

A Review on Gravity Power Generation

Tamboli Nvaman¹, Shaikh Usmanpasha², MD.Ali Hassan³, Vahid Khan Liyaqat Khan⁴, Prof.Iqbal Mansuri⁵

UG Scholar, Dept. Of Mechanical Engineering, Akkalkuwa, Maharashtra, India^{1,2,3,4}

Asst. Professor, Dept. Of Mechanical Engineering, Akkalkuwa, Maharashtra, India⁵

ABSTRACT— Gravitational vitality is the vitality where a question has descending development as a result of its weight in a gravitational field. The most well-known utilization of gravitational potential vitality is for a protest close to the surface of the Earth where the gravitational quickening can be thought to be steady at around 9.8 m/s. Since the zero of gravitational potential vitality can be picked at any point (like the decision of the zero of a facilitate framework), the potential vitality at a tallness h over that indicate is equivalent to the work which would be required to lift the protest that stature with no net change in active vitality. Since the constrain required to lift it is equivalent to its weight, it takes after that the gravitational potential vitality is equivalent to its weight times the tallness to which it is lifted.

KEYWORDS: Gravitational vitality, gravitational field, gravitational potential.

I. INTRODUCTION

Presently a days because of the impacts of contamination and a worldwide temperature alteration there is a requirement for creating power from renewable sources. Because of the accessibility of gravity everywhere throughout the earth, plentiful and reliable it is extremely appropriate to producing power by utilizing gravity. Vitality request is expanding step by step with quick development in industrialization and in addition modernization. Yet, the vitality assets are step by step diminishing at high degree. Inside a couple of years the vitality assets will be done and subsequently there will be absence of fuel (coal, wood, water, and so on.) for power era. The other renewable sources, for example, sunlight based, wind, biomass and so forth are accessible just for a specific span of time amid the day and night. Along these lines the gravity control era is one of the technique to create control which satisfy vitality requests and prerequisites of present time. It is conceivable to avoid gravitational activity far from a question so that the protest is somewhat digressed. That impact makes it conceivable to concentrate vitality from the gravitational field, which makes the era of gravitational electric power mechanically practical. Such plants would be close about like hydro-electric plants. Be that as it may, the gravitational electric plant would be much littler than hydro-electric plants. The area of that plant would not be confined to reasonable water heights and gravitational electric power plants and their created vitality would be much costly.

Newton 1st Law:

This law is really only a definition of force. It says that when a body is acted upon by an external resultant force it will accelerate. If the resultant force is zero, then the body either remains at rest or else it will continue to move at constant velocity (that is with constant speed in a straight line. This law is state that “An object at rest will remain at rest unless acted on by an unbalanced force. An object in motion continues in motion with the same speed and in the same direction unless acted upon by an unbalanced force”. This law is called Law of inertia.

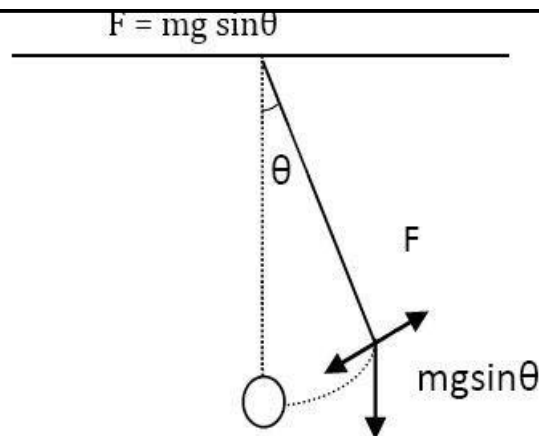


Fig.1 Mechanism of Pendulum bob

Energy comes in two basic forms: potential and kinetic. Potential Energy is any type of stored energy. It can be chemical, nuclear, gravitational, or mechanical. Kinetic Energy is found in movement. Even the tiniest things have kinetic energy, like atoms vibrating when they are hot or when they transmit sound waves. Renewable gravitational Energy is used in this setup

II. LITERATURE SURVEY

1) The movement of divine bodies, for example, a moon, the earth, the planets and so forth has been a subject of incredible enthusiasm for quite a while. Renowned Indian Astronomer and mathematician, this movement and composed his decision. Around a thousand years after Aryabhat, the splendid mix of Tycho Brahe [1546-1601] and Johanaase Kepler [1571-1630] examined the planetary movement in incredible detail. They all came to point that there must be a compel in charge of such a movement.

2) The year 1665 was exceptionally productive as a question strike before Sir Issac Newton, that what is the compel that creates this speeding up? Along these lines this constrain pulls objects toward focus of the earth was discovered and turned out to be, named as, Gravitational drive. Sir Issac Newton had found the marvel of gravity almost 400 years back.

