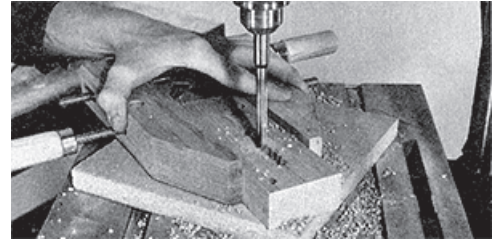


## Tip #115

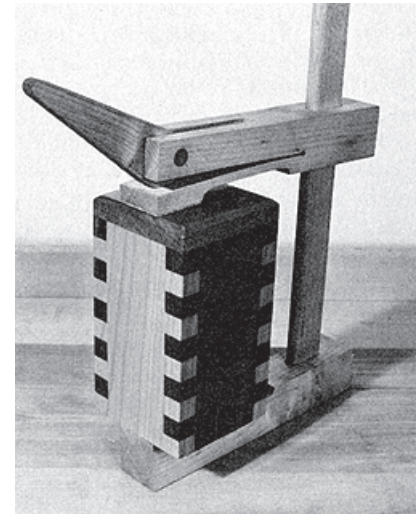
## Make Your Own Cam Clamps

If you're like most woodworkers, sometimes you just never seem to have enough clamps. And the clamps you do have take forever to unscrew and tighten down again. Here's one possible solution for your problem: cam clamps. They're simple and inexpensive to build - you can make a dozen of them in an evening - and they're even simpler to use. Just one flick of the wrist and you can exert 200-300 pounds of pressure.



### Plan of Procedure

1. Cut all stock to size. Take special care to cut the bar stock accurately. Cut out the cam with your Bandsaw or Scroll Saw and carefully sand the flat spot shown in the drawing, using your Disc Sander.
2. Drill all holes, except for those in the bar. Clamp jaws together and cut the recess by making a series of 3/8" holes. Use the same technique to cut the bar slots. Use a rasp or file to smooth the inside of the recess and the slots.
3. Using your Dado set-up to cut the dado for the cam in the sliding jaw...then switch to a regular saw blade to cut the long saw kerf. This kerf allows the cam to open and close the jaw, exerting pressure on the pieces being clamped. Assemble the cam to the jaw, using a 3/8" diameter dowel pin as a pivot. **IMPORTANT:** Do not apply glue to the full length of the dowel pin, as it has to rotate in the clamp body in order for the cam to move and do its job.
4. Round the edge of the bar with a shaper or plane. A Radi-Plane is the ideal tool for this job. Assemble the stationary jaw to the bar, drill holes in the bar (using jaw holes as guides), and insert dowel pins.
5. Assemble the sliding jaw to the bar, drill a hole in the end of the bar opposite the stationary jaw, and insert a dowel pin as a stop peg.
6. Glue cork onto the jaw faces. To use, simply slide the jaw to the desired opening, place the piece to be clamped in between the jaw faces and flip the cam lever.



### Bill of Materials (in inches)

Use Rock Maple, Beech, Ash or Oak

- |             |                              |
|-------------|------------------------------|
| A. Jaws(2)  | 1-1/4 x 1-1/4 x 7            |
| B. Cam      | 1-1/4 x 4-1/4 x 3/8          |
| C. Bar      | 1-1/4 x 3/8 x 40(or shorter) |
| D. Pegs (4) | 1-1/4 x 3/8 dia.             |
| E. Cork (2) | 1-1/4 x 1-1/4 x 1/16         |

