

GSJ: Volume 13, Issue 1, January 2025, Online: ISSN 2320-9186 www.globalscientificjournal.com

# **BOAT MOVES IN THE WATER**

# **BY THE LAW**

# **ACTION=REACTION+ABSORPTION**

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# **ABSTRACT :**

**MOTION IS ROTATION AND ROTATION IS MOTION.** This implies that, If a force is applied to a wheel then the wheel rotates such that every point of it moves simultaneously in the vertical cycloid path to cover on the horizontal straight line path. Cycloid is a curve that is traced by a point on the circumference of a circle as it rolls along a straight in one rotation. Cycloid is a part of the circular path. So this path is moved by the centripetal force and simultaneously the straight line path is covered by the centrifugal force. The following motion law is derived from the above fact as,

A body is at motion, as long as the applied force on it , converts to the centripetal force as well as the centrifugal force.

A body is at rest until the applied force on it , converts to the centripetal force as well as the centrifugal force.

This implies that

## THE FORCE OF ACTION IS ALWAYS EQUAL TO THE SUM OF OPPOSITE REACTION AND ABSORPTION

This implies that

14 PARTS ACTION = 11 PARTS REACTION + 3 PARTS ABSORPTION

=> 1 PART ACTION = (11/14) PART REACTION + (3/14) PART ABSORPTION

This implies that

#### ACTION = REACTION + ABSORPTION

### THE BOAT MOVES IN THE WATER BY THE LAW "ACTION = REACTION + ABSORPTION "

Similarly the rocket moves in the space and the balloon moves in the air by the law

#### "ACTION = REACTION + ABSORPTION "

# **KEY WORDS:**

Boat ,Rocket ,Balloon, Water ,Space ,Air ,Motion , Cycloid path motion, Straight line path motion, Centripetal force, Centrifugal force

# **INTRODUCTION:**

### CASE-I

Motion is rotation and rotation is motion. So man walks on the road by the rotations of his two legs. In every rotation, each foot moves simultaneously in a vertical cycloid path to cover on a horizontal straight line path.

If a force is applied to a wheel and the applied force is converted to the centripetal force and the centrifugal force, then a point of the wheel moves vertically **8r length** in the cycloid path by the centripetal force and Simultaneously the same point covers horizontally  $2\pi r$  length on the Straight line path by the centrifugal force



Suppose  $S_1$  = length of the cycloid path And  $S_2$  = length of the straight line path So  $S_1 = 8 r$  and  $S_2 = 2 \pi r$ 

where r is the radius of the wheel, which generates the cycloid .

Here  $8r > 2\pi r$  by the mathematical calculation.

 $\Rightarrow s_1 > s_2 \Rightarrow \frac{ds_1}{dt} > \frac{ds_2}{dt}$ 

Here  $\frac{ds_1}{dt} = v_1$  = velocity of a point in the cycloid path

and  $\frac{ds_2}{dt} = v_2$  = velocity of the same point on the straight line path

So  $v_1 > v_2 \implies mv_1 > mv_2$   $\implies m \frac{dv_1}{dt} > m \frac{dv_2}{dt} \implies ma_1 > ma_2$ Here  $\frac{dv_1}{dt} = a_1$  = acceleration of a point in the cycloid path and  $\frac{dv_2}{dt} = a_2$  = acceleration of the same point on the straight line path . Here  $ma_1 > ma_2 \implies F_1 > F_2$ So  $F_1 = ma_1 = Action$  Force and  $F_2 = ma_2 = Reaction$  Force As  $F_1 > F_2$ 

So  $F_1 - F_2$  = ABSORBED FORCE =>  $F_1 = F_2$  + ABSORBED FORCE But magnitude of the centripetal force = Action force and magnitude of the centrifugal force = Reaction force + Absorption force The centrifugal force acts on the straight line path and the centripetal force acts in the cycloid path .

So CENTRIPETAL FORCE

= ACTION FORCE =  $F_1$ 

and **CENTRIFUGAL FORCE** =

ABSORBED FORCE +  $F_2$  =

### ABSORBED FORCE + REACTION FORCE

But the magnitude of the centripetal force is equal to the magnitude of the centrifugal force.