3) London inquires about Martin Riddiford and Jim Reeves who have put in four years for creating gravity light as a disconnected venture. They are utilizing attempted and tried fabricate who has the right learning to make gravity light. Gravity light is a progressive new way to deal with putting away vitality and making brightening. It takes just three seconds to lift the weight which powers gravity light, making 30 minutes light on its drop.

4) Chun-chao Wang and Yuh-suiang Wang has effectively creates the idea of gravity power era instrument.

In his idea, more disentangled component is utilized for the era of the power. The essential target of his development is to give gravity control era system which can give a persistent and stable operation to consistently change over the gravity potential vitality into the dynamic vitality and after that to change over the motor vitality into electrical vitality, He has clearly formulated a component whereby static gravitational force can be tackle to create valuable vitality. He has worked for a long time creating and testing gravity controlled gadgets and he has been exceptionally effective in his

work. His different plans depends on the guideline of having weights joined to a haggles for those weights to be balanced outwards when falling and counterbalance inwards when rising. Due to the distinctive lever arms included, that gives a drive irregularity which causes the wheel to turn ceaselessly and if the weights are of an extensive size, then the revolution is intense and can be utilized to produce electrical vitality.

5) Russian Inventor, Mikhail Dmitriev to think about his gravity engine. He has clearly contrived an instrument whereby static gravitational force can be tackled to create helpful vitality. He has worked for a long time creating and testing gravity controlled gadgets and he has been extremely effective in his work. His different outlines depends on the standard of having weights appended to a haggles for those weights to be counterbalanced outwards when falling and balance inwards when rising. On account of the diverse lever arms included, that gives a drive irregularity which causes the wheel to pivot constantly and if the weights are of an impressive size, then the revolution is effective and can be utilized to produce electrical vitality.

III. PROBLEM FORMULATION

Whether building up a country with aspirations of financial development, or an industrialized area moving towards a low carbon economy, the difficulties of future power creation are shared. Thusly an endeavor is made to produce power with an eco-accommodating idea. The different non-renewable sources like sun powered, wind, hydal, etc, are utilized to create the power however they can't deliver movement consistently. So an exertion is made to create the power from the usage of the strengths like gravity and lightness such a machine will continue delivering power for all eternity without the need of information sources like air, light or fossil fuel. This machine can be small to the point that it can be introduced on the lawn of anybody's home or on a housetop that will produce adequate power to address the issues of the house hold .or it can be sufficiently enormous to control the urban areas.

IV. METHODOLOGY

The mechanical assembly comprises of wrench and stick course of action bearing variable loads and supporting stand. The game plan of pulley in a manner that distance across of upper pulley is substantial when contrasted with the base pulley and these two pulleys are adjusted in a vertical plane. Variable burdens are mounted on the belt as appeared in the above figure and this belt is mounted on two variable pulleys by utilizing nut and screw. For the era of power the Mini DC generator is utilized which is associated with the flywheel through pinion and this flywheel is appended to the base pulley. The flywheel is utilized as a part of this game plan for the heap adjust reason.

The game plan requires some underlying power to turn the variable loads in round movement, after that it will takes a shot at gravitational drive in which the heaps from the higher elevation are tumble down because of the gravitational vitality and thus the lower burdens are pulled up because of the development of upper load and subsequently the chain will proceed for some term. The course of action uses a gravity vitality change unit to change over the gravity potential vitality into the active vitality. The gravity vitality transformation unit produces positive torques by receiving outward spreading single course swing arms and lessens the negative torques by coordinating with the collapsing activity of the single directional swing arms, in order to play out quite a while, compelling and consistent vitality change of changing over gravity potential vitality into dynamic vitality. Next, the active vitality will be transmitted to a power producing unit to play out another vitality transformation of changing over the dynamic vitality into the electrical vitality. Lastly, a power supply framework is utilized to transmit the electric vitality out.

