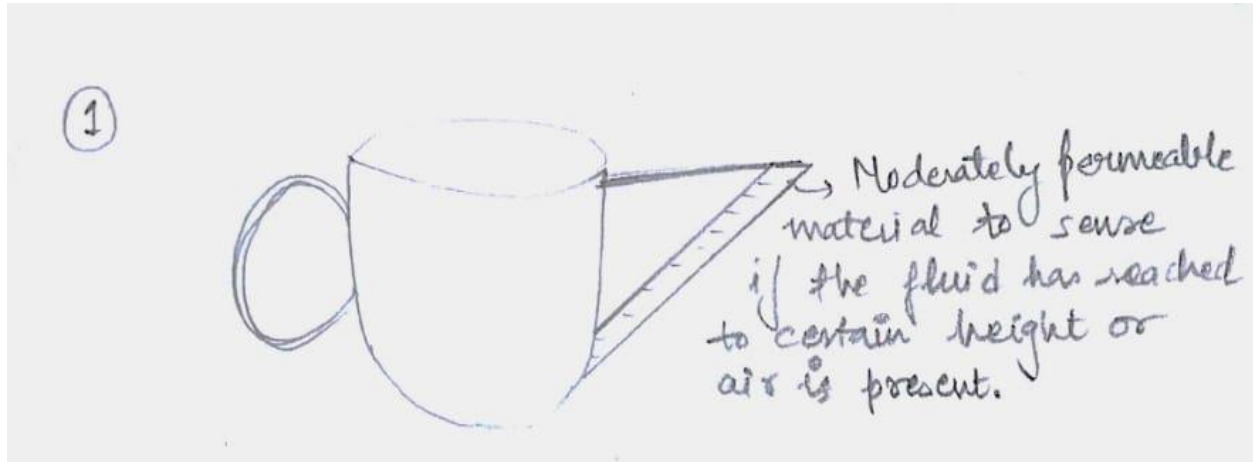


Mug Designs for Visually Impaired People

The cup material for all the designs can be of food-grade plastic material, making it unbreakable and cost efficient.

Design 1

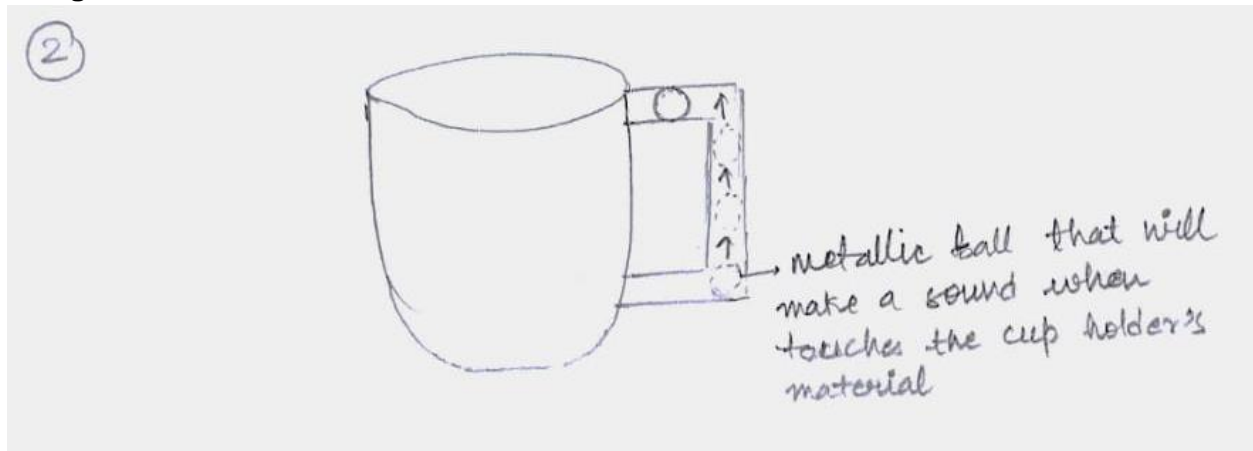


As the fluid will rise in the cup, it will also rise in the outside pipe, that can be sensed by the user.

