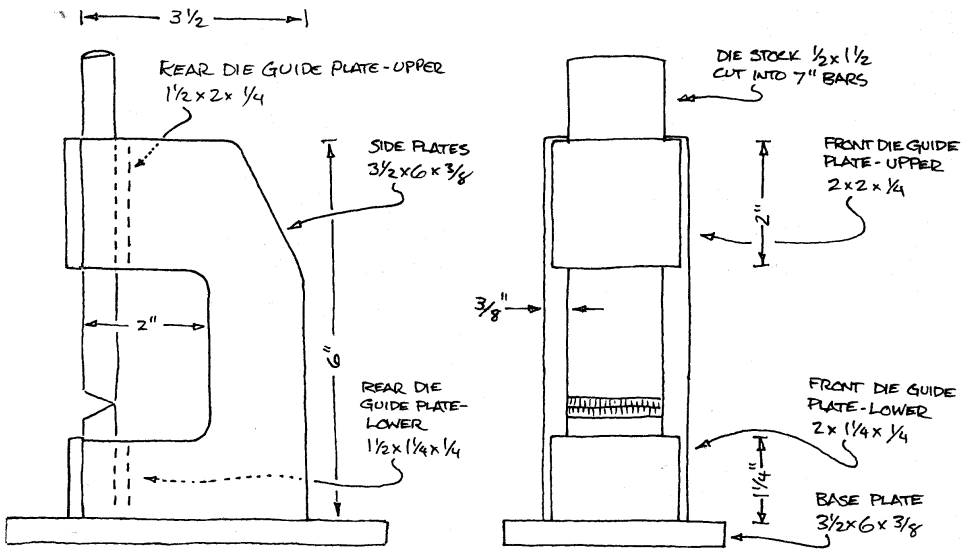
A Blacksmith's Helper

Here's my design for a Blacksmith's Helper. Basically, it's a frame to hold standard 1 1/2"x 1/2" die blocks. I developed this design based on one that Lou Muller uses. Though Lou's design is a more accurate and finer tool, this design is considerably lighter, cheaper, and quicker to make. (See The Blacksmith's Journal, #98)

Whatever you do, remember to start with the die stock and build the holder around it. You can use tool steel for the dies, but I've been using plain old hot rolled for a couple of years, and the results are quite satisfactory.

A cheap harbor freight drill press vise was used to hold the parts together while welding. I wrapped the dies with two layers of newspaper before welding the pieces together, and had to drive out the die blank with a hammer. Still, most of the holders that I built had anywhere from 1/32" to 1/16" wobble. This could be reduced somewhat by using cold rolled steel for the dies and backing plates, but if you need super accuracy, you'll probably need to machine the guide and use bolts and shim stock to assemble it. This design doesn't allow for any of these refinements.It's designed to get the job done with a minimum of fussing around.

I built several of these to take to the Madison conference for the tailgate sales. Uri Hofi noticed them and said"Is good tool. It will break... here... (the upper weld that guides the forward part of the die) but is good tool." He also said," I give you tip. I make a lot of leaves with serrated edges... like rose leaf. Take a bolt, weld to the top edge and the bottom edge of die, it will make serrated edges in one hit. In Israel, we have split dies. (I've seen antique two piece threading dies... I believe this is what he was referring to) I use them. You don't have this in America. Is good tool for this."



Dies For The Helper

A Blacksmith's Helper is a really handy tool to have when you work alone. There are about a be-zillion dies you can make for this thing. Die design is limited only to your imagination.
I have a smaller version that I've been using for a couple of years now. I've made several die sets for it. Most of my dies are made of plain mild steel. A few have tool steel or spring steel inserts. They are just now starting to show a little wear. Cold rolled steel would be best, but my helpers were built with hot rolled, you might need to shim dies if you make them fromanything else. Case hardening is an option, as is using super quench, but I've never tried either.