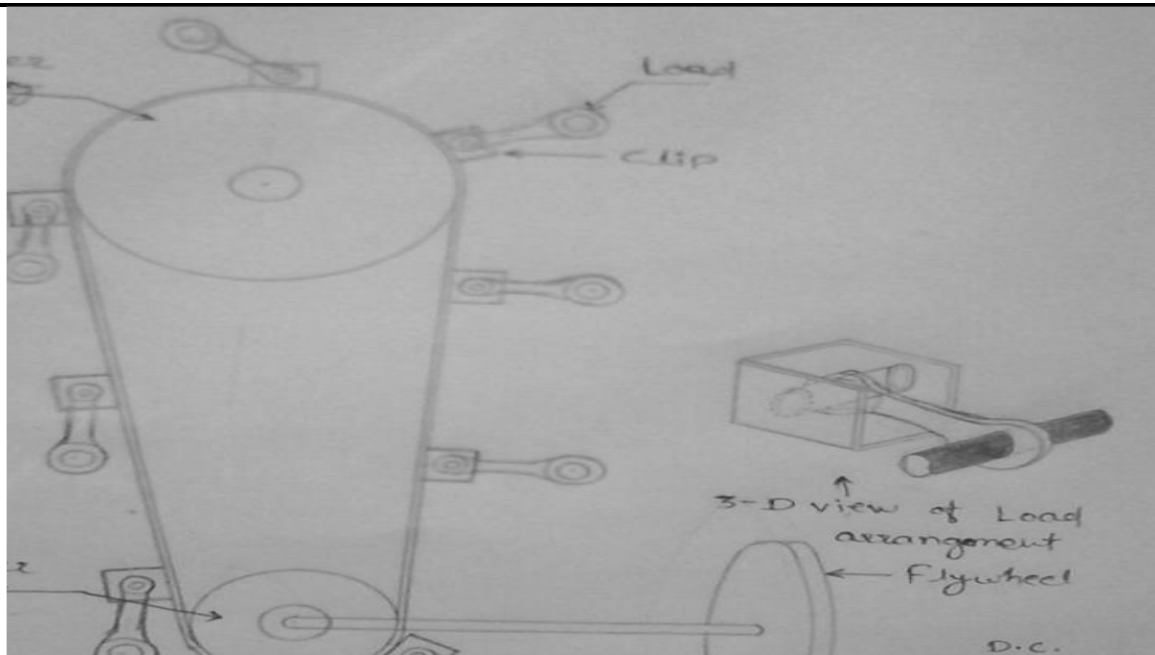


Fig. 2 Schematic Diagram of Model-1

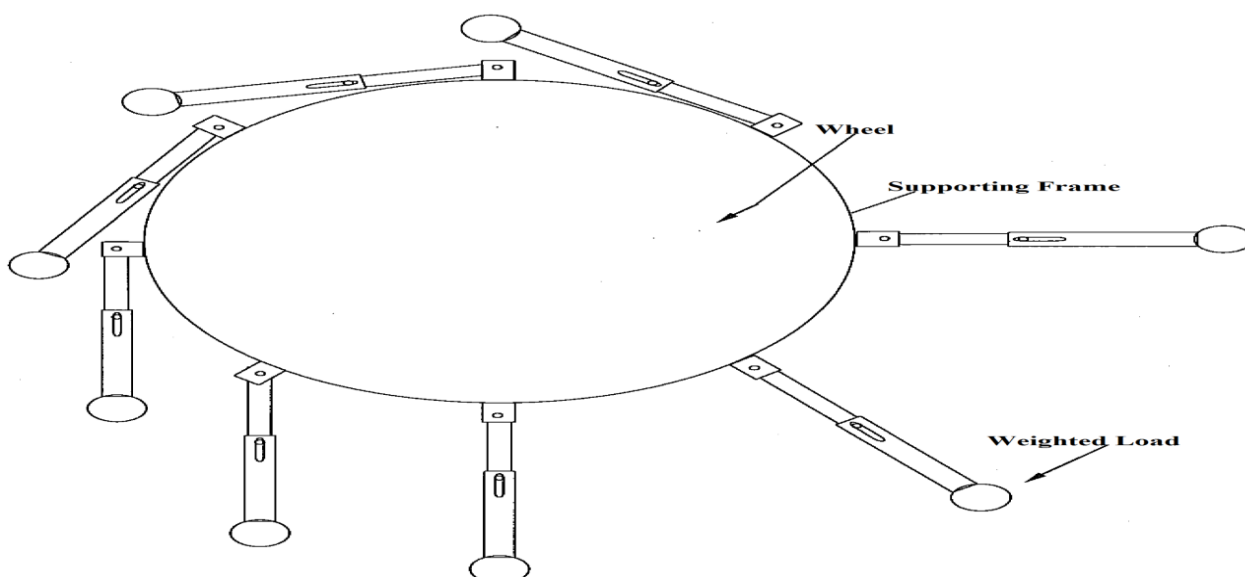


Fig. 2 Schematic Diagram of Model-2

1) Pulley:

A pulley is a wheel on a hub or shaft that is intended to bolster development and alter of course of a link or belt along its perimeter. Pulleys are utilized as a part of an assortment of approaches to lift loads, apply compels, and to transmit control. In nautical settings, the get together of wheel, hub, and supporting shell is alluded to as a "piece". A pulley may likewise be known as a sheave or drum and may have a depression between two ribs around its outline. The drive component of a pulley framework can be a rope, link, belt, or chain that keeps running over the pulley inside the furrow. Pulleys are gathered to shape a piece and handle with a specific end goal to give mechanical favorable position to apply expansive strengths. Pulleys are additionally gathered as a feature of belt and affix drives keeping in mind the end goal to transmit control starting with one pivoting shaft then onto the next. A wooden pulley of 16.5 cm perimeter is utilized to transmit control. It has a high co-effective of grinding.

