

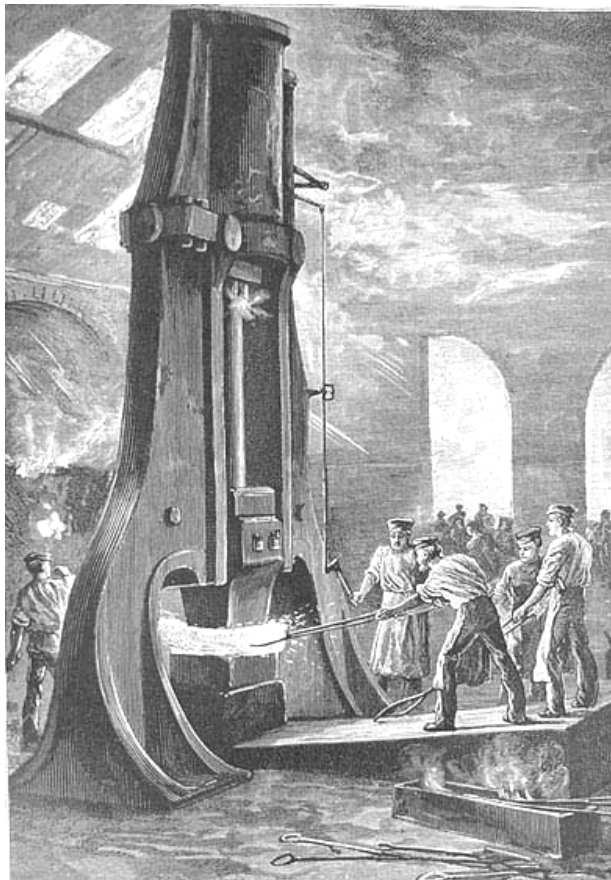


# FORGE

Dedicated to the revival of the "King of Crafts"

Vancouver Island Blacksmiths

www.vibblacksmiths.com



## COMING EVENTS

**March 25 2007**— VIBA meeting starting at 11:00am Luxton fairgrounds

**April 29 2007**– VIBA Meeting and Production Day

**May 4, 5, 6, 2007**– NWBA Spring conference in Enumclaw Wa.

**June 29-July 2 2007** — CanIRON VI

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Dues are due! Dues are really overdue...but you can still save your reputation by sending in the money now. Raynier just went on a vacation ...he needs your funds ASAP

## 2007 - Executive

President: Charlie Dowdeswell  
478 2460

Vice Pres.: Ray Orchard 478-9839

Secretary: Clint Montgomery 360-6910

Treasurer: Raynier Pipke 743-9945

Librarian: Skip Kennedy 478-8172

Editor: Dennis Gillett

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## Submissions & Contributions

Submissions to "Forge" can be made at any monthly meeting or by snail mail to:

VIBA - The Editor  
1040 Marwood Avenue  
Victoria, BC Canada  
V9C 3C4  
OR  
Email: [dgillett@shaw.ca](mailto:dgillett@shaw.ca)

## President's Report

By: Charlie Dowdeswell

No Report, that's right...no report. He obviously needs some encouragement.

## Gate Making Course By Jake James

I am looking to sign up the one week class in April... 19-23rd. Please let me know if you are interested, if these dates don't work I'll be happy to re-schedule. Cost \$550/person. Can run 4 people in one class. project will run from design to completion, we'll be doing a more modern design, but all traditionally made. The finished gate will be put into the CanIRON gallery and auction.  
Cheers, j

## Membership list problems

We have been experiencing technical difficulties recently with our membership list. The Information Technology Dept of our club has been working diligently to solve the problem so be patient with us. If you don't get a newsletter and don't see this notification ...please let us know ...so we can add your name (providing you have paid ,of course). Please let us know how you found out you were missing, as well.  
Ed.

## Secretary's Report

By: Charlie Low

VIBA Minutes Feb 25 '07

The meeting was called to order by President Charley shortly after 11.00.

