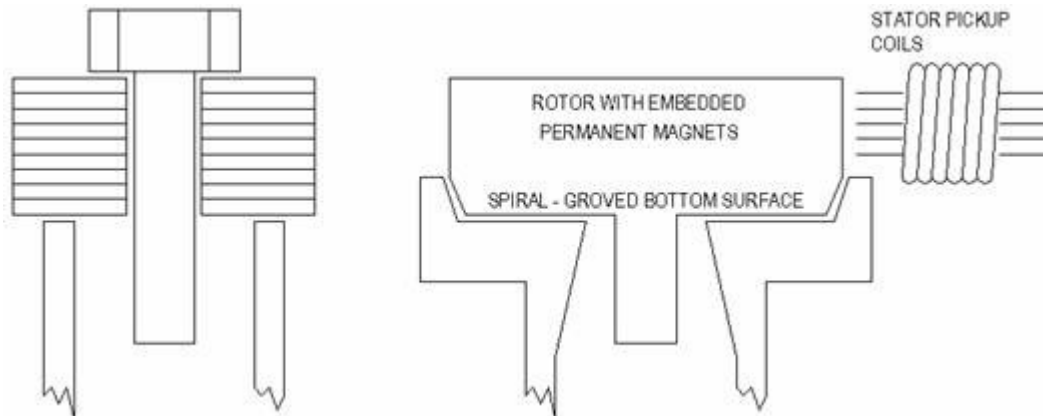
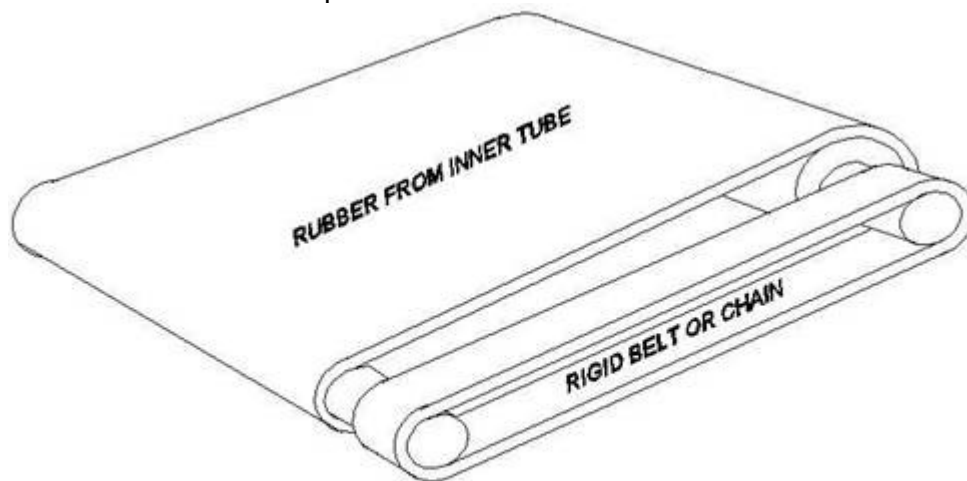


Engine Ideas

Considered a simple form of steam turbine/generator. This began as a concept for a pressure release valve, consisting of a bolt through a stack of washers sitting on the end of a vertical tube. Any pressure high enough to lift the bolt and washers would be free to escape. If there were spiral grooves cut in the bottom washer, and counter-rotating grooves in a seat on the end of the tube, the assembly would spin. If you hadn't guessed, this assembly could become the frictionless rotor of a small generator with a built-in pressure control.



How about a rubber band exposed on one side to heat from sunshine or a wood stove?



NOTE: RUBBER UNDER TENSION CONTRACTS WHEN WARMED, RATHER THAN EXPANDING. THEREFORE THERMAL RADIATION ON THE TOP SURFACE WOULD CAUSE ROTATION IN THE COUNTER-CLOCKWISE DIRECTION.

I once used super glue to glue thin strips of aluminum foil and hard thin plastic together, and sprayed the resulting bi-material strip black. You get a lot of bend when you expose it to radiant heat. I even made a crude flower from this product, which would open up when you brought it next to the woodstove. Approximately speaking, plastics expand and contract with heat about ten times more than metals do for the same temperature change. This could be an interesting way to get the sunshine to do something mechanical directly. Like most things, I discovered this the hard way. I had built a solar panel with a hard plastic cover, and the whole thing tried to pretzel when it warmed up.