Hence ACTION FORCE = REACTION FORCE + ABSORPTION FORCE This implies that,

## ACTION = REACTION + ABSORPTION CASE-II

"A body is at motion, as long as the applied force on it , converts to the centripetal force as well as the centrifugal force ".

When a force is applied on a wheel, then the wheel rotates ,Such that every point of it moves in the cycloid path by the Centripetal force and simultaneously the same point covers on the straight line path by the centrifugal force . The length of the cycloid path is 8r by the calculation of the integral calculus and the length of the straight line path is  $2\pi r$  by the mathematical calculation.

So motion ratio =  $F_1$  :  $F_2 = S_1 : S_2$ 

= LENGTH OF CYCLOID PATH : LENGTH OF STRAIGHT LINE PATH

 $= 8r: 2\pi r = 8: 2\pi = 8: (2 * 22/7)$ 

= (8 \* 7/7) : (2 \* 22/7)

= 56 / 7: 44 / 7 = 56: 44 = 14: 11

Hence  $F_1 : F_2 = 14:11$ 

The magnitude of the centripetal force is equal to the magnitude of the centrifugal force. So each one of centripetal force and the centrifugal force must cover equal amount of distance.

But  $F_1 : F_2 = 8r : 2\pi r = 14 : 11$ That is why, the centripetal force covers 14 parts distance and the centrifugal force covers 11 parts distance.

This implies that some amount of the centrifugal force is absorbed on the road, As a result the centrifugal force could not cover equal distance of path.

Hence 14 PARTS ACTION - 11 PARTS REACTION = 3 PARTS ABSORPTION This implies that

14 PARTS ACTION = 11 PARTS **REACTION + 3 PARTS ABSORPTION** So 1 part action = (11/14) part reaction + (3/14) part absorption => ACTION =

**REACTION + ABSORPTION** 

# **SUBJECT MATTER:**

#### **MOTION OF BOAT :**

When a man applies a certain amount of force to a body with his two hands on the forward direction simultaneously he exerts an equal amount of force on the ground with his two legs.

Otherwise he can not apply the force.

A man pulls a cart with as much as force by his hands simultaneously he pushes the ground with that same amount of force by his legs.

Hence without pushing the ground by the legs, the man can not pull the cart by his hands.

Here push and pull are the action forces which are equal in magnitudes but opposite in directions.

So force can not be applied to one direction at a time .

Hence the force is applied simultaneously to both the opposite directions as equal amount of action forces.

When a boatman pushes the water to the backward direction with a force by the oar simultaneously he pushes the boat to the forward direction on the water with the same amount of force .

Because the forward push and the backward push are the two opposite and equal action forces.

The boat is made in such a shape that the forward direction force makes the inertia of motion to the boat according to the following motion law of Nrusingh. A body is at motion, as long as the applied force on it , converts to the centripetal force and the centrifugal force.

Similarly the boat will be at motion, when the forward applied force on it , converts to the centripetal force as well as the centrifugal force.

ACTION FORCE = REACTION
 FORCE + ABSORPTION FORCE
 ACTION=REACTION+ABSORPTION
 This implies that the boat moves in the water according to the following law
 ACTION = REACTION + ABSORPTION

The boat would not move as long as the forward action force is equal to the backward reaction force according to the following law

## ACTION = REACTION MOTION OF ROCKET :

If a man applies a force to a body by his two hands to the forward direction simultaneously he applies the same amount of force to the ground by his two legs to the backward direction.

if a man pushes a body to the upward direction by his hands standing on a weight measuring machine, Then simultaneously the same amount of push by his legs to the downward direction is recorded on the weight measuring machine apart from his own weight. So force can not be applied only to one direction at a time .

If a force is created then the same force is applied simultaneously to both the opposite directions from the source of that force.

But the body is made in such a shape that the forward direction force makes the inertia of motion to the body according to the following Nrusingh's law,

A body is at motion, as long as the applied force on it , converts to the centripetal force as well as the centrifugal force. The rocket engine burns propellants inside it, which produces hot gases.

