

THE GRAVERGY

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INTRODUCTION: In this modern world the energy has a very wide use. We cannot live even a day without energy. Energy is being produced from various forms such as wind, solar, chemical, coal etc. But these methods have their own disadvantages some are expensive and some harm the environment. In order to overcome all these issues I have designed a machine that can resolve all the energy crisis of the world.

BASIC PRINCIPLE: The basic principle on which the design works is **GRAVITY**.

WHY GRAVITY: The advantage of using gravity is gravity is caused due to masses. Gravity will be present till the end of the Earth. The main advantage of using gravity I think is the magnitude of gravitational force varies negligibly for small change in position. This is due to the very small value of gravitational constant.

LET'S DO AN EXPERIMENT:

Take a uniform rod/scale. Try to balance it on your finger. It will be balanced at its midpoint. WHY? This is because it will have equal masses and equal lengths on either side of its midpoint. So the torque due to gravity on either sides of the uniform rod/scale would cancel each other and thus it will remain in equilibrium.

Now displace the rod from its midpoint as shown in figure. Now in this case the rod has unequal masses and lengths on either side of rod and this leads to a net torque and thus the rod will rotate and fall.

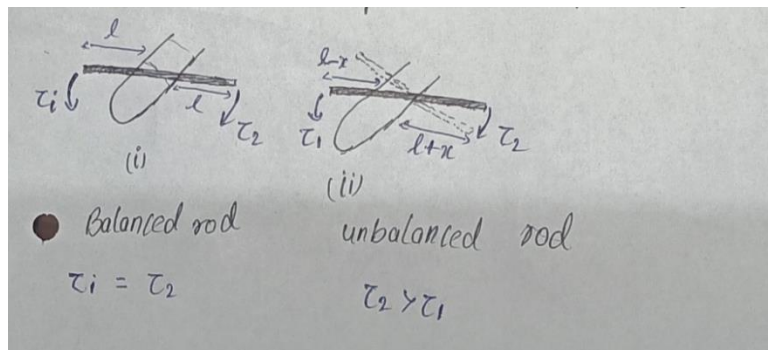


Figure 1

CONCLUSION: This experiment proves that gravity can do a useful work .Now please study the amazing idea about converting the work done by gravity into energy.

NOW LET'S ENTER INTO OUR DESIGN THE GRAVERGY.

PARTS:

There are two arms which are free to displace sidewise.

There are totally 6 magnets of which two are fixed and remaining 4 magnets are attached to arms and can rotate along with the arms.

Let us name the two fixed magnets as ' α ' and ' β '.

And number the remaining magnets as 1, 2, 3 and 4

Both the arms meet in the **PART C** .Both arms are not joint but they are free to slide upon one another .

