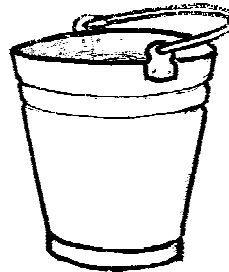




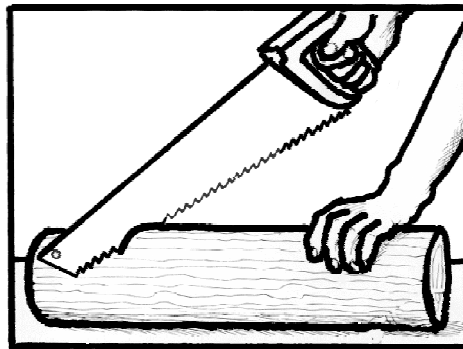
# HOW TO MAKE A STRENGTHENING RIDGE IN A BUCKET

One or two ridges around the rim of a bucket will increase its strength and make it more ridged making it easier to use. One method of making ridges is with a wooden stake and mallet. Another method is to use a spring jenny. Ridges can be added to other metal objects to make them stronger.



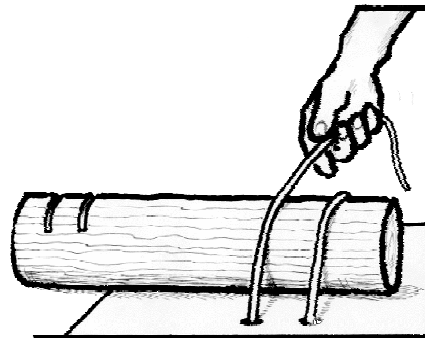
## Making a ridge with a stake and mallet

Use a saw to cut grooves in a straight round hard log. Make two cuts, the width of the groove apart, straight across the log. Remove the wood between the cuts with a knife. The distance between the grooves will be the distance between the ridges made in the bucket.



Drill (or burn with hot steel rod) two pairs of holes in the bench.

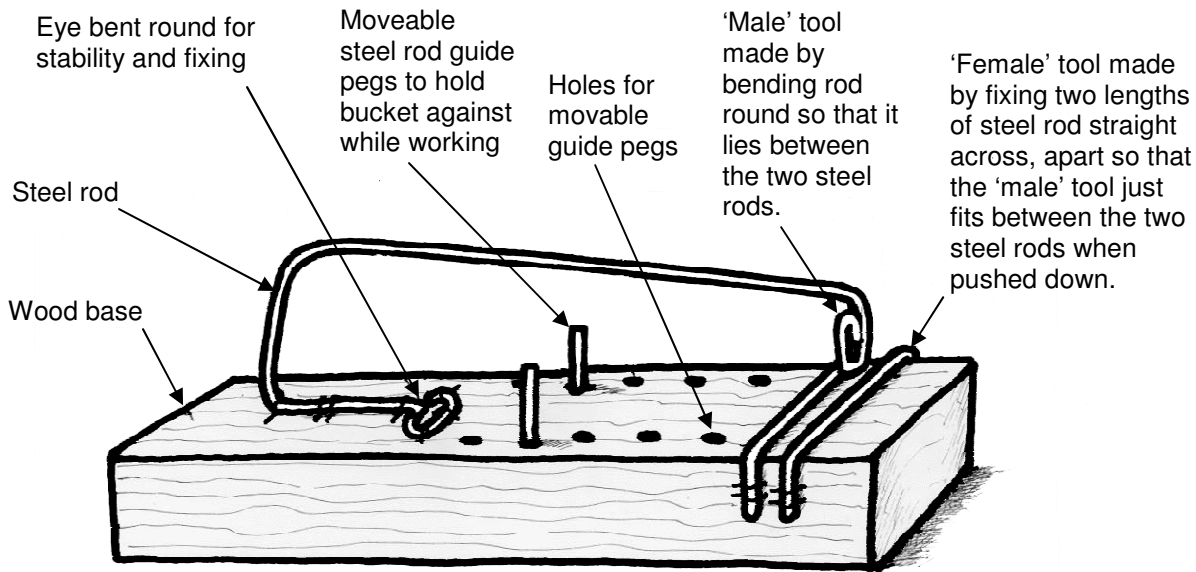
Use strong wire to fix the log to the bench, positioning the log so that the grooves are the distance from the bench edge that you wish the ridges to be from the rim of the bucket



## Making the ridge

- 1) Place the bucket over the log so the metal lies flat along the log, and the rim presses against the edge of the bench.
- 2) Make a wedge-shaped hardwood mallet, and strike the metal above a groove, forcing the metal down into the groove. Turn the bucket slowly round as the ridge forms.
- 3) Make the other ridge with the second groove.

## Making a ridge with a spring jenny



### Making the ridge

- 1) Place guide pegs in equal holes, to guide where the ridge will be made.
- 2) Place rim of the bucket against guide oegs, so that the outside of the bucket presses down against the female tool, so the male tool is on the inside of the bucket.
- 3) Strike the top of the male tool repeatedly with a hammer or mallet, and rotate the bucket slowly as the ridge is formed, taking care that the bucket rim always rests against the guide pegs.
- 4) When ridge is completed, move guide pegs and repeat the process for another ridge.



### References and further reading

- [How to Make a Folding Machine for Sheet Metal Work - Workshop Equipment 1](#)  
Rob Hithings, Practical Action Publishing
- [How to Make a Foot-operated Workshop Drill Workshop Equipment 2](#)  
Paul Smith, Practical Action Publishing
- [How to Make a Rolling Machine for Sheet Metal Work - Workshop Equipment 3](#)  
Rob Hithings, Practical Action Publishing
- [How to Make Cutting Shears for Sheet Metal - Workshop Equipment 4](#)  
Rob Hutchings, Practical Action Publishing
- [How to Make a Hand-operated Holepunch - Workshop Equipment 7](#)  
Ted Stone and Jim Tanburn, Practical Action Publishing

- [\*How to make a Metal-bending Machine – Workshop Equipment 10\*](#)  
R.D. Mann, Practical Action Publishing
- [\*Basic Blacksmithing: An introduction to toolmaking\*](#), David Harries, Practical Action Publishing, 1993
- [\*Blacksmithing Instructors' Guide: Sixteen lesson plans with teaching advice\*](#), David Harries, Practical Action Publishing, 1993

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# technical brief