Standing Gardener

Work Completed

This week for the standing gardener much work was completed. All of the feet were welded onto the pipes and tubes. While welding the feet onto the tubes and pipes they became warped which would not be good when we needed to bolt them to the top and bottom sheets. To fix this we had to bend the plates back into their original shape. This was accomplished by placing the plates in a vise and banging them back to shape using a hammer. This is shown in Figure 1 below.

![Figure 1: Reshaping of tube and pipe feet.](image)

We also had to use the miller to cut three spots in our workspace where our adjustable pot holder tray will be implemented. We made these cuts 5/8” in width and will be used with a nut and bolt. The milling process is shown in figure 2 below.
Now that the legs of the stander are finished and the top and bottom sheets of the gardener are finished we were able to set all the legs in place on the gardener to see how our layout is coming along. The gardener is looking very much like the CAD drawing we made it to look like. Figure 3 shows a picture of the standing gardener in its semi assembled state.
Future Work

We are currently in the process of finding a new material to cover the workspace of the gardener. Also we will be starting on making pads for the device.

Multi-Terrain Wheelchair

Work Completed

For the wheelchair we have completed our design of the attachment we will be using for our front and back wheels. The front casters of the wheelchair will hit each other if attached in their current location so we will have to offset them by a couple inches each. The housing unit for the previous casters has a diameter of 1 1/16” so we needed a rod which would fit into that space. At the machine shop they only had 1” or 2” rods. Therefore, we had to use the lathe to decrease the diameter of the 2” rods to 1 1/16”.

Figure 4: Lathing 2” rod to 1 1/16”.

Figure 4: Lathing 2” rod to 1 1/16”.
**Future Work**

Once the front casters of the wheelchair are finished and in place we will be able to determine the desired height of the rear wheels. We will use a similar design for the rear wheels as we are for the front wheels. There are two positions for the previous wheels to be mounted to the wheelchair. We will use both of those to attach the new wheels. This is going to be done to increase the strength of the rear wheels.

**Hours Worked: 14.5**