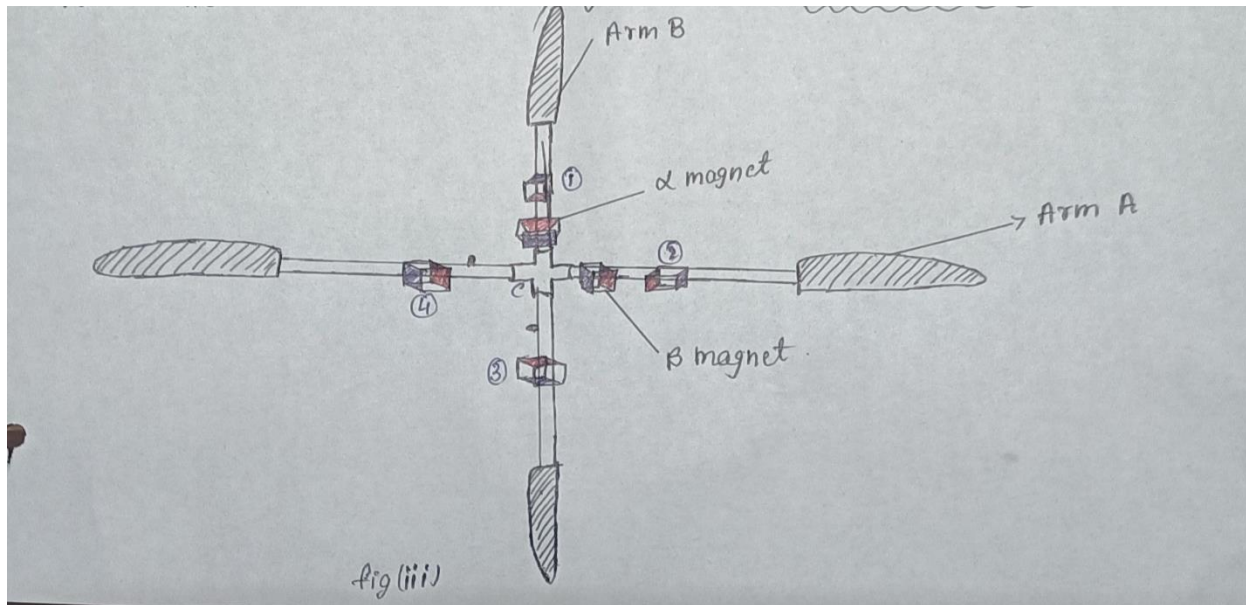


Figure 2: Gravergy

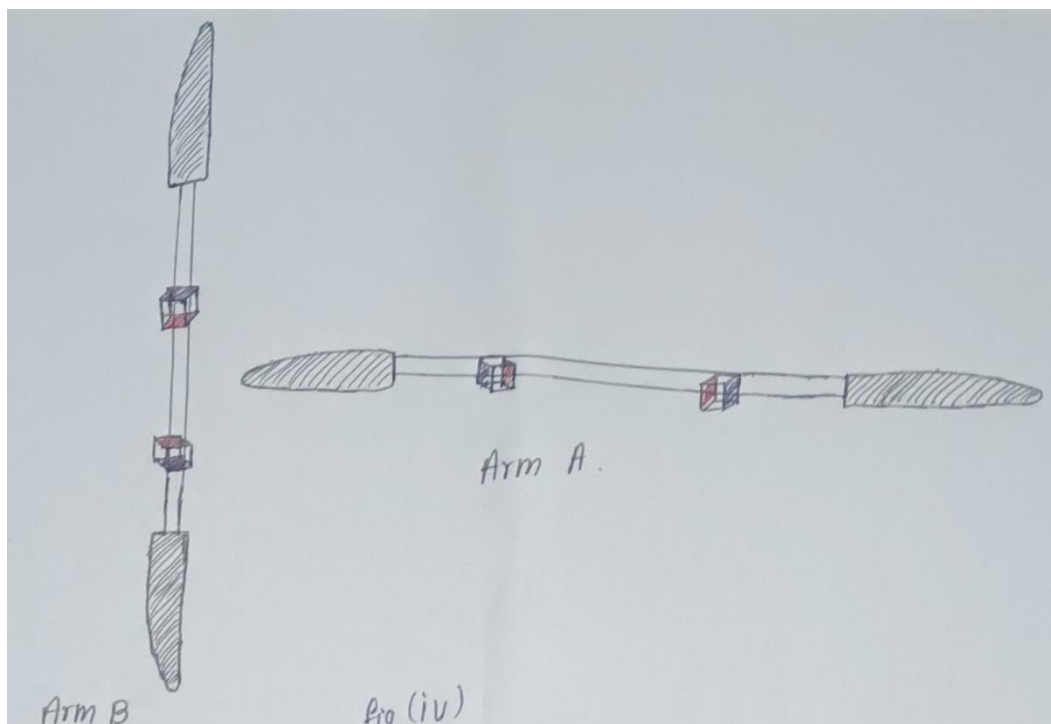


Figure 3 diagramatic view of arms

α AND β MAGNETS: These magnets play a crucial role in providing a continuous motion for both the arms. The unique property about these magnets is that they are fixed and cannot rotate along with the arms. They provide the repulsion to the other magnets.

