

Homemade Rock Saw/Combo



The Gold Gal has been collecting rocks from hither and yon lately and getting interested in rock polishing, cutting, etc. She has been tumbling them for a while now and wanted a quick way to cut large ones in to small ones. She also wanted a way to knock down the sharp edges and rough spots so they would tumble a lot faster. So here it is a homemade cutter/grinder I built her.

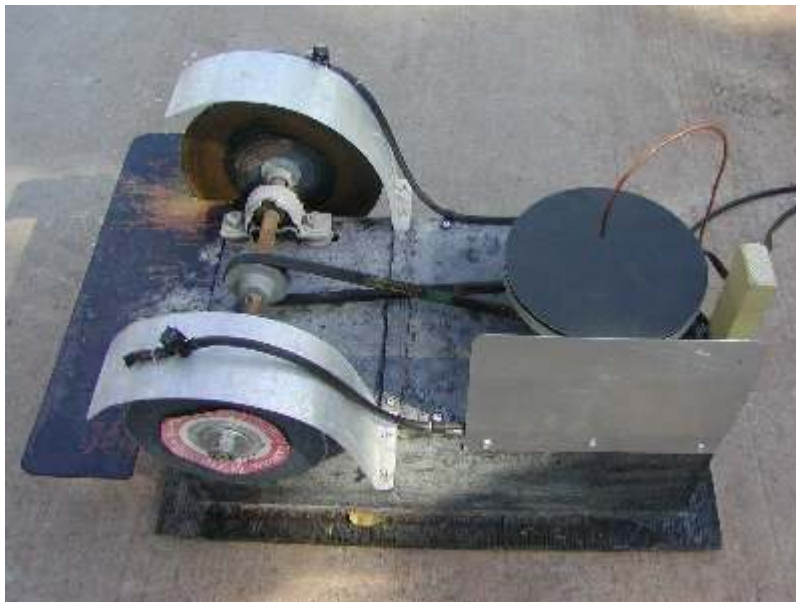


It is simply a washing machine motor driving a homemade arbor shaft with two 1/2 in. sealed bearing pillow blocks to rotate in. The belt has a 90 deg twist in it to go from vert to horiz rotation. Everything is mounted on a steel top plate that screws to a wood box base. A small front steel rock rest to set the rocks on when cutting and grinding. Water is supplied from a garden hose to a small regulator to knock it down to 15 PSI then on to the Drip System hose and small drip valves to squirt on the saw and wheel. They are individually controlled which is a big plus over my first setup. First I tried a water bottle on a post above the wheels and it would run out of water and need constant adjustment. Now everything is fixed in place and under constant pressure and works great. I did order the grinding wheel 22.00 and bought the 7 in. diamond saw blade at Lowes 14.00 . The shaft I made from a piece of round 1/2 in. steel, I used a 1/2 in. die and threaded 2 inches on each end. I had everything else so it came in pretty cheap as projects like this go.



New polishing head, accepts different grit pads for shaping and polishing stones.

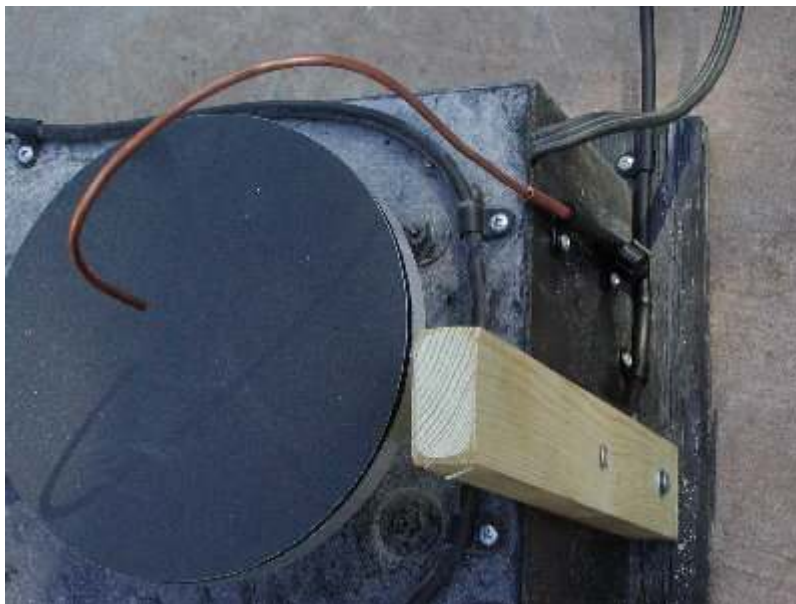
Now having used the little rock saw/grinder a while Linda wanted some way to finish grinding and polishing the rocks on the same machine. So we ordered a polishing head for it. This motor has a long output shaft so I was able to flip its pulley upside down, slide it down a bit, and mount the head no problem.



The metal shield was added to block the water spray from slinging out and on the user. A wood 1x2 was added to rest your hand or dop stick on to shape rocks. This may be improved upon later.



Here is a view of the water feed it comes in from the right and tees off goes up through a drip system valve on up through the copper tube which can be repositioned at will. The abrasive pads peel off and come in 100, 220, 320, 400, and 600 grits.



This is a better view of the water feed for the little rock machine.