Show and tell:

Dan brought in the Triceratops head made at his demo. He would like to do another demo within a month or so.

Raynier showed photos that Ray had taken, Don brought a hammer-in hook.

Anthony brought tools donated by the widow of (?) (lost the name).

The minutes of the previous meeting were adopted, moved by Neil and seconded by Don. There was no business arising

Under new business, Don mentioned having a production day and doing some refinishing on the existing stock.

Raynier told us we had been invited to join the Heritage Society- annual cost is \$75.00, and among the benefits will be widespread advertising for CanIRON.

The question of who has keys to the shop was brought up. Neil has the list of who has them, and has spare keys if they are needed.

Committee reports:

Raynier reports that we are OK financially. Skip reports we have subscriptions to various blacksmithing newsletters for the library. Dennis is the sole newsletter person now as Sandy has resigned. He encourages people to write up and forward any information that would be of interest to blacksmiths. His email, also on our front page info is

[dgillett@shaw.ca](mailto:dgillett@shaw.ca)

Neil's report on CanIRON was long, complicated and interesting. There are a lot of very important jobs that, more than anything else, will need coordinators. Galen, who is coordinating volunteers, feels that the worker-bees will be readily available, and what is really needed is people to figure out what needs doing under each specialty, and get people doing those things. Neil created a board listing all the jobs necessary to be done. That job board is in the shop so you can decide where you would like to contribute and sign up..

As an aside, it was pointed out that our 20<sup>th</sup> anniversary as a club will happen in July-tying in with CanIRON nicely.

# Dues are now overdue for 2007...you need to pay to play

Here is a list of our sales stock compiled by Don Startin as of Feb 2007. Don has estimated the number of each item that we will need for the coming fair season, based on prior sales activity. If we continue with tradition, the April meeting day will be production day. Have a look at the list and see

## Annual Stock Inventory for Production Day

ITEM	In Stock	Needed
Heart Hooks	5	6
Flat Iron wall hooks	-	4
Table Napkin rings	2	4
Camp Triangles (L)	1	1
Camp triangle (S)	-	2
Strikers for triangle	4	4
Shoe horns	8	8
Ice Picks	2	2
Flower pot hanger	2	2
Candle holder	7	12
Box Hardware corners	1	1
Hoof Picks	4	4
Mexican Hacksaws	1	2
Plate Stands	-	2
Hand Made Nails	5	5
Cornish Miner's candle holder	-	4
Coat Hook racks	2	2
¼" steel bowls	4	4
Tent pegs	5	6
Steak flipper (RH)	3	3
Steak flipper (LH)	1	5
Steak Forks	1	1
Bar-B-Que spatulas	-	2
Regular fire pokers	-	6
Regular fire shovels	-	1
Lawn beverage can holders	2	10
Key ring holder (pocket size)	2	6
Key ring holder (large size)	2	2
Back scratchers	-	4
Screw-in hooks (large)	4	8
Screw-in hooks (small)	4	8
Hammer-in hooks (large)	3	3
Hammer-in hooks (small)	3	3
Bar-b-Que lighter (wire)	1	1
S hooks	4	4
Mini horse shoes	24	24
Gate Hasp sets	2	2
Spice spoons	5	5
Bottle openers	1	6
Beverage can tag lifters	1	6
Crucifixes	2	6
Bracelets	5	5
Clavises (shackles)	-	1

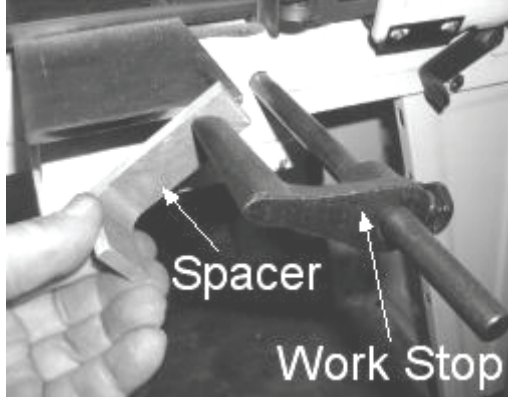
what is needed and what you would like to make. We know that you make a killer screw-on wall hook but we have enough of those, so make a candle holder (particularly the Cornish Miner's holder) or a fire poker...or design something new so we can all learn something.