2) Weighted Load (Bob):

The straightforward gravity pendulum is an admired scientific model of a pendulum. This is a weight on the end of a mass less line suspended from a turn, without grating. At the point when given an underlying push it will swing forward and backward at consistent abundancy. It associated on the supporting edge and the pendulum weave is comprised of non-attractive material and has great rigidity to manage the weight constantly The ideal opportunity for one entire cycle is known as the period. The period relies on upon the length of the pendulum.

3) Supporting Frame:

It is a non-attractive material to bolster the generator and the electric circuit get together. At the focal point of the supporting edge pendulum is connected. Magnets are settled on both side of the edge. The one side of supporting casing is resemble "L" shape where the weave and associating pole is connected.

4) Wheel:

A bike wheel is a wheel, most normally a wire wheel, intended for a bike. A couple is frequently called a wheel set, particularly with regards to prepared worked "off the rack" execution arranged wheels. Bike wheels are commonly intended to fit into the edge and fork by means of drop outs, and hold bike tires. An ordinary cutting edge wheel has a metal center point, wire strain spokes and a metal or carbon fiber edge which holds a pneumatic elastic tire.

5) Low RPM Generator:

Low rpm generator deliver control at low transformation every moment. Low rpm generators once utilized gives years of utilization. These generators gives higher proficiency as well as have ease, low rpm generator are utilized in light of the fact that they give an exceptionally solid power yield as they work at less speed which prompts to less wear and tear of the different piece of generators. The rpm of the generator is around 50-100 rpm at little size, the speed of the generator can increment greater size of unit by apparatus framework, similar to wind turbine.

6) LED:

A light-radiating diode (LED) is a semiconductor light source. LEDs are utilized as marker lights as a part of numerous gadgets and are progressively utilized for other lighting. Showing up as down to earth electronic segments in 1962, early LEDs radiated low force red light, however current variants are accessible over the noticeable, bright, and infrared wavelengths, with high splendour.

V. FUTURE APPLICATIONS**1. Tom Bearden's Free vitality Generator**

Tom Bearden has created and protected are free vitality gadget called "MEG" (which remains for "Unmoving Energy Generator", this gadget changes thee attractive constrain of a lasting magnet into power and accomplishes over solidarity. Notwithstanding it doesn't keep running without anyone else's input, it is controlled by vitality extricated from the vaccum (Energy that must individuals won't acknowledge or comprehend until they see it running). I need to concede I have just observed hypothetical proof of it, this far however from what I have seen and experienced in my life. It must be valid. All adherents must have a little tolerance until it will be acknowledged, at some point or another. it can be concluded from the nature of the relationship between offered traffic and blocking probability as explained above that greater the offered traffic, the higher the blocking probability.



Fig. 3 Free Energy Generator driven by Gravity

2. The Green Usher's Powered Machine

It guarantees contamination free power. Gravity control holds every one of us on earth. It is a compel that is as yet being misconstrued for reasons unknown, a wonder whose genuine clarification lie in quantum material science not yet found by humankind. Some say it could even be gathered for vitality since somewhere in the range of hundred years back, yet no one genuinely prevail to promote such a gadget. Some folks from INDIA called "The Green Usher's have apparently done it. They utilized the drive of gravity create usable power and, as the perfect, even licensed the thing (in India). The Machine is very huge , yet they say ready to perform Solar boards or twist turbines in effectiveness however , not at all like those development asserting working over solidarity gadgets , this one claims just a part of the vitality being controlled by gravity. Notwithstanding that, they likewise guarantee no emanation from the machine , which , to me , says it must be co-controlled by hydrogen It is 100% green, standalone , very adaptable , profoundly powerful , all around reasonable and practical interminable, Renewable, Reusable, Relocatable, and free from any factor climatic or financial reliance gives most extreme yield against the territory required for setup, and have long administration life a with limit component of more than 99% and can subsequently accomplished framework halfway immediately.

