Where , W, is the pressure per finite volume of the pendulums material, L ,is the length of the pendulum and the pendulums volume is, K . The total output torque is, T ,while the torque without subtraction of the bearing torque (of the relevant part of the mechanism), B , is , J .

$$T = J - B = \frac{WLK}{D^2}$$

Where the pressure per finite volume of the material the pendulum is constructed from (or the weight per finite volume of this material) is determined by the volume chosen, the particle volume, the density or distance between particles, and the specific velocity quantity involved, these are all variables, the simplest way to maximize the output torque being to choose a material with the highest comparative weight per finite volume. The weight per finite volume is also determined as a product of the gravitational field strength of the planet and also the distance from the planet, D^2. Therefor the most practical means of selecting a configuration of materials and geometric configurations of these materials to maximize the output torque is to utilize a pendulum of sufficient length while constructing the pendulum from a material with a high weight per finite volume.

The torque required to operate the assembly, N , being the kinetic friction of the bearings. This is the torque (motor , M_1) must produce while , T , is the torque delivered to motor , M_2. So where J is greater than zero the output torque must be greater than the input torque providing the resistive torque or bearing torque on the input section and output sections of the mechanism are equal. The practicability of the device is dependent upon the gravitational field strength and the material chosen as-well as the length of the pendulum. In other words by the existence of the variables , W, L, K , and , D , determining the torque quantity, J , the output torque is a variable essentially independent of the kinetic frictional torque or bearing torque. The mechanism is divided into two half's, the reciprocating action of the motor , M_2 , being a product of geometric re-arrangement of the pendulums which is driven by motor, M_1 . To attain motion of the assembly , N , in a sustained fashion with only the torque provided by motor M_1 being equal to the kinetic friction it is important to balance the assembly, N , such that the weight on each half of the assembly is equal, therefor the weight of the assembly is independent of the running torque.

Given the desirability of both a low bearing frictional torque while also utilizing pendulums constructed of a material with a high weight per finite volume it is advisable to utilize a bearing for the attachment of the pendulum to the assembly , N , with a low frictional torque where by a large pressure is applied to the bearing perpendicular to the axle. The attachment of the assembly, N , to the main axle is also subject to high pressure so again the same bearings are desirable. The assembly, N, being responsible for the re-orientation of the pendulums position to give rise to reciprocating action of the main axle and ultimately the motor, M_2 , is not directly linked to the output torque so there is no need to have this part of the apparatus constructed from a material of a notable high weight per finite volume. In utilizing a material for the assembly,

N , of a low weight per finite volume the bearing connecting the assembly, N , to the main axle will have a pressure on it which has been minimized by the choice of material while the output torque is un-effected (independent of the weight per finite volume of the assembly material). It is worth noting that the main axle is necessary to be divided into two axels with respect to each axles ability to rotate independent of the other, the mechanism to enable this feature can be contained where by the assembly, N, is connected to the axle. One of the axles is utilized to cause rotation of the assembly, N , while the second axle is driven indirectly by rotation of the assembly , N , enabled by re-orientation of the pendulums position; with a torque, $(\frac{WLK}{D^2}) - B$. The means for connection of the pendulum to the axle rotated is the chain on the reverse of the assembly , N , as seen in Fig 2.