For a better understanding of working please imagine that the arms are /the system in **fig (2)** is connected to motor /generator as like in wind mill.

WORKING: Let us consider that our design is in the state given in fig(2). Now let us analyze the forces. The weight of **arm B** is balanced by **repulsion between α magnet and magnet number 1** as shown in **fig.(4)**

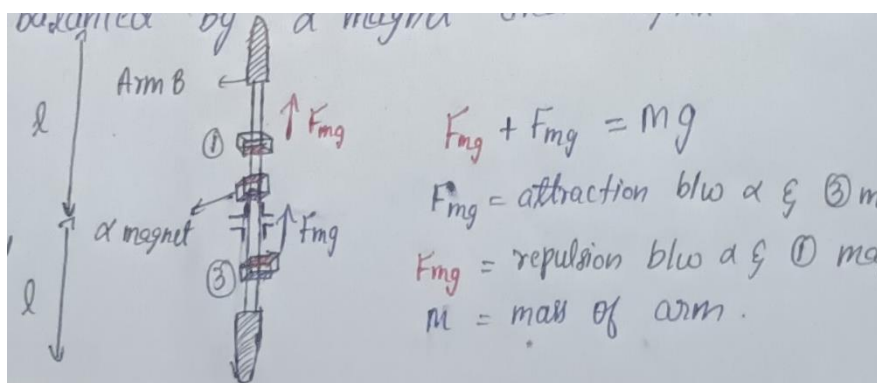


Figure 4

But the most interesting is about the **arm A**. Due to the repulsion between **β magnet and magnet number 2** and the attraction between **β magnet and magnet number 4** the **arm A** will displace towards right. And this creates a situation similar to unbalanced rod. Thus the **arm A** will rotate due to a net torque. As shown in the **fig.(5)**

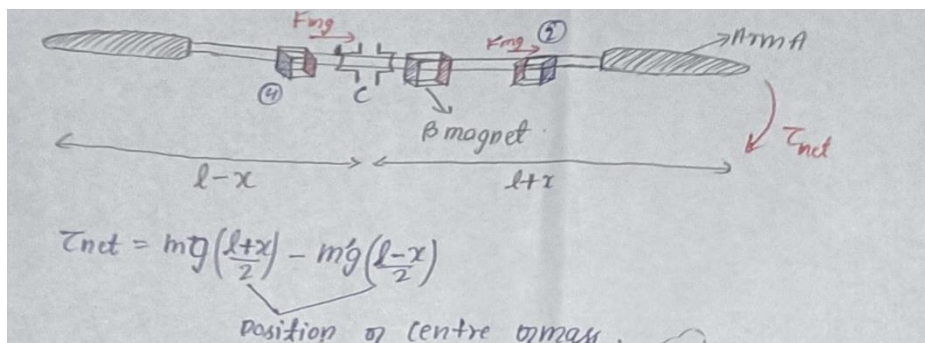


Figure 5

WHAT HAPPENS ONCE THE 'arm A' BECOMES VERTICAL:

Once the **arm A** becomes vertical due to the repulsion between **α magnet and magnet number 4** the **arm A** will come to its original length. Now the **arm B** will become horizontal and repeat the same above procedure and thus cause the rotation of the arms again. This process will continue and thus provides continuous rotation motion to both the arms without any external help.

