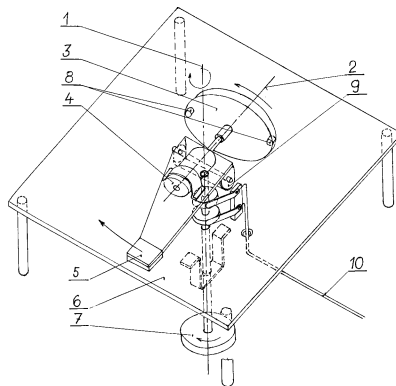
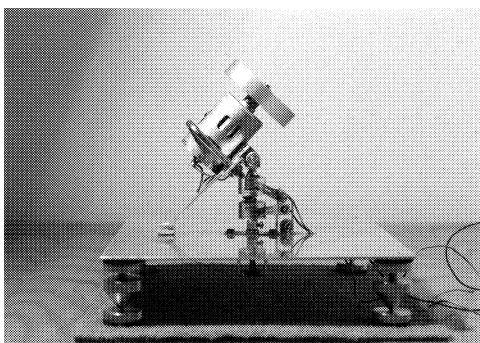


UNUSUAL PRECESSION

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1. Introduction

At present time the theory of practical use of flywheels is the area where is hard to expect new pieces of knowledge. Nevertheless I would like to bring your attention to the following description of the precession movement together with a device where it was provoked and some results of experiments connected with it, that are not usual for this type of movement.



2. Description of the device

We would probably hardly expect precession of the flywheel (1) together with its drive (2) and drive plate (4) on which rests around the pin of precession (5) at the same justification as the flywheel is rotating (1). In the case described on this enclosed picture, the drive plate slides with its curved end, stiffened by felt, on the smooth leveled base lamella (6) resting on four braces. It overrides the friction caused by compound of weight of the flywheel (1) together with its drive (2), which presses the plate of drive (4) to the lamella of frame (6). Concrete value of the factor of friction regarding to the pin of precession (5) is 1.6 Ncm. Joint (3) enables the variation of the plate of drive (4) at the level of the pin of precession (5) and the pin of rotation (1a). The angle of inclination of the plate of drive (4) regarding to the pin of precession (5) is moving between 45 ± 10 degrees. The lamella of the frame (6) is made from 2 mm thick polished aluminum identical to the plate of drive (4). Flywheel (1) is manufactured from the steel with the diameter 58.6 mm, thickness 5 mm and mass 114 g. Direct electric device is used to propel the flywheel working with Voltage 3–9 V and power 1.1–6.6 A. Maximum revolution of the electric device is 11 600 RPM. The source of power is a dry battery 12 V, 6.5 Ah. Power from the battery goes to the pulse electronic regulator which in conjunction regulates revolution of the electric device. Power (9) from electronic regulator is directed into electric device through a spring copper connections (10) and collective rings fastened on the precession shaft. Positions (8) on the picture there are two small plates from the same material, one of them is fastened on the front and the other

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