Limitation:

1. In the case of hot liquids, there can be skin burns.
2. Both the hands will be equipped.

Design 2



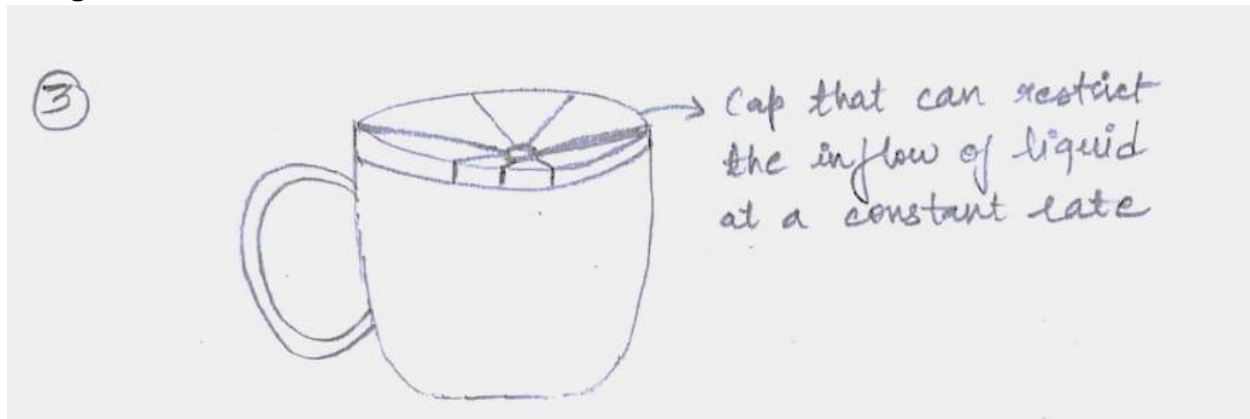
To address the previous design drawback, here, a metallic ball will rise with the filling of fluid, and the sound produced will be heard.

Moreover, only one hand will be equipped.

Limitation:

1. There can be overflow of the liquid.

Design 3

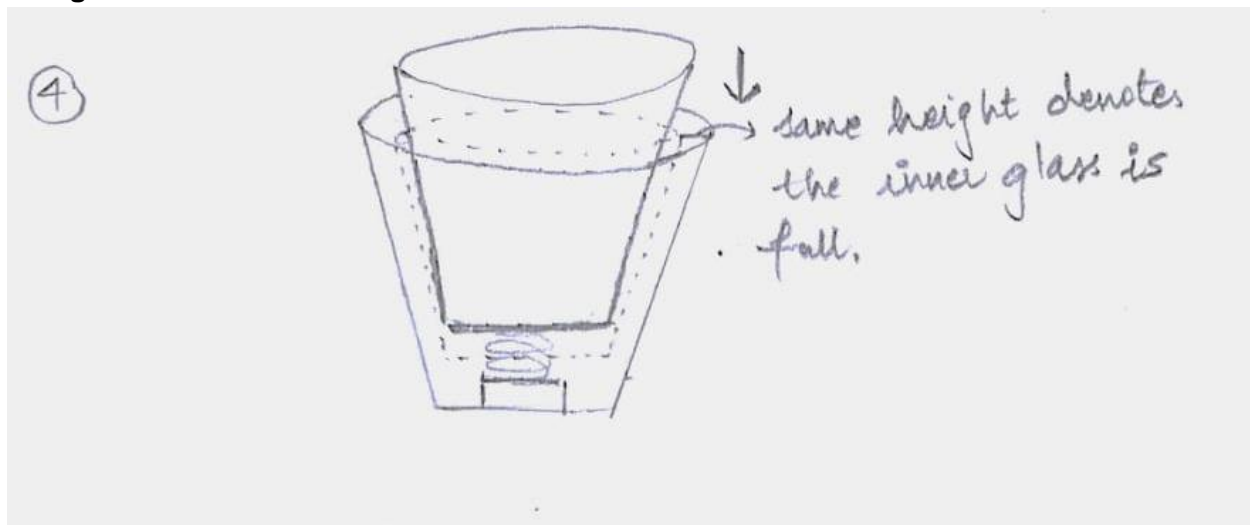


Here, the cup can be covered with a cap, to limit the flow of liquid, and a timer can be set to monitor the quantity of the fluid.

Limitation:

1. The flow from tap to the cup may not be controlled.
2. Overflow can happen.

Design 4



Here, there will be two glasses (one inside the another). Outer glass will be of steel material and the inner glass can be of any material. A string will be attached at the bottom of the outer glass.

Initially, when the inner glass is empty, the spring will be relaxed and its height will be larger than the outer one (for simplicity, let us consider that inner glass is little shorter). The amount of tension in the spring will be such that when the least density fluid (e.g. water) is poured to the rim of the inner glass, the height of both the glasses will become equal. And for other fluids, a user can learn an estimation of height difference by experience.

The outer glass, being a steel material will help in sensing the overflow of liquid from the inner glass to the outer glass.