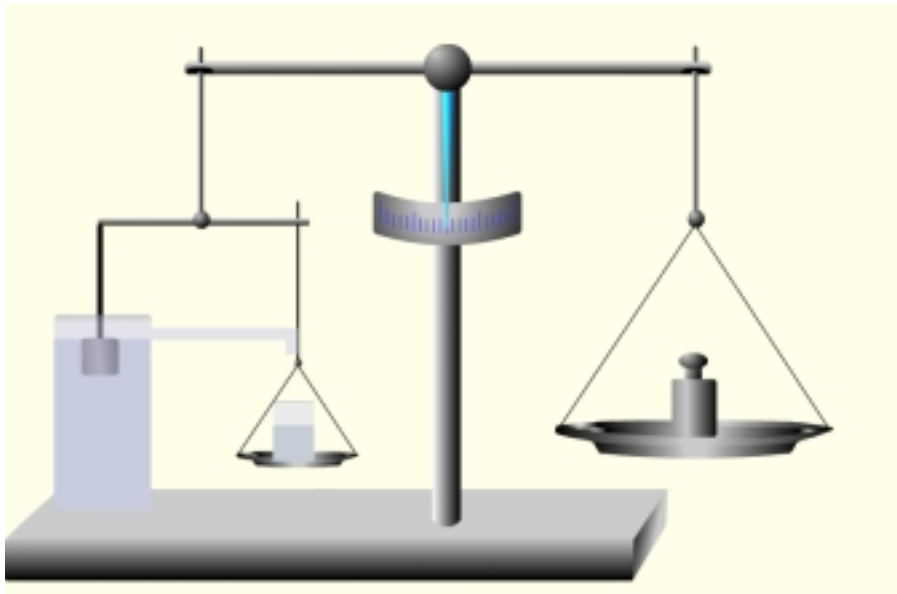


Buoyancy – how does an object sinking into the left-hand water glass change the equilibrium?
Does the water flowing out of the glass play any role?



Attention: To see the animation, you need a player of macromedia (Flash5)
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Explanation

The buoyancy acting on the object reduces the weight of the object acting on the balance and the scales lose their equilibrium for a short time.

The buoyancy acting on the body, when it is fully immersed in the water, is equal to the weight of the water displaced by the object. As precisely the volume of water displaced by the object flows into the second water glass on the beam of the balance, the equilibrium is re-established.