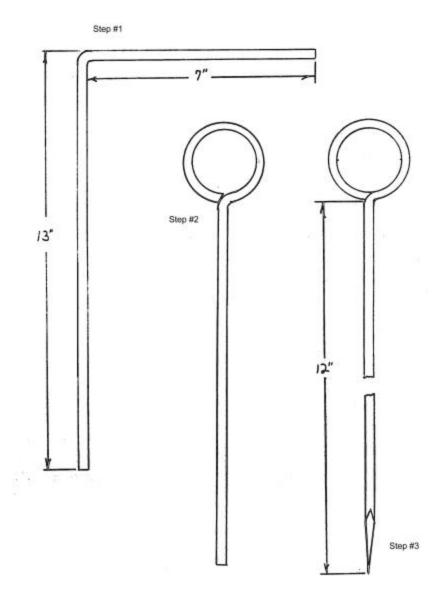
- 1. Always work the steel when red hot, DO NOT OVERHEAT.
- 2. Use a center punch to mark the bend of the eye (7"). Heat one end of the 1/4" round stock.
- 3. Form the eye by bending the stock at 90°
- 4. Then, reheat and bend the eye.
- 5. Trim to length (about 11 1/2") and point.
- 6. Cool the project.
- 7. Clean up with emery cloth and mark with masking tape.

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Grading:

Name:

Criteria		Possible	Score
Eye correct size (+/- 1/8")		4	
Eye round		4	
Pin correct length (+/- 1/8")		4	
Point neat (square)	4		
Overall workmanship (metal not over worked)		4	
	TOTAL	20	



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