ITEM	In Stock	Needed
Screw-in eyes	-	1
Feather wedges (set of 2)	-	2
Coil paper weight	-	2
Decorative flowers	4	4
Decorative Animals	2	2
Hand cultivator	4	4
Paper towel roll holder	-	6
Toilet roll holder	-	6
Door stoppers	1	5
6' garden stakes	7	7
Tartan brooches	6	6
Nail puzzles	-	6
Remove the heart puzzles	1	2
Get ring off handcuff puzzle	1	2
Weiner forks	4	4
Trivets	6	6
Double head snake hooks	2	2
Snake hooks	4	4
Screw-on wall hooks	10	10
Tomahawk	1	1
Ladle	1	1
Camp fire poker	2	4

## Horizontal Cut-Off Bandsaw Tips

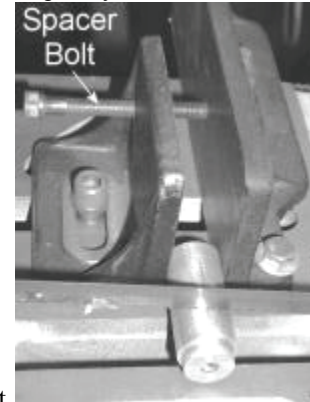
by Dick Kostelnicek - HMSC Member

When I make repeat cuts, I use the saw's work stop to set how far the work extends beyond the blade. However, I

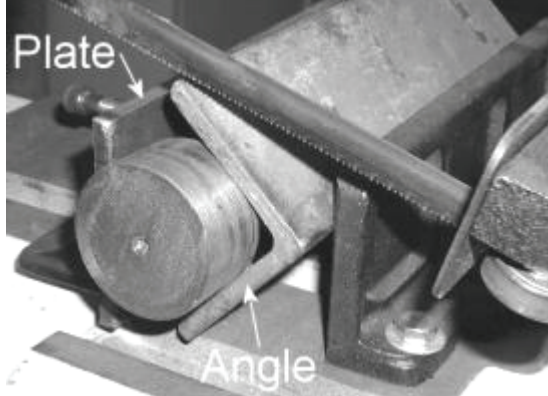


also use a scrap of metal as a spacer between the end of the bar being cut and the saw's work stop. Then, I tighten the vise, remove the spacer, and complete the cut. The clearance, provided by the spacer, prevents the *drop* (piece cut off) from jamming between the blade and the work stop.

To cut a piece that is too short to be adequately held in the saw's vise, I run a 1/4-20 spacer bolt, that is threaded through the back of the movable jaw, up against the fixed jaw. That way I don't have to search for just the right thickness spacer to place in the other end of the vise.



Sometimes the piece being cut is just a scrap that is too short to be held in the saw's



vise. I extend the jaws by using a piece of angle and a flat plate that provide a three point contact gripping the short piece to be cut. The moveable jaw extension plate has a threaded bolt at its back end (not seen) that contacts the crotch in the angle so that the saw's jaws remain parallel when the vise is tightened.

My saw does not have a forced coolant-lubrication system.

This creates a problem only when I cut soft aluminum, which tends to cold weld itself in the blade's gullets. The aluminum build up can be so great on a thick cut that the tooth's set provides insufficient kerf and the blade begins to drift to one side or the other. In order too prevent aluminum buildup, I touch a bandsaw wax stick periodically to the blade's teeth. In fact, I prefer to cut right through the stick's paper tube to a depth of 3/4 of the blade width to apply wax to the teeth and wipe clean the sides of the blade.



