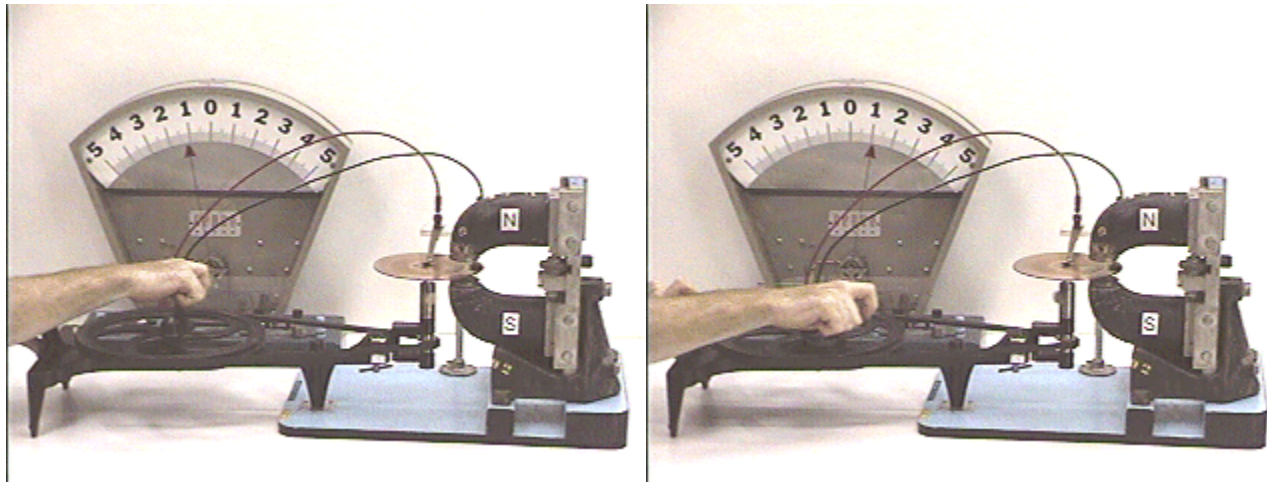


Answer #209

The answer is (b): The meter will read a negative voltage, as seen in an mpeg video by clicking your mouse on the photograph at the left below.



In this case the free electrons are moving through the magnet from the rear toward the front of the photograph, so, by the left hand rule for electrons, the fingers of the left hand point toward the right front of the photograph (the direction of electron motion) and curl *down* in the direction of the magnetic field (N to S), leaving the thumb pointing in the inward direction, the direction of the force on the electrons. The center of the disc is therefore more negative than the outside.

Click your mouse on the photograph at the right to see what happens when the disc is rotated counterclockwise.

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For questions and comments regarding the *Question of the Week* contact [Dr. Richard E. Berg](#) by e-mail or using phone number or regular mail address given on the [Lecture-Demonstration Home Page](#).