Rocket Stove Instructions

A rocket stove is a cooking stove that achieves efficient combustion of fuel. It has been used for cooking purposes in many energy poor locales (notably Rwandan refugee camps) as well as heating water.

Supplies:
- 2 large metal cans with 1 lid (about 18 litre, about 36 cm tall)
- 3 metal rods, such as rebar (each 30 cm long)
- 2 sections metal stove pipe (32 cm & 20 cm long) or sheet metal rolled into pipe-like sections
- 1 rectangular piece of metal as wide and slightly longer than the short piece of pipe
- Wood ash (or vermiculite), enough to fill large can

Tools:
- Tin snips
- Drill or hole punch

1. Remove lid from large can

2. Using end of stove pipe as a template, trace the outline in the center of the lid.

3. Using tin snips, cut out the circle that you traced.

4. Using the stove pipe, trace the outline 5 cm from the bottom of the large can.

5. Cut out the circle with tin snips.

6. Using the stove pipe again, trace an outline on the tall piece of stove pipe 5 cm from one end. Remove with tin snips.

7. Pour 4 cm of wood ash into the large can. Insert the tall stove pipe into the large can. Center it and line up the cut hole with the hole in the side of the large can. Drop the center cutout from the lid into the vertical pipe, ensuring it lies flat with at least 4 cm of wood ash beneath it.
8. Insert the remaining stove pipe into the hole horizontally until it protrudes about 5 cm into the vertical pipe.

9. Fill the void around the pipes with wood ash, until it is a few cm from the top of the can but does not overflow into the vertical stovepipe. Do not use sand or dirt for an insulator unless wood ash is not available.

10. Place the lid over the top of the vertical pipe, and press down lightly.

11. Drill or punch 3 pairs of holes around the rim of the can 2 cm from the top. Insert the metal rods into the holes in the shape of a triangle for a pot stand.

12. Cut a rectangular piece of metal slightly longer than the horizontal pipe. Leave a flange on the end in the shape of a letter “T.” This will be a shelf to feed wood into the combustion chamber.

13. Insert small sticks and only burn the tips. Push them in as they burn.

14. Use tin snips to fashion a pot skirt from the other can. This is simply a ring that goes up the side of the pot. It will direct more heat to the pot when cooking.