# Show and Tell

Photos by D Gillett



Dan Orton's triceratops head from the recent demo



Don's hammer-in hook

Below are two images of a blacksmithed gate at the corner of Craigflower and Coventry in Vic West. The gate and stone walls are what is left of one of Dunsmuir's castles built for one of his kids.

Submitted by Galen



# **FORGE WELDING A KNOB ONTO A ROD: NOTES AND INTERPRETATION FROM THE ROB LYON DEMONSTRATION: 11-16-02**

David Bailey

Welding a knob onto a rod is a useful and relatively easy forge welding process. It can be used for producing knobs of various shapes for handles, finials, bolt heads, and other applications requiring a mass on the end of a rod (see figure a). It involves forging a collar onto the rod and then forging the collar to the desired shape. A collar formed of half-round stock (prepared on a swage) will produce a sphere and a collar formed of rectangular stock will produce a cylinder, a cube, or a bolt head (figure b).

For smaller stock, heat and scroll the end of the appropriate collar stock so that the inside diameter of the scroll is a tight fit on the receiving rod. Mark the collar stock with a chisel to the apparent length

needed (at an angle so that the outside circumference will be larger than the inner), heat, and cut off on a one-bevel hardie (figure c). Flux both pieces, drive the collar onto the end of the rod, and complete the bend around the rod. At this point, the collar should make a tight friction fit all around and there should be a gap between the ends of the collar. If there is no gap and you hit too hard as you weld, stretching the collar, you'll be welding at one point and forcing the collar away at another. Flux again, bring to a welding heat, and weld using a light hammer and a half-round bottom swage. Forge into the desired shape. Be careful in the final heat not to let the collar fall into the fire when removing the

parts. Lift the end up rather than sliding it out. If the collar should slip down either in the fire or in preliminary welding, simply drop the rod into the pritchel hole or an equivalent after the initial weld and flatten the rod end, welding it to the ball (figure d).

For larger stock you need to calculate the collar length more closely. Make the length of the collar the diameter of the bar times 3 (not quite pi) plus the thickness of the collar stock. This will produce a collar not quite meeting when bent and slid over the rod. The gap allows for some stretching during the

welding process. Cut the collar ends at an angle such that the outer and inner circumferences will be equidistant at the joint (figure e).

In shaping the knob, the spherical and rectilinear shapes are intuitive. The faceted cube involves forging a cylinder into a cube, placing a lower corner of the cube onto the anvil and hitting the opposite top corner, thereby flattening those two corners, rotating the cube to the next set of corners and repeating the process. Alternating this faceting with

dressing of the original flats will produce a sophisticated, appealing shape. You may leave the corner facets smaller than the original faces or enlarge them to the

size of the flats. Additional shapes could be achieved using swages or treadle hammer dies.

**From THE HABA LETTER**

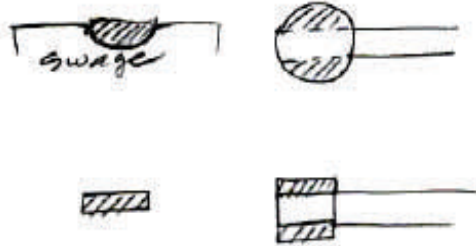
The Newsletter of the Houston Area Blacksmith's Association Inc.

# Forge Welding a Knob on a Rod

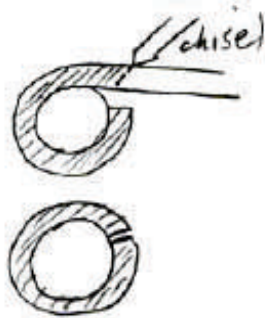
(a)



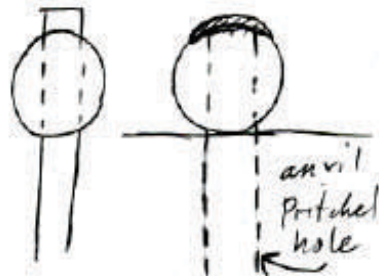
(b)



