

CANS TO TO

THE PROBLEM

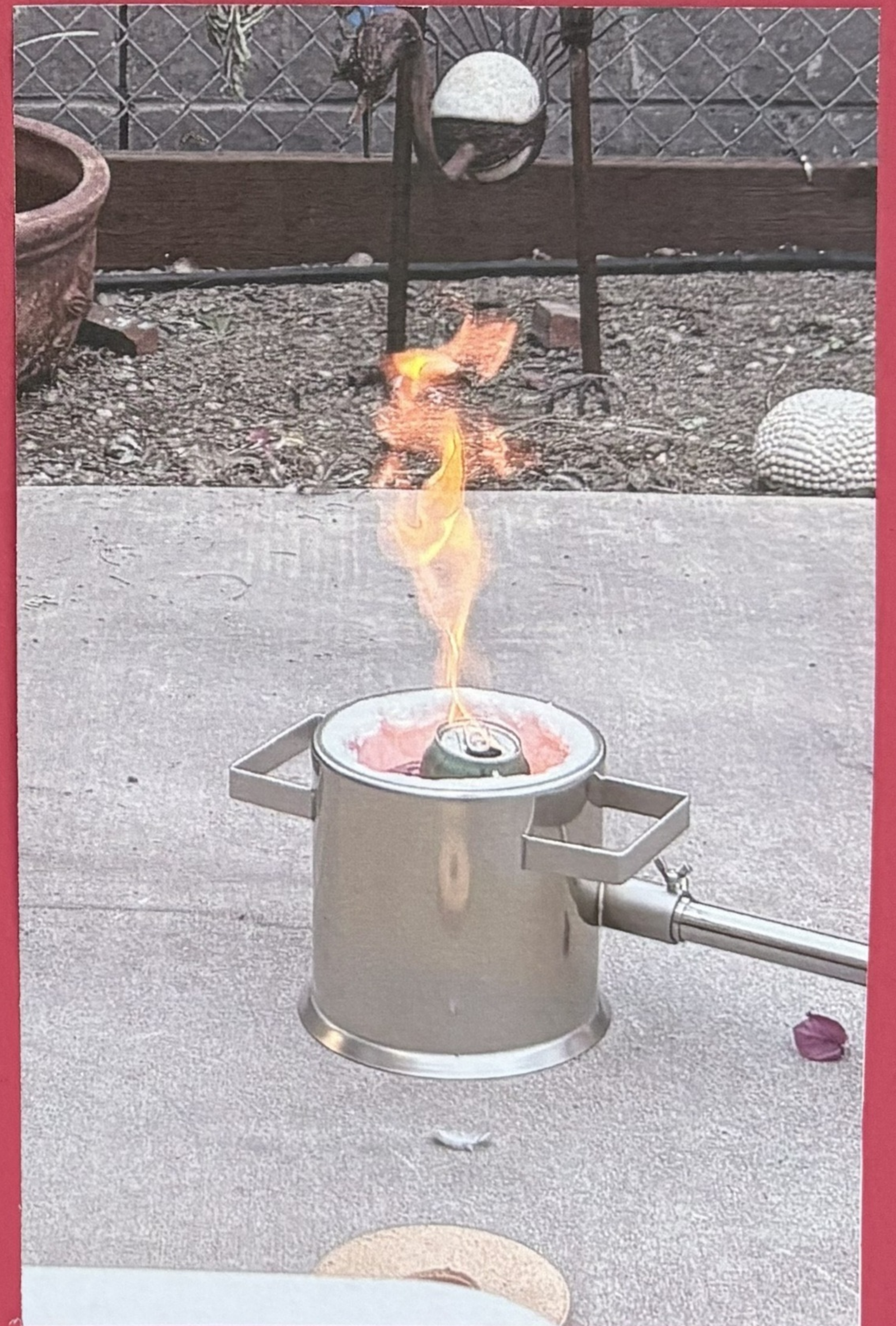
We want to help the environment, but we can't do that with cans scattered around. We have A LOT of cans, and I wanted to melt them into TOYS!!!



BACKGROUND RESEARCH

I had to figure out the temp of melting aluminum (1200 degrees Fahrenheit). I had to find out how to melt the aluminum to pour into molds.

Safety was a major concern because I didn't want to get burned.



BRAINSTORM

My first idea was to make chess pieces, but we couldn't find the molds. The molds have to be cast iron or graphite. But we did find the molds we could use for checkers. I found a small gas furnace to melt the aluminum and some tongs to grab the cauldron of hot aluminum.



DEVELOP THE SOLUTION

My original plan to make cans into toys didn't work. But it was successful because I learned about melting aluminum cans and I had a lot of fun doing it. And I made some cool figures. Also I think we need to drink more water so we have less cans.



THE MOST PROMISING SOLUTION

Using a welding mask, apron, gloves, jeans and leather shoes will keep me from getting burned. I decided a "TAKOYAKI PLATE" would be good for making checkers.

We also used a thermometer to tell the temperature of the cauldron.



TEST AND EVALUATE THE PROTOTYPE

We tried to melt the cans, and it worked well, but there were a lot of impurities or dross that made it hard to pour the melted aluminum out. We couldn't make a full set of checkers. We did make a dragon medallion and some round figures.



