

California Blacksmith Association Level 2 Check off

STUDENT NAME:		
Date	Instructor's Signature	Item
		Cape chisel
		Heading plate for bottom tools
		Final hammer eye drift
		Spring Fuller
		Open or flat jaw tongs (draw out or forge-weld reins)
		Scrolling Fork (case hardening)
		Scrolling Tongs (draw out or forge-weld reins)
		Leafing hammer
		Scroll form
		Ribbon scroll
		Fish tail scroll
		Half Penny scroll
		Beveled Scroll
		Collars
		Hardy tools (Bottom swage) (case hardening)
		Forge-welding (lap or drop tong weld)
		Upset square corner
		Grill project

Level 2 Certificate

The California Blacksmith Association (CBA) education program has three levels of certificates corresponding the beginner (Level 1), apprentice (Level 2), and journeyman (Level 3) blacksmith.

After completing level 2, you will have the skills needed to create most blacksmith projects and the associated tooling.

The “Level 2 Check Off” form lists the items which need to be completed. The “final” is making a Grill “ A rectangular frame that uses traditional joinery (two L-shaped pieces with one end tenoned and the other punched with an upset square corner between. The frame is to be filled with either two 'S' or 'C' type scrolls (with different ends on each scroll) and the scrolls collared together. Please refer to the Intermediate Grill Drawing at: <http://www.calsmith.org/Level-II>.

The textbooks for this class is Mastering the Fundamentals Of Blacksmithing, by Mark Aspery (referred to as Vol 1), Mastering the Fundamentals of Leaf-Work, by Mark Aspery (referred to as Vol 2) and Mastering the Fundamentals of Traditional Joinery, by Mark Aspery (referred to as Vol 3). They are available for about \$60 each from the author at http://www.markaspery.com/School_of_Blacksmithing/Purchase_books.html and at Amazon.com.

Other projects are described in Wrought Ironwork by COSIRA (referred to as WI) and The Blacksmith's Craft by COSIRA (referred to as BC). Both of these books are out of print and are available for download at <https://www.hlcollege.ac.uk/campuses-sub/5821ecd6c07ec/The-Rural-Crafts-Centre>.

The items can be made during one of our classes or on your own. The completed item is then shown to one of our CBA certified instructors who will sign your form.

To receive a Level 2 Certificate from the CBA you must be a member of the CBA. It is strongly encouraged for any student with an interest in Blacksmithing to join the CBA as this will give you access to additional classes and meetings throughout the year. You will also receive the CBA magazine containing pictures, projects, and listings of events. For further information see: <http://www.calsmith.org>.

The following lessons are planned at Adam's Forge to complete the Level 2 tasks:

	STOCK
1. Straight and Corner Cape chisels	7.5 inches of 5/8" Sucker rod for each chisel
Heading plate for bottom tools	½ inch thick plate, 5 inches square
2. Transmogriifier (final hammer eye drift)	8 inches of 1 inch diameter round bar
3. Spring Fuller	45 inches of ½ round bar
4. Box tongs	20 inches of ½ sq. bar. 5/16" round x 1 1/2" long
5. Scrolling wrench (case hardening)	20 inches of 3/8 x 1' bar
6. Scrolling tongs	20 inches of 3/8 x 1" and 5/16" round x 1 5/8" long
Forge welding (lap or drop tong)	12 inches of 1/2 "round bar x 2
7. Leafing hammer	6 1/8 inches of 1 inch square
8. Scroll form,	18 inches of 3/8" x 1 inch bar
Ribbon scroll,	18 inches of ¼" x ½ inch bar
Fish tail scroll	18 inches of ¼" x ½ inch bar
9. Half penny Scroll,	18 inches of ¼" x ½ inch bar
Beveled scroll	18 inches of ¼" x ½ inch bar
Collars	12 inches of 1/8" x ½ inch bar
10. Hardy tool	4 inches of 1 ¼ inch square bar, 2 feet of ½ inch round, 2 feet of 5/8 square
11. Upset square corner	24 inches of ½ inch square bar

Sucker rod is about 4140 steel. All other material is hot rolled steel.

To find a description of the projects please refer to the following list:

Straight and Corner Cape chisels	Vol 1, p82
Making a heading plate for bottom tools	Vol 1, p219
Transmogriifier (Final hammer eye drift)	Vol 2, p82
Starting material must be square or round stock, 1 inch diameter or more.	
Spring Fuller	Vol 2, p13
Box tongs (draw out or forge-weld reins)	Vol 1, p255
Scrolling wrench (case hardening)	Vol 1, p139
Scrolling Tongs (draw out or forge-weld reins)	Vol 1, p163
Forge-welding (lap or drop tong weld)	Vol 1, p239
Leafing hammer	Vol 2, p64
Scroll form	WI, p35
https://www.hlcollege.ac.uk/files/PDF/Rural-Crafts-Centre/wrought-ironwork/WROUGHT%20IRONWORK%20PART%203_tcm2-18921.pdf	
Ribbon scroll	WI, p16
https://www.hlcollege.ac.uk/files/PDF/Rural-Crafts-Centre/wrought-ironwork/WROUGHT%20IRONWORK%20PART%202_tcm2-18920_tcm2-18920.pdf	
Fish tail scroll	WI, p19
https://www.hlcollege.ac.uk/files/PDF/Rural-Crafts-Centre/wrought-ironwork/WROUGHT%20IRONWORK%20PART%202_tcm2-18920_tcm2-18920.pdf	

Half Penny scroll WI, p24
https://www.hlcollege.ac.uk/files/PDF/Rural-Crafts-Centre/wrought-ironwork/WROUGHT%20IRONWORK%20PART%202_tcm2-18920_tcm2-18920.pdf

Beveled Scroll WI, p32
https://www.hlcollege.ac.uk/files/PDF/Rural-Crafts-Centre/wrought-ironwork/WROUGHT%20IRONWORK%20PART%203_tcm2-18921.pdf

Collars Vol 3, p333 or WI, p39
https://www.hlcollege.ac.uk/files/PDF/Rural-Crafts-Centre/wrought-ironwork/WROUGHT%20IRONWORK%20PART%203_tcm2-18921.pdf

Hardy tools (Bottom swage) (case hardening) Vol 1, p223

Upset square corner BC, p82
https://www.hlcollege.ac.uk/files/PDF/Rural-Crafts-Centre/blacksmiths-craft/BlacksmithscraftPart5_tcm2-18916.pdf

References:

Vol 1 = The Skills of a Blacksmith, Volume 1, Mastering the Fundamentals of Blacksmithing, by Mark Aspery

Vol 2 = The Skills of a Blacksmith, Volume 2, Mastering the Fundamentals of Leaf-Work, by Mark Aspery.

Vol 3 = The Skills of a Blacksmith, Volume 3, Mastering the Fundamentals of Traditional Joinery, by Mark Aspery

BC = The Blacksmiths Craft, by COSIRA. This book is available for download at:
<https://www.hlcollege.ac.uk/campuses-sub/5821ecd6c07ec/The-Rural-Crafts-Centre>

WI = Wrought Ironwork, by COSIRA. This book is available for download at:
<https://www.hlcollege.ac.uk/campuses-sub/5821ecd6c07ec/The-Rural-Crafts-Centre>

Final Grill project

To receive this certificate, the blacksmith will present to their instructor a complete rectangular frame that uses traditional joinery (two L-shaped pieces with one end tenoned and the other punched with an upset square corner between).

The frame is to be filled with two 'S' scrolls (with different ends on each scroll) and the scrolls collared together. It is suggested that the student first transfer the drawing to metal and practice forging to dimension.



