GRAVITO-BUOYANCY SYSTEM

Objective of the system: To genearte cost-effective clean & renewable energy.
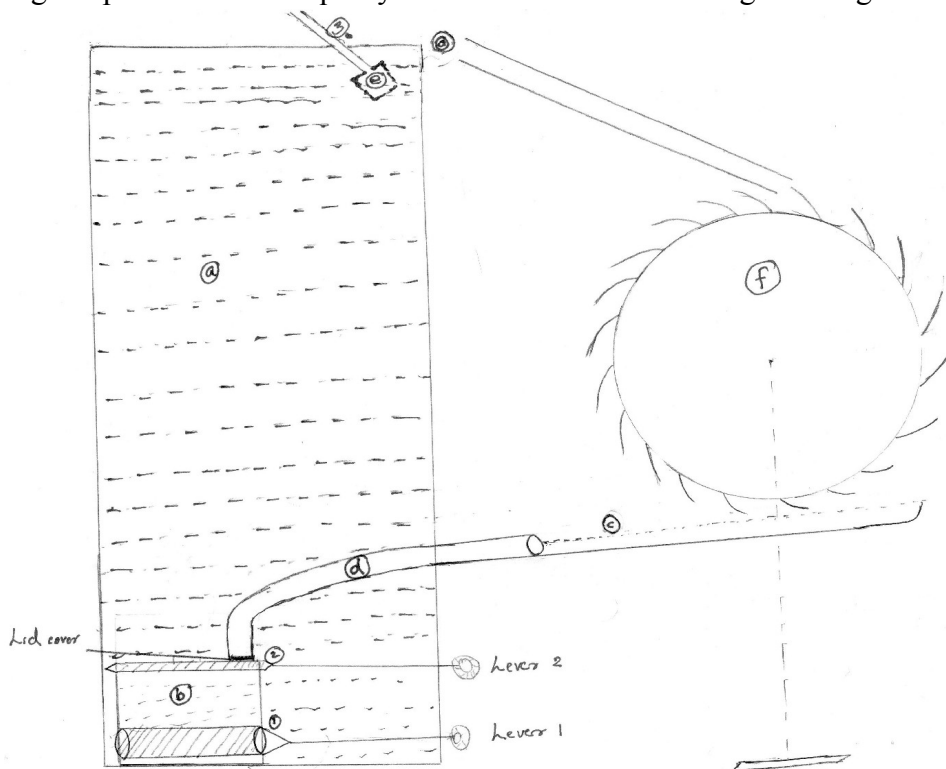
Parts of the system:
a) Water column: its height can be chosen based on power requirement
b) A small strong metalic box fixed at the bottom of water column. Its main parts are
- A metalic cylinder with sharp edge which is connected to lever #1
- A thick metalic lid with sharp edges which is connected to lever #2

c) A ball with strong outer cover which could be filled with water & air
d) A pipe to bring the ball to the small metalic box. Its opening is closed with a lid and the lid can only open outwards.
e) A paddle to push the ball out of water column.
f) A wheel, which acts as turbine to generate electicity.

How system works:

In this system, wheel is rotated using the gravity force generated from the falling ball. Once the ball is reached at the lower part of the wheel, it will fall into the pipe. The ball will slowly moved to a small metalic box which is placed inside the water column. Once the ball reached the pipe opening, lever #1 is used to move metalic cylinder outward to ease water pressure inside the small metalic box. This helps the ball to easily fall into the small box. Subsequently lever#2 is used to move the small box lid so that the water pressure inside the small box became the same as the water colum. Since ball weighs less than its displaced water mass, ball will be lifted to the top using buoancy. Once ball reaches the top, a small paddle will help to push it out of water coulmn to the pipe at the top.

Once the ball moved out of metalic box, lever #1 is used to place back the metalic cylinder to its original posistion. Subsequntly the metalic box is closed again uisng lever #2 so that the

system will be ready to receive the next balls coming in.

Fig 1

If water leaking is expected, the lever #1 and lever 2 posistions could be moved to the fixed platform placed on the top of water column. Please refer Fig 2
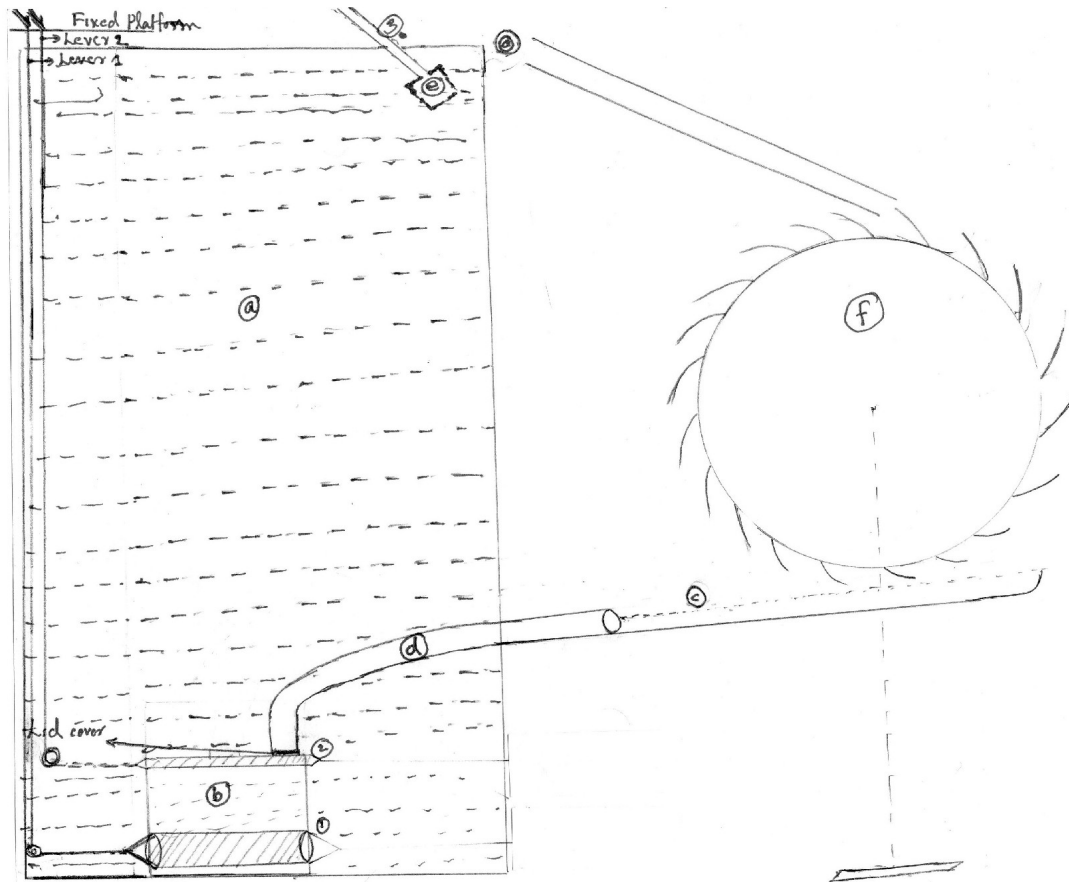

Fig 2