

THE DEMONSTRATION CORNER

“Balancing on the Edge” and “Inexpensive Accelerometers”

by

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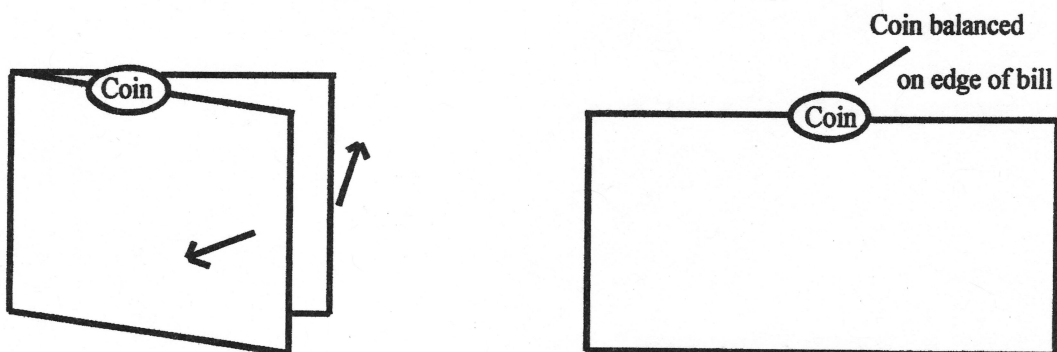
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“Balancing on the Edge”

Many of you will know you can find the centre of mass of a metre stick (for example) by supporting the stick on your two index fingers and moving your fingers together. They will naturally meet at the centre of mass. I hadn't seen this variation on the idea. Did you know you can balance a coin on the edge of a dollar bill?

Fold the bill in half and open it so that it forms a V. Place the coin on the V-shaped edge. Now carefully open the bill until the coin is balanced on the single straight edge of the dollar bill. It works! COOL!



“Inexpensive Accelerometers”

This is a cheap version of the commercial liquid-filled plexiglass accelerometers. A qualitative accelerometer can be made using a ziplock bag, 4 bendable straws, 4 thin dowels (that fit into the straws) and a large elastic band.

Make a frame that fits inside the bag using the bendable straws at the four corners with the dowels along the sides. The dowels should be the correct length to frame the bag. Fill the bag up to about 2 inches with coloured water. Elastic bands can be used around the outside of the bag at the level of the water to mark the horizontal (which shows zero acceleration).

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Submissions describing demonstrations will be gladly received by the column editor.