That hot gases make simultaneous equal and opposite action forces to both the upward and the downward directions in the rocket.

The downward force is the seen action force as hot gases and the upward force is the unseen action force as thrust.

When the upward action force is equal to the sum of the reaction force and the absorption force .

Then the rocket moves forward in the space by the following law

#### => ACTION FORCE = REACTION FORCE + ABSORPTION FORCE

This implies that

(ACTION =

#### **REACTION + ABSORPTION )**

But the following law

( ACTION =

#### **REACTION + ABSORPTION)**

is derived from the simultaneous cycloid path motion and the straight line path motion of a body.

It is seen that the rocket moves in the space in a cycloid path to cover on a straight line path.

This implies that, the motion principle of the body is same as the motion principle of the rocket.

Hence the rocket moves in the space by the following law

### ACTION=REACTION+ABSORPTION MOTION OF BALLOON :

If a man applies a force to a body by his two hands to the forward direction simultaneously he applies the same amount of force to the ground by his two legs to the backward direction.

Otherwise he can not apply the force. So force can not be applied to one direction at a time . If a force is created then the same force is applied simultaneously to both the opposite directions from the source of the force. But the body is made in such a shape that the forward direction force makes the inertia of motion to the body according to the following Nrusingh's law

A body is at motion, as long as the applied force on it , converts to the centripetal force as well as the centrifugal force.

The air trapped inside the balloon pushes out in the open end by an action force to backward direction,

Simultaneously an equal and opposite action force is created from that open end to the forward direction . So the balloon moves forward direction in the cycloid path by the action force in the air to cover on a straight line path .

The law **(ACTION = REACTION + ABSORPTION )** is derived from both the cycloid path motion as well as the straight line path motion of the body. As the body and the balloon both move in the cycloid path to cover on the straight line path. So this implies that the balloon moves in the air by the law

ACTION = REACTION+ABSORPTION CONCLUSION :

The following laws are the set of motion laws of NRUSINGH

1) THE LAW OF MOTION :

----- Nrusingh's 1st law

(a) INERTIA OF REST : A body is at rest, until the applied force on it , converts to the centripetal force as well as the centrifugal force .

(b) INERTIA OF MOTION : A body is at motion, as long as the applied force on it, converts to the centripetal force as well as the centrifugal force .

The following law is derived from Nrusingh's 1st law

2) THE FORCE OF ACTION IS ALWAYS EQUAL TO THE SUM OF OPPOSITE REACTION AND ABSORPTION

----- Nrusingh's 2nd law This implies that

**ACTION = REACTION + ABSORPTION** So where there is the force factor in any law then that force factor would be modified by [(11/14)Force] The following laws are derived from Nrusingh's 2nd law 3) Force = (11/14) Mass \* Acceleration ----- Nrusingh's 3<sup>rd</sup> law 4) Energy=(11/14) mass(velocity of light)<sup>2</sup> ----- Nrusingh's 4th law 5)Pressure\*Volume=(11/14)Temperature -----Nrusingh's 5th law 6) Pressure = (11/14) Force / Area ----- Nrusingh's 6th law 7) Energy = (11/14) Frequency ----- Nrusingh's 7th law

----- Nrusingh's 8th law

9) Heat Energy = (11/14) Temperature

----- Nrusingh's 9th law

Combining the 5th law and the 9th law of Nrusingh, It is obtained that

**10)** Heat Energy = Pressure \* Volume

----- Nrusingh's 10th law

11) SUPPLIED HEAT = (3/14) ABSORBED HEAT + (11/14) WORK DONE HEAT

This implies that Q = (3/14)U + (11/14)W

----- Nrusingh's 11th law

12) The gravity is the pulling force of the cycloid centre of the moving body

----- Nrusingh's 12th law

13) Angle of Refraction =

(11/14) Angle of Incidence.

----- Nrusingh's 13th law

14) The acceleration due to gravity of an object is equal to 11m/s<sup>2</sup> on the Earth .
- ------ Nrusingh's 14<sup>th</sup> law (15)Gravitational force of a heavier body

= (11/14)mass\*acceleration of a lighter

body. ----- Nrusingh's 15th law

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