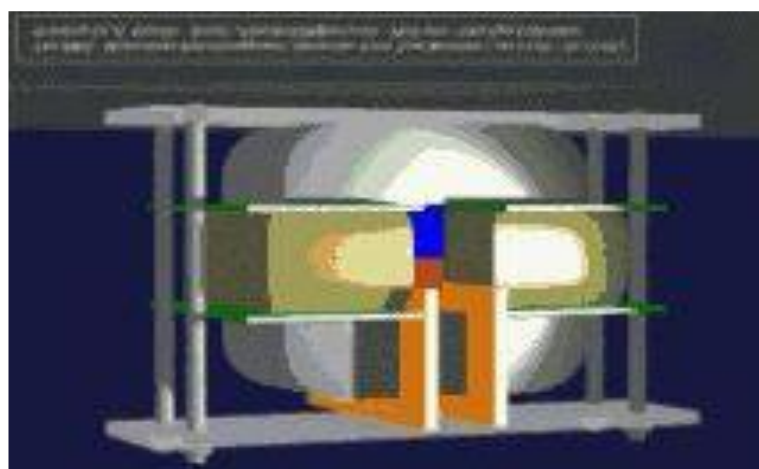


Fig.4 Green Usher's Machine power.

VI. CONCLUSION

Gravitational essentialness is the imperativeness where a question has dropping advancement as an aftereffect of its weight in a gravitational field. The most surely understood use of gravitational potential essentialness is for a dissent near the surface of the Earth where the gravitational enlivening can be thought to be unfaltering at around 9.8 m/s. Since the zero of gravitational potential imperativeness can be picked at any point (like the choice of the zero of an encourage structure), the potential essentialness at a height h over that demonstrate is proportionate the work which would be required to lift the dissent that stature with no net change in dynamic essentialness. Since the oblige required to lift it is proportionate to its weight, it takes after that the gravitational potential imperativeness is comparable to its weight times the stature to which it is lifted.

REFERENCES

- [1] Vidhan Srivastava, Sumit Chaudhary, Shailesh M. Pandey, Kulvinder Rana “ Gravity Power Generation” IJMRS’s International Journal of Engineering Sciences, Vol. 01, Issue 03, September 2012.
- [2] George.O. Schur, “Gravity actuated thermal motor”, United States Patent number: 4121420.
- [3] Richard P Feynman, Robert B Leighton ,Matthew Sands “ Lecture on physics”, Narosa book disributirs ltd. ,volume 1.
- [4] Chun-chao Wang, Yuh-suiang Wang “Gravity Power Generation Mechanism” United States patent number: 20090115195 A1 AppNo.11/935,228 May, 2009.
- [5] David Hatcher Childress Anti-gravity and the Unified field Adventures Unlimited press Pages: 6,38,106,204,545 May,1990.
- [6] John. J. Hurford, “Gravity motor ”, United States Patent number: 6237342.
- [7] Md.Muqtar Ahmed, Heena Naaz, "Power Generation through Gravity and Kinetic Energy", International Journal of Scientific and Research Publications, Volume 4, Issue 1, January 2014.
- [8] Presentation about the light powered by Gravity: www.emaze.com/@ALCCZZZI/Gravity-Light (Date of access: Sep 20, 2015)
- [9] Mr. Rakesh S .Ambade, Mr. Rameshwar S .Panse, Mr.Prashant K .Kurve, "study and performance of gravity weight balance mechanism.", in International Journal For Engineering Applications And Technology, March 22, ISSN: 2321-8134, pp. 127-131
- [10] GravityLight: lighting for developing countries www.indiegogo.com/projects/gravitylight-lightingfor-developing-countries#/ (Date of access: Sep 24, 2015)
- [11] Mr. Rakesh S. Ambade, Mr. Roushan Prabhakar, Mr. Rupesh S. Tayade, “A Review on Gravity Power Generation”, International Journal of Innovative Research in Science, Engineering and Technology, vol. 3, issue. 4, pp. 11085, 2014.
- [12] About Mikhail Dmitri Gravity wheel motor: [peswiki.com/index.php/Directory:Mikhail_Dmitrie v_Gravity_Wheel..](http://peswiki.com/index.php/Directory:Mikhail_Dmitrie_v_Gravity_Wheel..)
- [13] About industrial overview and Renewable energy replacements: www.adeniumcapital.com/industry-overview.aspx.
- [14] Transcript of Gravitational Potential Energy: prezi.com/ahf5irczdxnf/gravitational-potential-energy.
- [15] Details about Synchronous motor driver: <http://resultsdownload25y.tk/synchronous-motor-driver>.
- [16] Details about LED light: http://www.entrustexim.com/about_led_light.html.