**Sam Shelkey**

**List of Materials:**

Ridgeway Plumbing and Heating T-Shirt

O-Ring and Pipe with Ball Valve

A propress is a sort of clamp that exerts many, many pounds of pressure to crimp a pipe. It bites down on the pipe to create a watertight seal with a rubber ring. It was invented in Germany in 1899, for crimping beer tabs. It came into use here in 1980 for home plumbing. It does not use metal of any kind, and there is no welding or soldering involved. One pipe fits inside the other, and then the press bites down on the pipe. A propress can crimp pipes ranging in size from ½ inch to 5 inches. It takes much less time than traditional welding, and it does not involve any lead (which is poisoness, and is in almost all plumbing, except for pipes using this method). The pipe is crimped into a hexagon, so the pipes are different shapes and cannot come out of each other.