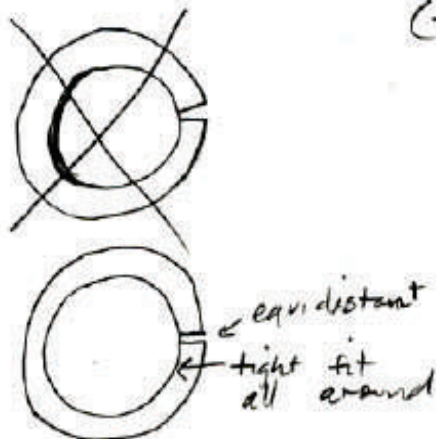
(c)



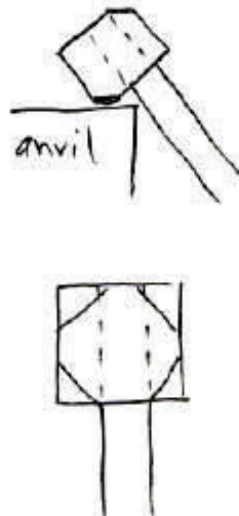
(d)



(e)



(f)



## **SKILLS EXPECTED FOR THE EMPLOYMENT OF A JOURNEYMAN**

**Submitted by Ralph Gustafson      How do you stack up?**

Blacksmithing Standards developed by the Appalachian Blacksmiths Association, an ABANA Affiliate, and registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

1. Drawing Out: Draw a bar to a point or dress an edge or point a tool.
2. Upsetting: Upset to at least 1-1/2 times the diameter or width of a bar on the end and in the middle.
3. Bending: Make a ring out of bar stock or flat stock; forge a square corner right angle bend in square stock.
4. Drifting: Make a drift and use it to smooth, shape or enlarge a hole.
6. Mortise and Tenon: Make an assembly from at least two separate pieces using this technique.
7. Collaring: Make an assembly from at least two separate pieces using this technique.
8. Scroll Work: Make two different types of scrolls.
9. Splitting: Split a bar with a hot cut in the middle or at the end of the bar.
10. Fullering, Grooving, Veining, Set Hammering: Show examples of each or if used as an intermediate technique, describe how and why the techniques are used.
11. Riveting: Make two assemblies from at least two separate pieces for each assembly using hot riveting and cold riveting (pop riveting is not acceptable).
12. Forge Welding: Show at least three different techniques.
13. Arc Welding, Brazing, Soldering, Oxyacetylene Torch Welding: Show an example of each.
14. Hot Rasping, Filing: Hot rasp the torch cut end of a bar to reasonable straightness and evenness; show a workpiece which has been filed to a smooth, flat surface; describe the types, care and use of files.
15. Sinking, Raising, Metal Spinning: Make or show a hemispherical or hollow object made from flat sheet using any one technique.
16. Grinding: Know how to use a body grinder (portable grinder), pedestal grinder, belt grinder, sharpening stones and abrasive papers; know the types of abrasives and how they are graded and classified; show an edge tool that you have sharpened.
17. Drilling, Tapping, Die Work and Threads: Drill and tap a hole, thread the end of a bar with a die; know the common thread classifications; know the common drill size classifications and the care and use of twist drills.
18. Heat Treating, Hardening, Tempering, Annealing, Case Hardening: Know how to properly anneal, harden and temper carbon tool steel; know how to case harden mild steel, know the colors for tempering; make or show a tool you have made that has been heat treated that will cut or forge mild steel without breaking or deformation on the working end.
19. Heading: Head two bolts, one square headed and one hex headed; head a nail; head a rivet.
20. Cutting and Shearing: Know how to use the hot cut, cold cut, hacksaw, tinsnips, bench or floor shear; know how to use the oxyacetylene torch for cutting and demon-



strate each technique.

21. Swaging: Swage a tenon or make the end of a square bar round using a swage.

22. Twisting: Show two different twists in a square bar.

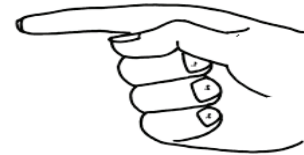
23. Shop Safety: Know first aid techniques for cuts, burns, abrasion and other shop related injuries; describe methods of hearing, sight and body protection and why they are necessary; know power tool and machinery safety including welding equipment safety.

