

# Leonardo da vinci perpetual machine

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Pilar Garza ESL Extra assignment 15 December A Leonardo Da Vinci Perpetual Machine Leonardo Da Vinci as one of the greatest minds in the history, similar to other inventors, could not stay cold to the idea of perpetual motion, a machine that would keep working without any outside energy sources. Led by his investigations of power transmission (Capra), the inventor joined collective efforts to construct a perpetual machine and created drawings of it, examining the idea, though he did not support its credibility much (Mirowski).

Da Vinci's projects of the perpetual machine focused on overbalanced wheels, with at least four different designs of the machine made in the course of studies. The model presented in the picture is probably the simplest among them, but it is definitely as good as others are. The main purpose of such layout was to create asymmetry using additional physical effects. This hypothetical perpetual wheel would revolve around its axis, and the metal pellets placed in the sections of the wheel would roll over, creating unevenness in load distribution and making the wheel keep on moving. However, eventually, Da Vinci admitted that the construction of a working perpetual machine is impossible. Commenting this conclusion, Da Vinci wrote that, interpreted into modern language, when the pellet (i. e. the weight) placed in one of the sections " moves farther from the pivot, the gravitational torque on it increases, but also the moment of inertia of the wheel is increased at the same time, which makes the gravitational torque less effective in increasing or sustaining motion of the wheel" (Simanek). In other words, the obtain effect is eventually zero. Moreover, Da Vinci concluded that every mechanical system inevitably loses its power through friction (Capra).

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Later, and especially at the dawn of the 20 century (intensive industrialization), the inventors tried to improve older prototypes of perpetual machines, but these attempts proved to be failure due to laws of physics (e. g. the principle of perpetual motion virtually violates two first laws of thermodynamics (Roy). In the end, the idea of a mechanism producing free energy without any outside sources or fuel was condemned as utopian.

#### Works Cited:

- Capra, Fritjof. *The Science of Leonardo: Inside the Mind of the Great Genius of the Renaissance*. Knopf Doubleday Publishing Group, 2007. Print.
- Mirowski, Philip J. *More Heat Than Light: Economics As Social Physics: Physics As Natures Economics*. Cambridge University Press, 1991, p. 15. Print.
- Roy, Bimalendu Narayan (2002). *Fundamentals of Classical and Statistical Thermodynamics*. John Wiley & Sons, 2002, p. 58.
- Simanek, Donald E. *Perpetual Futility: A short history of the search for perpetual motion*, 2007. From: <https://www.lhup.edu/~dsimanek/museum/people/people.htm>