Tool for Tamping Earth

by **Thinkenstein** on June 29, 2010

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Intro: Tool for Tamping Earth

This is a tool for tamping earth. It has a heavy cast concrete head with a flat bottom. You pound the earth with it to compact the dirt. It is a tool that might be used in road work, or for preparing ground prior to pouring a cement floor, etc.

It's not a tool that many people would ever use. I have needed one in the past for tamping the ground to compact it before plastering floors and walkways with my nylon-cement construction technique (nylon fishnet and cement). Now, I need one to help out on some asphalt road work, to tamp and shape asphalt. I hope it works. This will be my first time working with asphalt.

The shaft is a piece of light-weight galvanized tubing. Holes are drilled, and nails pass through the pipe, helping to lock the cast cement head in place. I suppose that, if one was making cement dumbbells for weight lifting one could use the same nail technique for locking the cement in place.

The nails make sure the head stays in place. Without the nails, use and abuse could loosen the pipe and it could slip out of the cement.

step 1: Drill holes for the nails

I use nails 3 1/2 inches long, and a slightly smaller drill to make the holes for them so that they can be driven into the pipe tightly with a hammer. I use three nails at different angles. Six holes, in three opposing pairs.

At the other end of the pipe, I drill a couple larger holes so that I can hang the tool up from a nail in the wall, or an “S” hook from something.

Image Notes
1. This is a larger hole in the top end of the handle. I like to hang my tools up. You can hang it on a nail or using "S" hooks from something overhead.

step 2: Drive in the nails

There’s not much to it, just drive the nails in with a hammer. Make sure that the nail lines up with the hole on the opposite side of the pipe. If you try to bang it into solid metal, the nail will bend.

step 3: Set up for pouring cement

As a mold for the cement head, I used a plastic margarine tub. This is going to be a fairly light-weight tamper. If you need something bigger and heavier you may want to use a heavier pipe than I am using here and a larger container as a mold.

Over my level work table there is a pulley, with a rope system for raising or lowering lights. I used the system to hang the tool handle, instead. Lower the handle to the appropriate depth for when it is in the mold.

I cut a hole in the bottom of the butter tub to allow filling with concrete when the tub was inverted, and I used the tub lid as a bottom for the mold. I used some plasticine clay to fill in some irregularities around the edge inside where the lid joined the tub. Eliminating irregularities makes the cement surface flatter when it is removed from the mold.

If the lid has an air space between it and the table, shim it up a little with pieces of cardboard, etc. You want the bottom of the cast cement to be flat, not with a belly to it.

I think that the larger tamper I made years ago was made in an inverted container without a lid. I just sealed where the container joined the non-stick table surface with some clay. Basically, you just don't want cement to leak out from underneath the mold container.

Image Notes
1. Adjust the height of the handle so it ends up at the proper depth inside the mold.

step 4: Pour the cement

Mix up some concrete (three parts gravel, two parts sand, one part cement) with sufficient water to be able to get it into the mold. Use a stick to jiggle the cement around some to eliminate air bubbles.

Let it stand until the concrete is hard enough for you to remove the tub mold.

This tamper has a slightly reddish color because the cement was contaminated with some red pigment from another project.

step 5: Remove the mold container

The lid just pops off. I cut the body of the plastic container with a knife to get it off the cement.

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