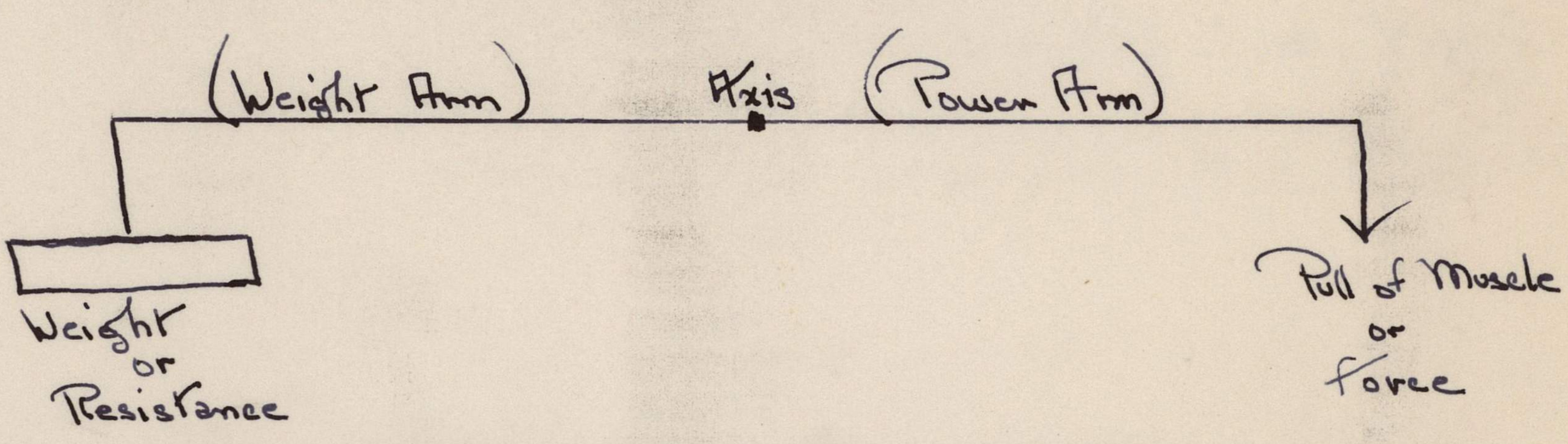
BONE LEVERS:

Lever is a rigid bar revolving about a fixed point.(axis or fulcrum)

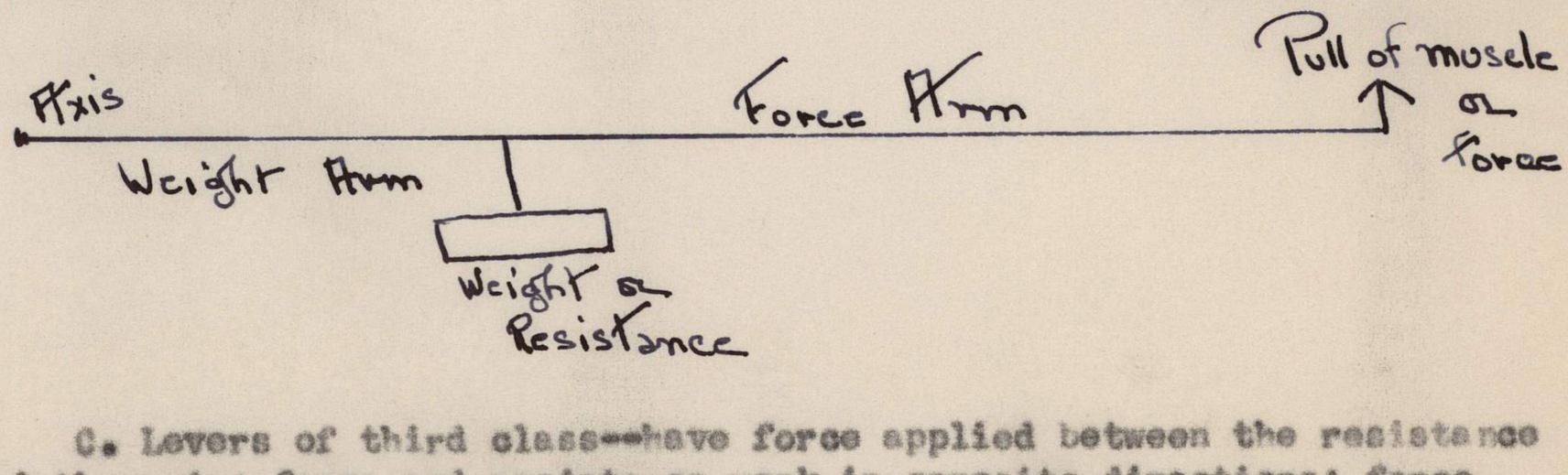
The action of bones as levers and the action of muscles to move these levers is fundamental to kinesiology, since all forms of physical movement occur thru the use of levers

There are 3 types of levers:

A. Lever of first class has axis between the other two points:- force and weight act in same direction. Ex. triceps muscle acting on elbow joint (axis) and weight is hand.



B. Lever of second class has the reistance on weight applied between the force or muscle pull and axis; force and resistance act in opposite directions and the force required is less than the weight or resistance. Very few (some say none) levers of second class in body.



C. Levers of third class--have force applied between the resistance and the axis; force and resistance work in opposite directions; force always greater than the resistance.

Ex. Biceps as force, elbow as axis and weight the hand.