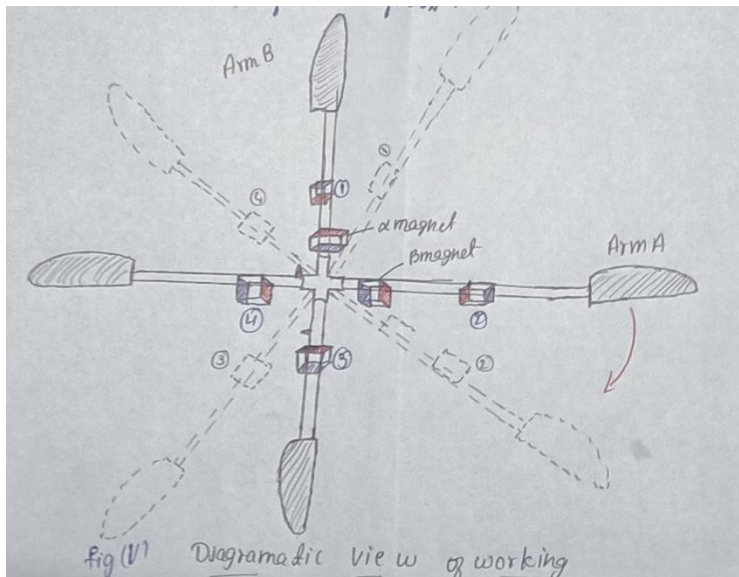


Figure 6 diagrammatic view of working

WHAT IF THE ' α MAGNET' WAS ABSENT:

If the ' α magnet' was absent then the **arm A** when it becomes vertical it would not have regained its original length and could provide a torque in opposite direction of rotation and rotation would have stopped and our design would have failed as shown in the **fig(7)**

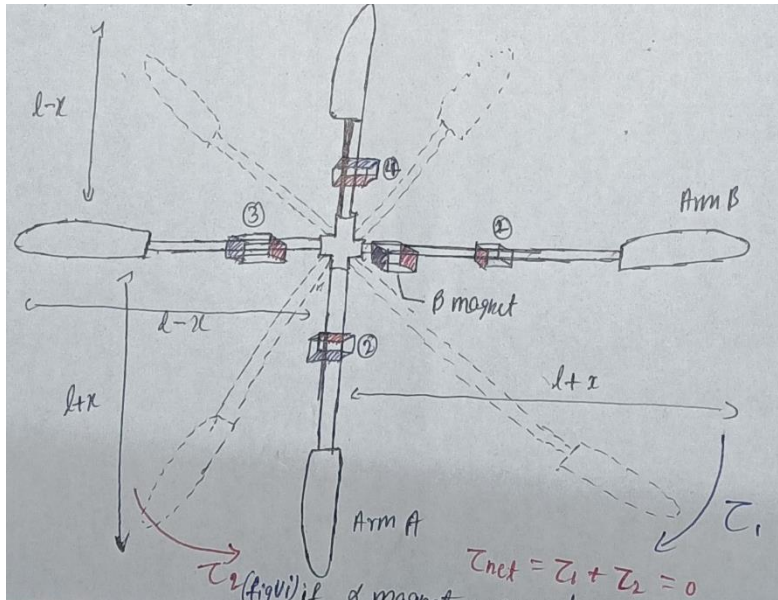


Figure 7

HOW TO INCREASE THE EFFICIENCY?

As we have seen that **α and β magnets** play a crucial rule. As explained above **α magnet** will cause the vertical arm to restore its original length and thus helps in the cancellation of opposite torque. And also in the **fig** you may get a doubt that when the **arm B** is trying to restore its length the **magnet number 3** may be repelled by **magnet number 4**. To resolve all this problems and to increase the efficiency **the strength of the α and β magnet should be increased.**

CONCLUSION: This design concludes that we can use gravity for the production of energy and this design causes less pollution less expense .we can use the nature in many useful ways .but we must not disturb it.

FUTURE GOAL: I want to correct the mistakes that the scientist have done. I want to design a rocket engine that is eco-friendly and I think I am close to even that. I want to learn the concepts of physics in more depth .For this I need help from you. Without your help I cannot achieve the goals.

Inspired by ELON MUSK AND NICOLA TESLA.