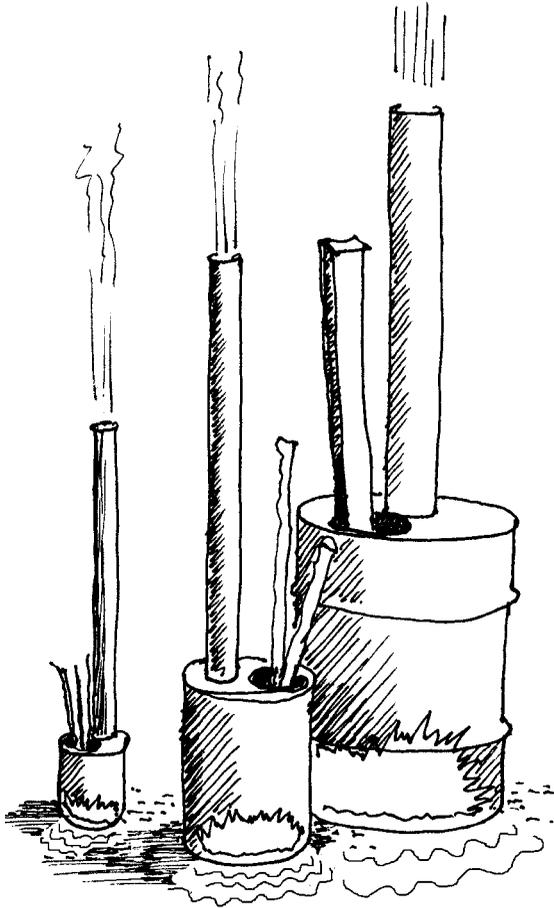


## HOW TO MAKE A POCKET ROCKET



Pocket Rockets come in many shapes, sizes and styles. The type pictured is an outdoor radiant heater. It's made from cheap materials that are often found in the waste stream. Because of its high chimney, it has a relatively clean burn, but of course what heat isn't absorbed by a human directly off the radiant barrel is sent to the heavens. The emissions are low, though, making it a nice way to get warm around a fire in the city, for example. It requires very little wood to operate. It is also easy to make.

This recipe is for a Pocket Rocket with a five-gallon burn chamber (using a 5 gallon can or pail). It's possible to make one in any size. The pipe sizes will be proportional. For example, a 25-gallon drum works well with an 8" x 25" feed tube, and a 4" x 66" flue pipe. These measurements are fudge-able. It's the proportions that matter.

### MATERIALS:

- 5-gallon metal can or pail with removable lid, clean of finish paint or residue
- 4 inch x 60 inch pipe (preferably not galvanized)
- 6 inch x 12 inch pipe (not galvanized, flat black stove pipe is preferred for both)
- Sheet metal scrap of at least 4 inch x 4 inch (or something similar: steel pie pan, vegetable strainer, steel pot lid, etc)
- Newspaper
- Firewood: dry, thin, straight, long
- Plenty of tiny kindling

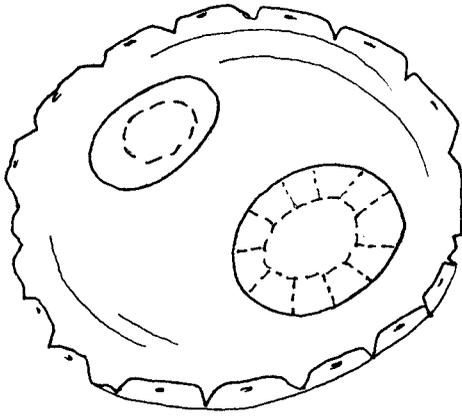
### TOOLS:

- tin snips
- hammer and nail
- hole saw
- pliers
- felt-tip marker

### SAFETY GEAR:

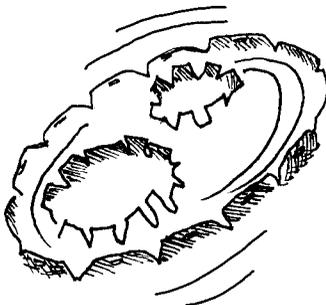
- leather gloves

Remove the residues of paint and the pail's contents (see a note on safety, below). Remove the rubber gasket, if there is one, from the inside of the lid. The feed tube and the flue pipe are both attached at the same end of the burn chamber (the can or pail) in the lid. Trace the outline of the two pipes onto the lid with a felt marker (or nail, etc), placing each pipe towards the outer rim of the lid so that there will be plenty of material left in the lid itself to support the pipes (see illustration, following page). In order to create a tight fit for the pipes, draw a circle that is an inch all-around smaller inside the original one.



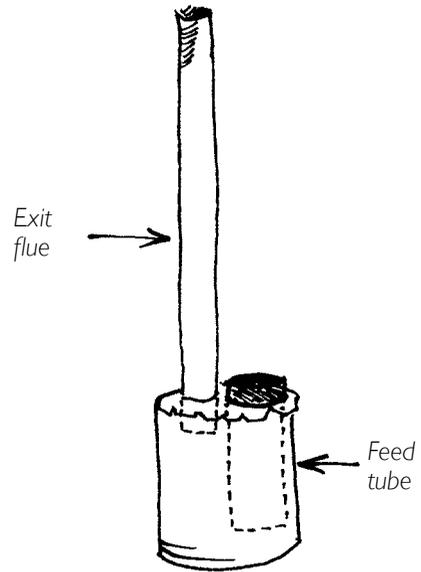
The flip-side of a can lid with large and small pipes traced onto it.

Start the hole in the center with a hammer and nail, chisel or other sharp object. Then from the starter hole, use tinsnips to cut out the inner hole. An easy way to do this is to cut in a spiral pattern from the center out to the inner marker line. Do the same for the other pipe. Now you have a can lid with two holes which are both too small to accommodate the pipes. Using tinsnips, cut tabs about an inch wide, radially from the hole's center out to the pipe's actual line. These tabs will hold the pipes in firm and tight and allow much more control and adjustment when fitting them. Using pliers, fold the tabs almost to right angles pointing into the can. Now you have a dangerous frisbee.



Can lid with tabs cut out and folded back.

The shorter, bigger pipe, which is the feed tube, will hang inside the can, almost to the bottom (see illustration). The long exit flue pipe will sit into the can only a few inches,



just enough to hold it steady. Put the lid on the can and friction-fit the two pipes into position, making adjustments to the tabs as necessary so that there is a nice tight fit.

**Operation** Light the corner of a piece of crumpled newspaper and push it down the feed under the area of the flue. Flames should be drawing up the flue pipe. Slowly feed more burning newspaper to burn at the bottom of the feed tube. Add a little more newspaper then a few pieces of kindling, standing upright in the feed hole. The object is to keep the draft going in the same direction: into the flue. Add more fuel. You can regulate airflow into the stove with a piece of sheet metal a little larger than the pipe. There are many ways to enhance the burn quality. Experiment!

**A note on safety.** A lot of the pipe out there is galvanized. Its melting point is 787°F, but it offgases at a lower temperature than that. I like to just avoid galvanized pipe.

Most barrels are painted. This paint must be burned off in a bonfire to remove it. Who is downwind (including you)? Wear robust leather gloves, and stay out of the smoke.