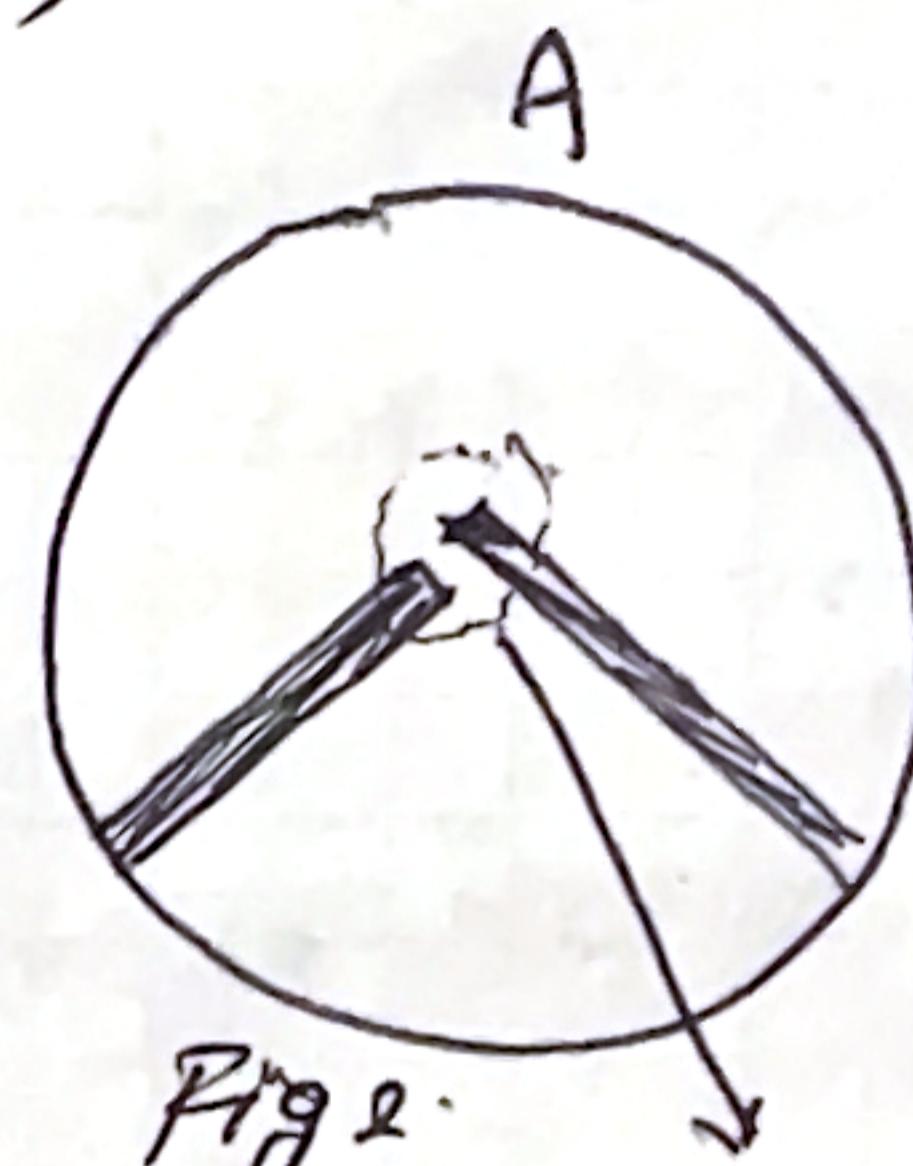
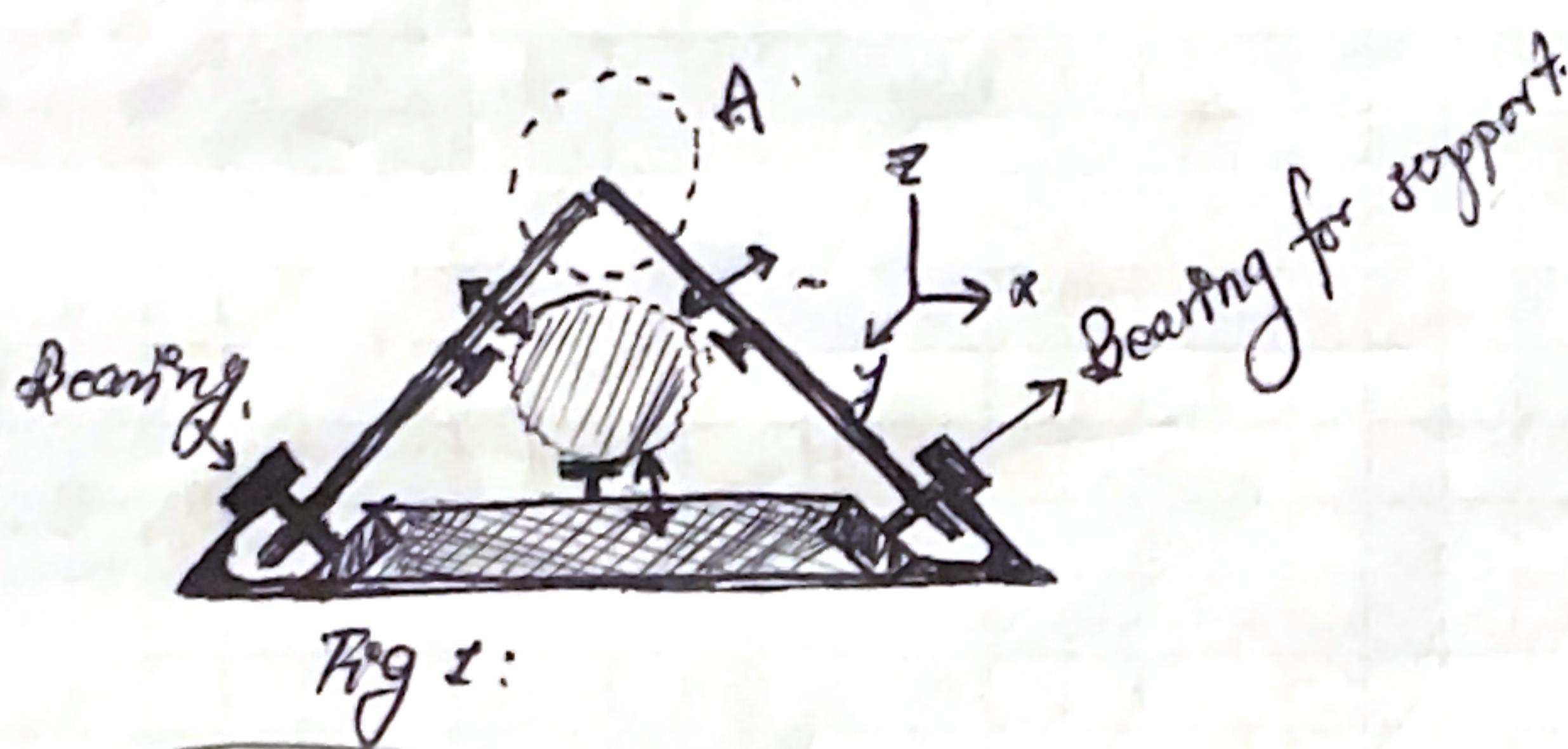


