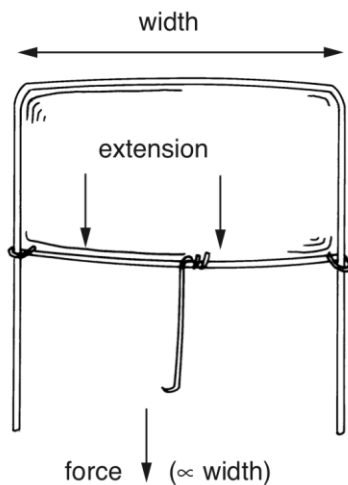


A Classroom Demonstration for *The Life of a Leaf*

From www.press.uchicago.edu/sites/vogel/ Created by Steven Vogel svogel@duke.edu

The Force of Surface Tension (Page 122):

A device for illustrating the force of surface tension can be made by bending and looping a few bare, unstranded wires—it can be surprisingly crude and still work.



For scale, the thing ought to be about two inches (5 cm) across. For the downward slider use a cross-wise piece of wire with loops at its ends and a vertical extension (twisted on) below to pull on. Pulling on the latter, you (or a student with a steady hand) notices that the force to move the slider doesn't depend on the slider's position. Alternatively, you can tip the whole rig slowly up from a horizontal position, unlike what would happen with a rubber membrane. Any elevation sufficient to move the slider ought to be enough to move it all the way downward. The solutions sold in toy stores for blowing bubbles seem to be a little better than diluted dishwashing detergent.