24. Basic Metallurgy: Know the properties and use of wrought iron, mild steel, carbon and tool steels and their classifications, cast-iron, brass, copper, aluminum; know sheet and plate gauging for ferrous and non-ferrous metals.

25. Fire and Fuel: Know the constituents of good shop coal; know the different types of coal fires and fire maintenance.

26. Jigs and Dies: Make both a jig and a die for doing repetitive production work and show examples of work produced with them.

# CanIron needs you



Hear ye, hear ye! CanIRON VI is coming up at the end of June and to make this all happen it will need a few hours of your help and even your spouse if willing. To volunteer contact Galen Kennel at [woodhill@rkc.ca](mailto:woodhill@rkc.ca) or phone 382-4667

List of jobs that need volunteers: Gallery & auction attendants, teaching station helpers, registration desk, souvenir desk, spouse programme assistants, gate keepers, parking directors, camping directors, grounds cleanup, demo assistants, gophers, airport shuttle (car & driver), slide show coordinator, tail gate sales, iron in the hat sales, and set up before and clean up after.

**Vancouver Island Blacksmith Association  
Membership Application**

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ Prov./State: \_\_\_\_\_

Post/Zip Code: \_\_\_\_\_

Email: \_\_\_\_\_

Phone: (\_\_\_\_) \_\_\_\_\_

Fax: (\_\_\_\_) \_\_\_\_\_

Are you a: New Member  Renewal

Regular Membership \$30.00 Annually

Contributory Member \$100.00 Annually

Members are required to sign a Liability Waiver  
Make cheques or money orders payable to:

**Vancouver Island Blacksmith Assoc. (VIBA)  
1040 Marwood Avenue  
Victoria, BC CANADA  
V9C 3C4**

**Artist Blacksmiths Assoc. of North America  
Membership Application**

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State/Prov.: \_\_\_\_\_

Zip/Postal Code: \_\_\_\_\_

Phone: (\_\_\_\_) \_\_\_\_\_

Fax: (\_\_\_\_) \_\_\_\_\_

Full Time Student.....\$35./year

Regular Membership.....\$45./year

Senior Citizen (age 65+).....\$40./year

Overseas Surface Mail.....\$60./year

Oversea Air Mail.....\$80./year

Contributory Membership.....\$100./year

Public Library Subscription.....\$35./year

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**June 29—July 02, 2007**  
**Victoria, B.C. Canada**  
Vancouver Island Blacksmiths Assoc  
[www.caniron.ca](http://www.caniron.ca) [www.viblacksmiths.com](http://www.viblacksmiths.com)

Canada's biennial blacksmithing conference will take place this year in the city of Victoria on beautiful Vancouver Island. It will be hosted by the Vancouver Island Blacksmiths Association.

Featured demonstrators include;

Richard Bent FWCB, Paul Thorne, Jake James, Daniel Orton, Joe Delisimunovic, Peter Fuller, Al Bakke, Renato Muskovic, Tony Austin, Doug Newell.

We also have a hands on forging/teaching area, repousse' teaching station, demonstrations by the Western Canadian Farriers Association and the Western Canadian Wheelwright Association.

We have arranged for hands on craft classes for spouse/family members, including basketry, felt making, mosaic art, quilting, fragrant wreath making, broom making, traditional metis beading and glass bead making.

Camping & R/V parking will be available on site, offsite dorm rooms at the Royal Roads University, b&b's and hotel/motel rooms close by.

Test your skills at the standards of **THE WORSHIPFUL COMPANY OF BLACKSMITHS!!** (est. 1352)  
As part of CANIRON VI we will be hosting an **ADJUDICATED GALLERY** as well as a **LIVE FORGING COMPETITION**.

Check out the website <http://www.caniron.ca/> for more info

