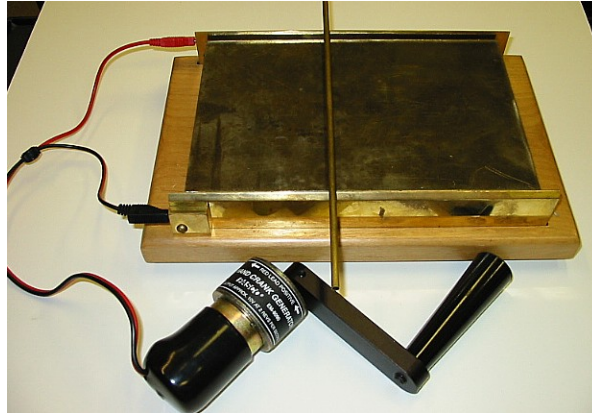


Magnetic Force on a Current Carrying Rod (Jim's Version)



Magnetic Force Demo

Purpose: Demonstrates $F/L = I \times B$.

This demo consists of a current carrying rod which is free to roll on brass knife edges. A strong B field, pointing upwards, is produced by permanent magnets below the plate.

Current can be passed along the rod in either direction by cranking the handheld generator one way or the other. In response, the rod rolls to the right or left along the knife edges. For example: in the photo shown, if the generator is cranked in the direction indicated to make the red lead positive, current flows towards the viewer. Since B points upwards, the rod will roll to the left.

Note: The magnets in the base are very strong! Use **CAUTION** and keep metal objects away. Some skin has already been lost in its construction.

Extra Equipment: None

Location: Ask Marianne or Christine