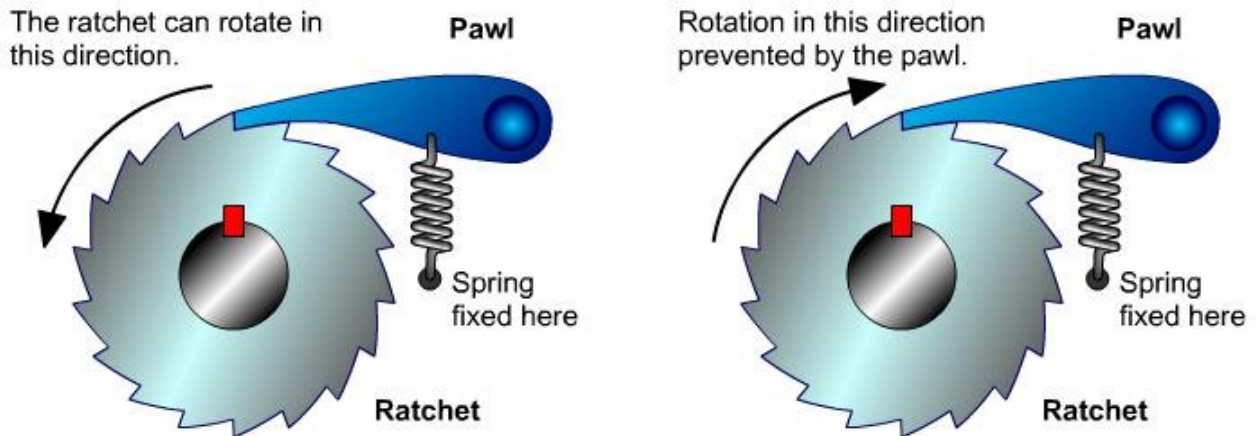


Ratchet and Pawl

The purpose of a ratchet and pawl is to allow a shaft to rotate in one direction only.

A ratchet is a wheel with a shape similar to a circular saw blade or horizontal milling cutter. A ratchet fits onto a shaft and is locked onto the shaft by a "key". The key fits into slots in the shaft and ratchet wheel. These slots are called "keyways".



A pawl is a metal part that rests on the ratchet. As the ratchet rotates, the pawl drops onto each of the steps on the ratchet rim, preventing the ratchet from turning in the direction of the pawl.

Sometimes a spring is used to keep the pawl in contact with the ratchet.

The ratchet and pawl mechanism is used wherever rotation is required in one direction only, e.g. in yacht winches and fishing reels.

Example

