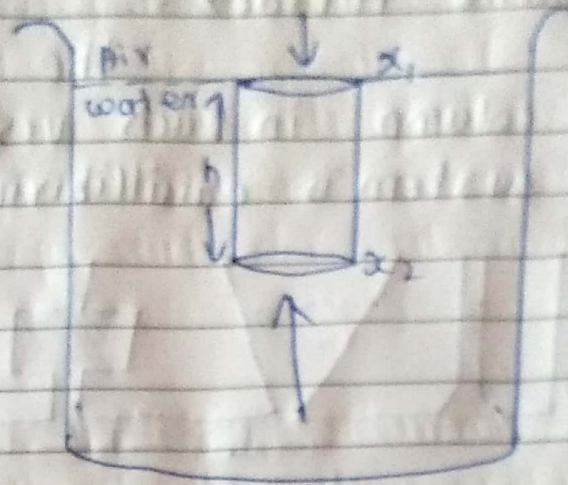


Fig. pressure at a depth h below the surface of a liquid.



- h = height

- P_0 is atmospheric pressure

- P is the total pressure

- $h\rho g$ is the pressure at depth ' h '

$$P = P_0 + h\rho g$$

The $P_0 + h\rho g$ is opposite in a direction
therefore the force is subtract.

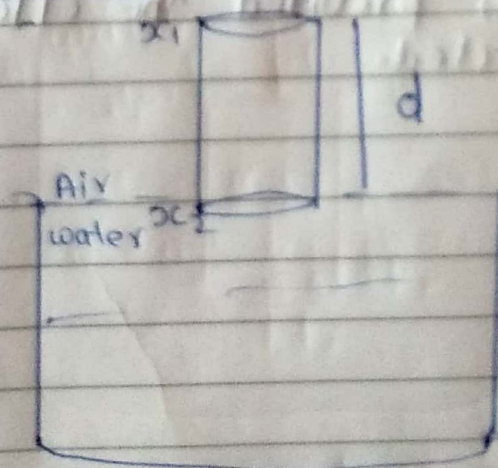


Fig. Change of atmospheric pressure with height.

d = height.

- P_0 is the atmospheric pressure

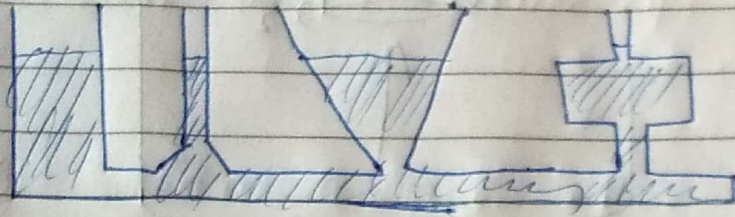
- P is the total pressure

- $d\rho g$ is the pressure at height ' d '

$$\therefore P = P_0 - d\rho g$$

* Hydrostatic Paradox :-

the pressure of liquid column in each vessel is the same & the system is in equilibrium.



* Pascal's law :-

Pascal's law states that the pressure applied at any point of an enclosed fluid at rest is transmitted equally & undiminished to every point of the fluid & also on the walls of the container, provided the effect of gravity is neglected.

