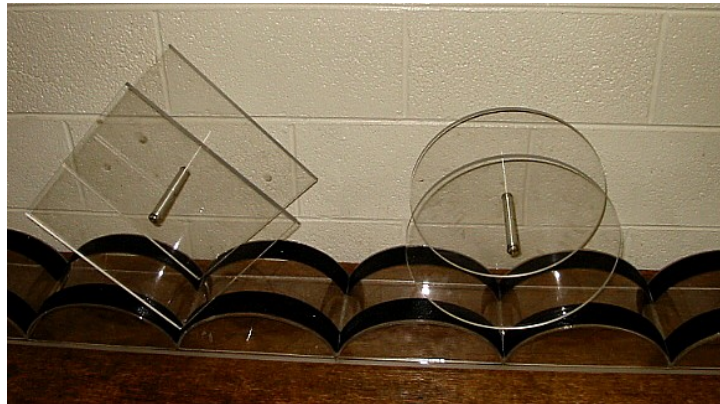


## Square Wheels



**Purpose:** Just for kicks!

A square wheel will roll smoothly with its center at constant height if the roadbed it travels over is an inverted catenary. (A catenary is the curve describing a rope or chain hanging loosely between two supports.)

Here is a link to an interesting [article](#) from *Science News*.

Here is a brief outline of the [mathematics](#) (including an extension for regular  $n$ gons)

**Note:**

**Extra Equipment:** None

**Location:** Shelf A1. The glass cabinet doors need to be removed to get the big roadbed out. This is easy: just lift the door up and pull the bottom out over the track.