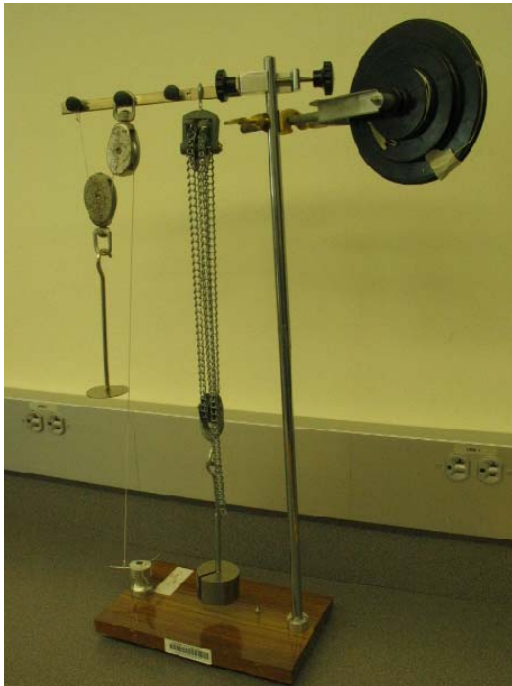


## Simple Machines



**Purpose:** To demonstrate some simple machines and how they provide a mechanical advantage.

**Location:** room 136, shelf N3

This stand has a capstan, pulleys, a chain hoist, and a wheel and axle. Each of these may be used to show how a force applied thru a distance can be used to produce a greater force that acts thru a shorter distance. The chain hoist has two different diameter gear wheels on a common axle at the top which take in (or let down) different lengths of chain to the pulley, thereby raising or lowering it by a much smaller amount than the length of chain pulled. Be careful to keep the chain aligned with the gears or it will slip.