T-lock Mechanism.

Well, for now, I choose option ① using actuator (servo motor). Using servomotor gives more control such as avoiding the obstacles without coming in touch with obstacles which isn't possible with rest of the two approaches. However, the cons of using linear actuator (servo servo motor) in this project or T-PCR is that more power is required to run this T-PCR as their involves 4-servo motors along with sensors (for ex: ultrasonic, infrared, ...) to detect or to give early warning of obstacles. There could be at least 4 sensors involve to detect the horizontal obstacles (HO), so it gonna be power intensive as well as costly using actuator option.

However, other two options looks promising & would love to dive into them if time permits.

Challenge (problem faced & solved partially).



These two arm aren't locking here. This could cause problem - because,

From fig ①, it is clear that while a T-PCR climbs up the tree, it forces one exerted equal & opposite in 3-direction. If arms aren't locked, there is higher chances of breaking/breaking arm ~~as~~ as the arm is already under stress as it is far away from the axis of rotation. So, it is vital to lock this arm together, so that in the case, when pose B of bigger size of a species on arm B is higher, locking mechanism would resist the new stress on arm by locking arm movement in x-axis.

Following figure gives the discovery of "T-lock", discovered by me 'Mansoor'.



(i) 1st iteration.

(ii) 2nd iteration.

(iii) 3rd iteration.

