Egg in a Beaker



1. Fill a medium sized beaker or a wide-mouth glass 1/2 full with water.

2. Place the beaker, a pizza pan, a cardboard cylinder

fashioned from a file card, and a hard-boiled egg near the

edge of a table as is shown in the figure. The egg and

cylinder must be directly over the beaker. Also, the pizza pan

must extend beyond the edge of the table.

3. Place the broom handle next to the edge of the pizza

pan.  With your foot on the bristles of the broom, “cock” the

broom by pulling the handle away from the pan.  This will put

the handle under tension.

4. Release the handle.  With luck, the egg should drop into the beaker.

5. Why did the egg fall straight down and not move with the

cardboard cylinder and pizza pan?

6. Do you think the mass of the object placed on the cylinder

matters? You may wish to check your answer by replacing the

egg with a ping pong ball.